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THE USE OF FAIR VALUE IN MEASUREMENT OF NON-CURRENT TANGIBLE ASSETS BY LISTED COMPANIES IN POLAND

Abstract. This paper presents measurement principles which can be applied for non-current tangible assets by listed companies using IFRS and discusses how decision of management of an entity may influence its financial position. Apart from analysis of measurement models applicable for property, plant and equipment and investment property and possible impact of use of fair value on presented assets and financial performance, the article presents results of a research relating to level of usage of this measure by companies listed on the Warsaw Stock Exchange.

Keywords: fair value, fair value model, revaluation model, cost model, measurement of tangible assets, International Financial Reporting Standards.

1. INTRODUCTION

Measurement is one of the most important areas in accounting¹ and a choice of adequate measurement basis, particularly in context of increasing use of fair value in accounting regulations, is a subject of consideration and research of many authors all over the world.² Fair value is defined in international accounting regulations (IFRS, 2010, IAS 40.5) as: “the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm’s length transaction”.³ In accounting literature this measure is treated as equivalent of

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¹ A significance of measurement is evidenced (among others) by Richard Matessich who distinguishes paradigm of measurement stating that the main objective of accounting is “to measure” (Matessich, 1985, p. 678).

² Valuation at fair value is a subject of wide research around the world, see e.g. Barth, Taylor (2010); Wier (2009); Chakraborty (2010); Carroll et al. (2003); Melis et al. (2006); Landsman (2007); Yamamoto (2008); Ramanna (2008); So, Smith (2009); Dickinson, Liedtke (2004). In Poland the research in relation to this measure was taken up by e.g. Mazur (2009); Kucharczyk (2009); Gierusz (2009) and many others.

³ In May 2011 International Accounting Standard Board (IASB) approved IFRS 13 *Fair value measurement*, which redefines 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.” The new definition will be applied from 1st January 2013.

active market equilibrium price and in the case of the lack of the active market estimated market value (Barth, 1994; Tweedie, 2007; Herz, 2002).

The increasing use of fair value as the measure alternative to historical cost and gradually driving the cost out of many areas of financial reporting give rise to a controversy (Gmytrasiewicz, 2009; Rówińska, 2009), what could be clearly seen in the financial crisis of 2008 (Andre et al. 2009; Veron, 2008; Zielke et al., 2008). Deep consideration is required especially in the context of a voluntary valuation of items at fair values as this allows managers to shape the financial position of a company. Among different possible areas of the voluntary use of fair value there is the balance sheet valuation of investment properties and non-current tangible operating assets. Such a selection is available to the companies listed on the Warsaw Stock Exchange (WSE).

The objective of this article is to discuss main valuation bases for investment properties and non-current tangible operating assets that can be used by entities listed on European markets, to explain impact of decisions of management on the financial position of a company presented in its balance sheet and to present results of a research conducted to check the level of use of fair value in the measurement of mentioned assets by companies listed on WSE.

The article is based on literature studies, analysis and interpretation of international accounting regulations and analysis of consolidated financial statements for 2008 of companies listed on WSE. In relation to empirical part there formulated the research hypothesis that listed companies more often use fair value measurement for investing assets than for operating ones.

2. VALUATION PRINCIPLES OF NON-CURRENT TANGIBLE ASSETS

Under international accounting regulations tangible non-current assets can be divided into two main groups: investment property and non-current tangible operating assets being usually called property, plant and equipment. Investment property is defined (IFRS, 2010, IAS 40.5) as property (land or a building – or part of a building – or both) held by owner or by a lessee under a finance lease to earn rentals or for capital appreciation or both. If a property is rather held for use in the production or supply of goods or services or for administrative purposes it should be classified as property, plant and equipment. It means that the same item can be classified differently depending on intentions of management.

The property, plant and equipment is much broader group than investment property as it includes not only real property, but also other tangible items that are expected to be used longer than one period such as vehicles, machinery and equipment. If an item is not real property, but it is held for rent to others it

should be classified to PPE. It is one of the characteristics of international regulations – different items used in the same way are differently classified as operating or investing assets what has impact on their valuation.

International Financial Reporting Standards (IFRS) provide the management with selection on models⁴ that can be applied to value property, plant and equipment as well as investment property. For the first group an entity can choose between the cost model and the revaluation model. For the second there is a choice between the cost model and the fair value model. The cost model mentioned for both groups works in the same way – items are valued as at balance sheet date at cost less accumulated depreciation and impairment losses. The cost generally comprises expenditures incurred to purchase or construct the item, adjusted with expenditure directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, increased with later costs incurred to improve utility of it (e.g. costs of material modifications).

The measurement under the cost model means that the value of an item is not influenced by fluctuations of market prices, except for their significant declines below carrying amounts as at balance sheet date that evidence a unrecoverability and construct premise of impairment loss (Kabalski, 2009, p. 57). The use of historical cost which assumes gradual allocation of incurred expenditure over periods of time when the asset generates economic benefits is based on the economic premise stating that sacrifices must generally be made (costs must generally be incurred) to achieve benefits (incomes) (*Measurement Bases...*, 2006, par. 293). This approach justifies any business activities-enterprises are set up with the objective of transforming various inputs of goods and services into outputs that can be sold for revenues that exceed the costs of the inputs used to achieve them. Thus, the historical cost of an input to a future income-generating activity represents the investment or sacrifice made to achieve benefits and the valuation is just a calculation of unamortized (unconsumed and unallocated) expenditures.

The cost model guarantees certain stability in measurement of items in balance sheet as well as a stability of amounts recognized in profit/loss as an expense. For that reason it is often called a conservative approach to measurement (Kabalski, 2009, p. 18). On the other hand, values presented in statement of financial position do not reflect values an entity may or could receive from sale of the item or by its further use. Thus, it could be said that valuation under the historical cost model does not fully satisfy the objectives of financial reporting adopted by American Financial Accounting Standards Board (FASB)

⁴ A term “model” is used in this article in accordance with meaning adopted in IFRS (Gierusz, 2009).

and International Accounting Standards Board (IASB). These bodies state (*Conceptual Framework*, 2010, par. OB1-OB3) that the main objective of general purpose financial reporting is to provide financial information to existing and potential investor, lenders and other creditors which is useful in making economic decisions, such as whether and how capital to the entity should be provided, whether given debt or equity instruments should be sold or held, whether and how investments should protected and enhanced. In decision making process information that helps to verify ability and capability of the entity to generate cash flow is important so measures reflecting those elements are superior to those that are based on historical data or / and expenditure incurred.

The explicit orientation of financial information on the ability of generating net cash flows by an entity suggests that financial statements and data presented in them should provide the assessment of such cash flows what may be achieved by adequate measurement basis. Such an approach is also enhanced by the definition of assets relating to future economic benefits that are usually tantamount to future cash flows (IFRS, 2007, p. 59-60). The main bases which reflect cash flows are value in use (called sometimes income value), realizable amount and fair value. The first and second are set from a perspective of a given entity. The value in use represents the expected cash flows that the company can generate from further use of the item while realizable amount is an amount that could be realized in transaction of sale of it. Those measures are not used as separate bases in accounting regulations but rather as supplementary parameter in recoverability tests. The third one (fair value) is set from perspective of the market participant what differs it from previous two. This valuation basis is accepted by international accounting regulations in measurement of many different items, among others the non-current tangible assets.

3. FAIR VALUE AS A MEASUREMENT BASIS OF NON-CURRENT TANGIBLE ASSETS

The fair value represents an amount that would be set in a transaction between willing, well-informed and not related parties. The best evidence of fair value is the market price which has been established in market adjustment process. Willing and well-informed market participants know all publicly available information and take it into consideration, along with their preferences referring to risk, while making decisions maximizing their profit or minimizing their risk. On the market, through combinations of different expectations and preferences of market individuals and numerous transactions among them the market price, reflecting market equilibrium in that particular moment, is set. The established equilibrium price represents a resultant of competing market

participants' expectations – their activities lead to set such a price that allows for maximum turnover on the market.

As the objective of fair value measurement is to reflect a market value as at the date of measurement, this measure has to refer to market equilibrium price at that moment (Tweedie, 2007; Herz, 2002). If observable market prices do not exist as at the measurement date, the objective of the measurement is a reflection of market value through its assessment as if market existed (*Measurement Bases...*, 2006, par. 106, SFAS 157, 2006).

The market value and consequently the fair value represent market expectations on the highest and best use of the item what means that entities being market participants consider their sale as well as holding and obtaining benefits from its use in specified period. Decisions about holding or selling depend on what market participants find the most favorable, so the fair value can't be treated as amount recoverable from forced or immediate sale as well as value in use calculated from the perspective of specific entity.

The use of fair value in accounting as well as the use of other measures based on current conditions may raise some doubts as even on open, well-developed, active and well-regulated markets from time to time price bubbles and spontaneous sales can found which cause prices not to reflect all available information (some investors may be led by emotions) or which cause that prices to be found irrational by external observers. In such cases use of the market value for accounting purposes may introduce a significant risk to financial reporting, especially when market prices are prone to imperfections of markets and possible irrational behavior of participants caused for example by actions of profiteers "turning on" the market. Apart from mentioned imperfections of mechanism of setting prices the growth and decline cycles on market need to be considered as well, including relation between market prices and economic cycle in the specific state. In such situations there are always doubts whether market value being strongly fluctuating or brought up to high level by profiteers' activities should be used in accounting and whether it should be adjusted. Despite these issues the fair value is accepted by accounting regulators because although not being perfect it is probably one of the best measures to meet the needs of financial reporting.

Measurement of non-current tangible assets at fair value means that their carrying amounts presented in balance sheet become more realistic as the valuation process reflects the amount that could be realized by an entity in unforced exchange transaction. In the same time this measure reflects expectations of market participants in relation to ability to generate cash flows from given item (through use or sale) what suits the objectives of general purpose financial reporting and provides users with information necessary in decisions' making processes.

4. RECOGNITION OF GAINS AND LOSSES ON RE-MEASUREMENT TO FAIR VALUE

A significant issue that should be pointed out when considering fair value measurement is the way of recognizing gains or losses on re-measurement. The accounting regulations provide two different models which can be used for non-current tangible assets: the revaluation model and the fair value model.

The fair value model is available for valuing of investment property and assumes that all changes in market value are recognized directly in profit/loss for the period. Such a solution means a significant deviation from realization and prudence principles which allow for recognition of such gains/losses only when a transaction with external entity appears. Recognition of gain/loss on re-measurement in profit/loss for a period may bring significant variability to income statement from period to period.⁵

A presentation of changes in value in financial result for the period is one of possible solutions which can be used in the current value accounting. The second important approach is recognition of such amounts in the revaluation reserve being a part of equity. This method is a second model based on fair value – the revaluation model. When an increase in value of the item is presented as surplus within equity, while a decline is recognized at first as a decrease of surplus from the previous periods and then as expense in profit /loss for the period. The revaluation model presents items of property, plant and equipment in current values and protects profit/loss from recognizing it as unrealized gains on re-measurement.

Under IFRS the amounts presented in the revaluation reserve are directly transferred to retained earnings (profit/loss of previous years) when the item is derecognized or being depreciated. It causes no gain to be added to financial results of the period and may be treated as one of weaknesses of such approach.

The revaluation model may be applied for property, plant and equipment – non-current tangible operating assets. Although IASB considered the revaluation model for investment property, it finally rejected it claiming that the fair value model better reflects performance of the entity. The main differences between discussed models summarizes Table 1.

Table 1. Main differences between the fair value model and the revaluation model

Differences	Fair value model	Revaluation model
1	2	3
Scope	Investment properties (tangible investing assets)	Property, plant and equipment (tangible operating assets)

⁵ For that reason the choice of this solution is often named aggressive approach (Kabalski, 2009, p. 18).

Table 1 (cont.)

1	2	3
Scope of decision of management	Generally for all investment real properties	For each class of PPE separately
Recognition of depreciation charges	No	Yes
Frequency of re-measurement	Each reporting date	Reporting date when fair value materially differs from carrying amount or when other item in the class is re-measured.
Recognition of gain/loss on revaluation	Profit/loss for the period	Revaluation reserve if an increase in value. A decline in value is allocated to revaluation reserve if previously recognized. The amount not assigned to revaluation reserve previously presented is recognized in profit/loss for the period.

Source: IAS 40, IAS 16.

It should be mentioned that the management of an entity has right to choose a model for investment properties (cost or fair value model) as well as for each separate class of property, plant and equipment (cost or revaluation model). It means that the same company (or two identical) may present different values in statement of financial position as well as different amounts in profit/loss for the period depending on a decision introduced to accounting policies by management. Thus, when analyzing the financial position of the entity and comparing it with other enterprises (from the same sector or on market) it is essential to take such choices into consideration.

5. THE USE OF FAIR VALUE IN MEASUREMENT OF NON-CURRENT, TANGIBLE ASSETS BY COMPANIES LISTED ON WARSAW STOCK EXCHANGE

In order to check and analyze the scope of use of fair value to measurement non-current tangible assets by companies listed on the Warsaw Stock Exchange an empirical research has been made. There analyzed consolidated financial statements prepared for 2008 as well as financial statements for this period when a given company did not form capital group (did not prepare consolidated financial statements) but its "normal" financial statements prepared under International Financial Reporting Standards. The research was focused on whole population of 314 companies listed on the Warsaw Stock Exchange, which use IFRS. These entities were chosen because of mentioned possibility of use of fair value for property, plant and equipment and investment property.

5.1. Fair value in measurement of property, plant and equipment

As a result of the first stage of the research there stated that only 28 companies applied revaluation model for property, plant and equipment. In the analyzed group 275 pointed at the cost model while 11 did not explicitly refer to measurement basis. The entities using the revaluation model are from various industries.⁶ This distribution presents Figure 1.

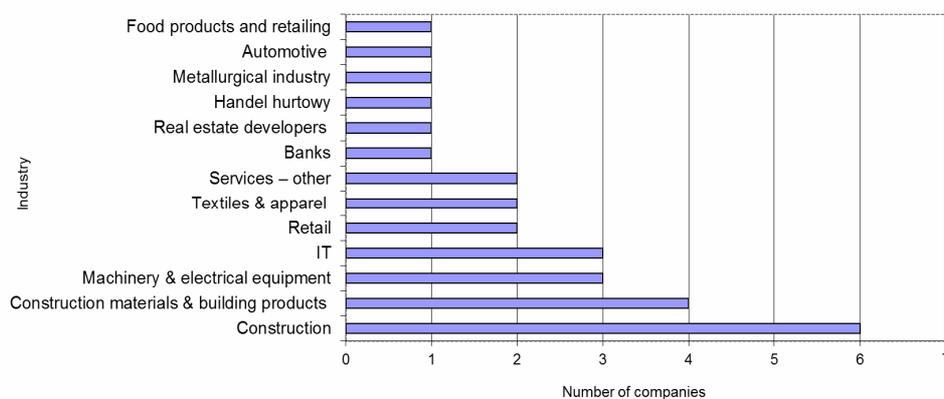


Fig. 1. Distribution of companies using fair value for PPE in industries

Source: own research.

Significant number of companies applying the revaluation reserve was from construction industry what is an interesting result which can be tentatively linked with awareness of measurement issues in this sector.

Apart from analysis relating to industries, there checked as well the use of fair value in relation to the market size of entities (their market capitalization). For that issue there distinguished companies with market capitalization higher than 250 million euros (segment 250p), companies with capitalization between 50 and 250 million euros (segment 50p), between 5 and 50 million euros (segment 5p) and lower than 5 million euros (segment 5m). In absolute numbers segment 250p includes 53 entities, segment 50p – 79, segment 5p – 164 and segment 5m – 18. The Figure 2 shows distribution of the enterprises taking into account the market capitalization at the end of February of 2009.

⁶ The industries (sectors) are identified in accordance to classification adopted by Warsaw Stock Exchange (www.gpw.pl).

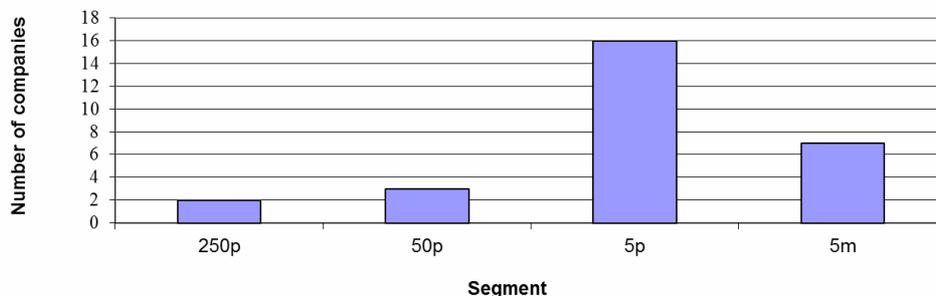


Fig. 2. Distribution of WSE companies applying the revaluation model under market capitalization criterion

Source: own research.

The majority of the companies using fair value was medium size – their market capitalization was not higher than 50 million euros.

In the next step of the research there identified main classes of non-current tangible operating assets for which companies introduced fair value measurement. The result shows that significant majority of them (25 out of 28 being 89% of the group) applied the revaluation model for real property only, one company for assets other than real property, and two of them used it for real property and other items of PPE (machinery, etc.).

The conducted research has shown that measurement under historical cost is still much more popular for property, plant and equipment than under current values. Many companies which decided to use fair value is from the construction sector which distinguishes this sector from other industries. Reasons for such decisions can't be explicitly determined with the analysis of financial statements.

5.2. Fair value in measurement of investment property

In the second stage of the research there analyzed the application of fair value model. As a result there stated that from 314 analyzed companies:

- 88 of them used fair value for investment property (giving about of 28% of examined population);
- 71 of them adopted the cost (about 22% of whole population);
- one mentioned two different measurement bases for different types of investment properties;
- 11 of them did not give the measurement basis despite presenting such assets, and
- 143 companies did not refer to measurement because of a lack of investment property in financial statements.

The research shows that more than a half of companies (55,34%) listed on Warsaw Stock Exchange referred to measurement of investment property. Among them more than a half use the fair value. Percentage distribution of those items presents Figure 3.

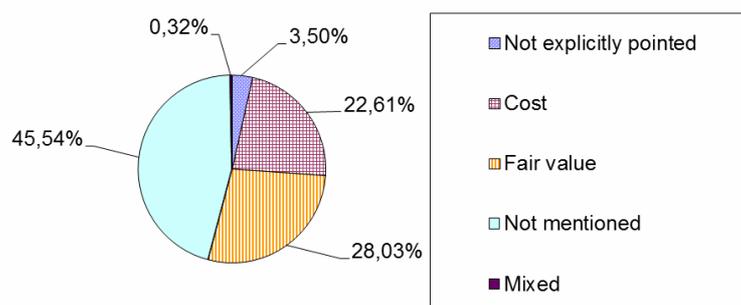


Fig. 3. Measurement principles adopted by companies listed on Warsaw Stock Exchange for investment properties

Source: own research.

In the following step of the research the distribution of companies using fair value in different industrial sectors were analyzed. The Table 2 presents this percentage distribution.

Table 2. Percentage distribution of companies in industrial sectors taking into account the measure used

Sector	Fair value	Cost
1	2	3
Pharmaceuticals	100,00%	0,00%
Insurance	100,00%	0,00%
Financials – other	87,50%	12,50%
Real estate developers	86,67%	13,33%
Forest products	75,00%	25,00%
Metallurgical industry	75,00%	25,00%
Automotive	75,00%	25,00%
Construction	72,22%	27,78%
Plastics	66,67%	33,33%
Retail	54,55%	45,45%
Food products and retailing	54,55%	45,45%
Chemicals	50,00%	50,00%

Table 2 (cont.)

1	2	3
Hotels & restaurants	50,00%	50,00%
IT	50,00%	50,00%
Textiles & apparel	50,00%	50,00%
Fuels	50,00%	50,00%
Telecommunications	50,00%	50,00%
Construction materials & building products	40,00%	60,00%
Media	40,00%	60,00%
Wholesale	36,36%	63,64%
Banks	28,57%	71,43%
Services – other	20,00%	80,00%
Machinery & electrical equipment	8,33%	91,67%
Energetics	0,00%	100,00%

Source: own research.

In two sectors use of fair value reached 100%, but any conclusions based on this information may be misleading because of significantly differences in number of entities in each industries referring to investment properties. In pharmaceuticals and insurance there appeared only one company (per sector) which explicitly gave the measurement basis for analyzed assets and both pointed at fair value. The opposite situation appeared in energetics where two companies referred to measurement and both use cost as measurement basis.

A more precise picture of the use of fair value presents Figure 4, which is based on absolute units – number of companies in identified sectors using fair value or cost.

Taking into account the number of companies using the analyzed measure there dominate real estate developers and construction sector, being industries for which properties and activities relating to them are specific. Among others reasons of frequent application of fair value in this groups of entities may be possession of qualified professionals that know the real property market.

Two next sectors that use fair value on larger scale are metallurgical industry and “Financials – other.” Industrial sectors in which relatively many companies use cost are: machinery and electrical, wholesale and banks.

Because of existence of many sectors in which only single entities referred to fair value, there divided companies into larger groups: financial sector (including 16 entities), construction and developers (including 33 entities), production (60), energy and fuel (6) and other services and trade (44 companies). Figure 5 below presents a degree of usage of analyzed measures in these identified groups.

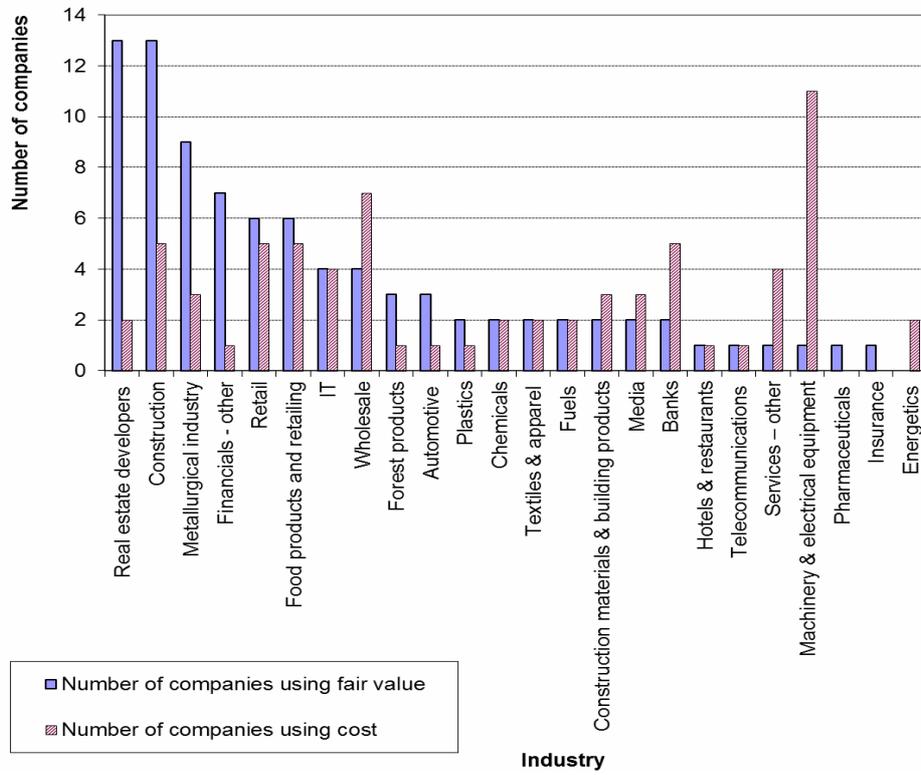


Fig. 4. Companies using cost and fair value in industrial sectors

Source: own research.

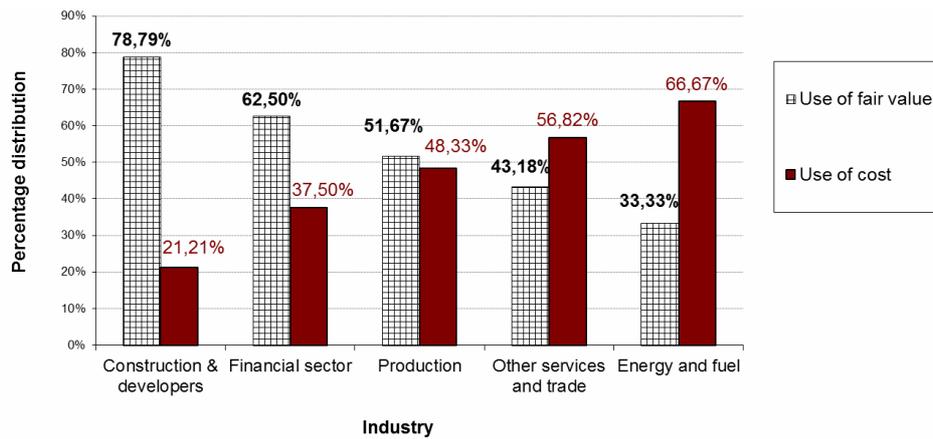


Fig. 5. Percentage distribution of companies using different measures

Source: own research.

The presented figure confirms previously formulated conclusions about the highest use of fair value in the sector relating to real property (construction and development).

In addition to analysis relating to industries, there checked also the use of fair value in relation to the market size of entities (their market capitalization).⁷

Figure 6 shows distribution of companies considering the market capitalization of companies at the end of February of 2009.

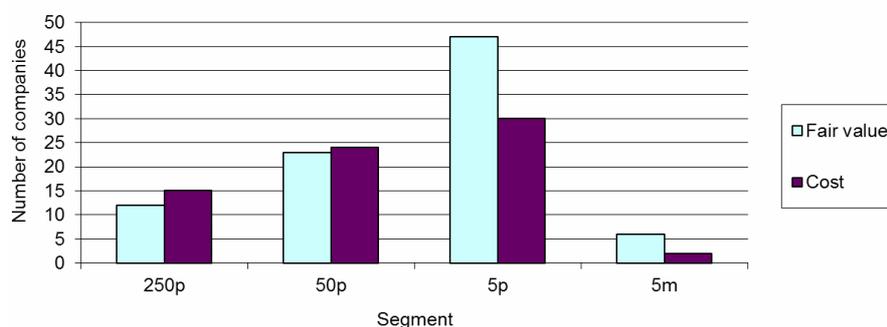


Fig. 6. Distribution of companies using fair value and cost on base of the market capitalization
Source: own research.

The diagram shows that the use of fair value dominate in segment 5p which comprises companies of market capitalization between 5 and 50 million euros. Taking into account that the most of companies in this segment did not refer to measurement principles for investment property because of a lack of such items, it may be stated that if a company presents analyzed items, it uses fair value as measurement basis.

It is worth noticing that in relative terms the smallest companies (of capitalization lower than 5 million euros) use fair value for investment property. From absolute perspective this segment is not so numerous what causes the percentage results to be highly sensitive.

In larger entities (of market capitalization above 50 m. euros) the use of cost slightly more popular than the use of second measure what shows that the latter is quite common solution.

The presented results of research show that entities much more often use the fair value for investment tangible assets (real property) than for operating ones. This confirms hypothesis stated for the article.

Among entities using fair value dominating are construction companies and developers what may be linked to their good understanding of real property market, professional employees and large number of such assets presented in statement of financial position.

⁷ Division mentioned in previous point.

6. CONCLUSIONS

The measurement of non-current tangible assets is one of several areas where fair value can be used voluntarily in balance – sheet valuations. The use of this measure allows for reflection of current conditions existing as at the measurement date what makes financial statements (especially statement of financial position) up-to-date and helpful in economic decisions. As the fair value represents the price which maximizes the exchange on the market and in the same time the amount that could be realized from sale or use of the item, it satisfies the objectives of financial reporting adopted by International Accounting Standards Board and American Financial Accounting Standards Boards. These bodies believe that financial information should help in assessment of future cash flows so measures based on future benefits such as fair value, realizable amount, value-in-use and recoverable amount have advantage over historical measures and values based on expenditure incurred.

As presented earlier the identical or very similar items may be measured using different principles depending on decision of an entity as well as their classification based on different intentions and expectations of management. Similarly different items used in the same way may be valued under different models. This may cause some distraction of investors analyzing financial statements and proves the importance of an identification and understanding of solutions applied by a given company.

An entity using IFRS may apply two different models based on fair value for non-current tangible assets – revaluation model for operating assets and fair value model for real property treated as investments. The main distinction between them is the way of recognition of a change of value. The former generally assumes recognition of the changes in revaluation reserve (in equity) with exception that the revaluation reserve can't be negative (amounts decreasing this item of equity below zero are recognized in profit/loss for the period). The latter assumes recognition of any change directly in profit/loss for the period which is significant deviation from prudence principle. Such an approach increases profit (reduces loss) in prosperity time and enables distribution of unrealized gains but may be risky for long-term condition of the company in case of future heavy slides of prices.

Management of an entity has freedom of choice under IFRS when considering and choosing the models for operating and investing tangible assets. Such choices there have also companies listed on the Warsaw Stock Exchange. As conducted research shows they more often use fair value for investment property than for operating assets – 55,34% of companies referring to measurement of investment properties admitted the use of analyzed value while only 9,24% adopted it for some classes of property, plant and equipment. It confirms the hypothesis formulated for the paper.

Among entities applying revaluation model for operating assets the most of them (89,28%) use it only for real property – only two companies selected it for real property and additional items, and only one for items other than real property. It shows that listed companies are much more keen to measure real property at current values than other assets.

Application of models based on fair value dominate in construction and developers sectors – sectors with probably good understanding and awareness of real property market and its challenges as well as problems arising on calculation of fair value.

REFERENCES

- Andre P., Cazavan-Jeny A., Dick W., Richard C., Walton P. (2009), "Fair Value Accounting and the Banking Crisis in 2008: Shooting the Messenger", *Accounting in Europe*, Vol. 6.
- Barth M. (1994), "Fair Value Accounting: Evidence from Investment Securities and the Market Valuation of Banks", *Accounting Review*, Vol. 69, No 1.
- Barth M., Taylor D. (2010), "In defense of fair value: Weighing the evidence on earnings management and asset securitizations", *Journal of Accounting and Economics*, Vol. 49, Issue 1/2.
- Carroll T., Linsmeier T., Petroni K. (2003), "The Reliability of Fair Value versus Historical Cost Information: Evidence from Closed-End Mutual Funds", *Journal of Accounting*, Vol. 18, Issue 1.
- Chakraborty T. (2010), "The Relationship Between Fair Values in Banks' Trading Books and Volatility in Share Price Returns in the Indian Context", *Journal of Accounting Research and Audit Practices*, Vol. 9, Issue 1/2.
- Conceptual Framework (2010), *The Conceptual Framework For Financial Reporting*, FASB-IASB, Norwalk-London.
- Dickinson G., Liedtke P. (2004), "Impact of a Fair Value Financial Reporting System on Insurance Companies: A Survey", *Geneva Papers on Risk and Insurance - Issues and Practice*, Vol. 29, Issue 3.
- Gierusz J. (2009), *Dylematy wyceny inwestycji w nieruchomości*, „Zeszyty Teoretyczne Rachunkowości”, vol. 53 (109), p. 51-63.
- Gmytrasiewicz M. (2009), *Dyskusyjne metody ustalania i prezentacji wartości według Międzynarodowych Standardów Sprawozdawczości Finansowej*, „Zeszyty Teoretyczne Rachunkowości”, vol. 53 (109), p. 63-71.
- Herz R. (2002), *Robert H. Herz's Remarks*, FEI Conference 2002, New York.
- Kabalski P. (2009), *Polityka rachunkowości w spółce stosującej MSSF*, Warszawa: SKwP.
- Kucharczyk B. (2009), *Wartość godziwa w wycenie aktywów finansowych – praktyka banków polskich*, „Zeszyty Teoretyczne Rachunkowości”, vol. 52 (108).
- Landsman W. (2007), "Is fair value accounting information relevant and reliable? Evidence from capital market research", *Accounting and Business Research*, Special Issue.
- Mattessich R. (1985), "Forschungsprogramme und Paradigmen im Rechnungswesen unter Betonung der Agency-Informationanalyse", *Information und Wirtschaftlichkeit*, Hannover: Sonderdruck.
- Mazur A. (2009), *Stosowanie wartości godziwej w Polsce – wyniki badań*, „Zeszyty Teoretyczne Rachunkowości”, vol. 49 (105).

- Measurement Bases for Financial Accounting – Measurement on Initial Recognition, Discussion Paper* (2006), IASB.
- Melis G., Melis A., Pili A. (2006), "Fair Value and Stakeholder-Oriented Accounting Systems. Some Evidence From Italy", *Corporate Ownership and Control*, Vol. 4, Issue 1.
- MSSF 13 *Pomiar wartości godziwej* (2011), IASB, London.
- MSSF (2007, 2010), *International Financial Reporting Standards/Międzynarodowe Standardy Sprawozdawczości Finansowej*, wydanie polskie z 2007, SKwP, Warszawa, wydanie angielskie z 2010, IASB, London.
- Ramanna K. (2008), "The implications of unverifiable fair-value accounting: Evidence from the political economy of goodwill accounting", *Journal of Accounting and Economics*, Vol. 45, Issue 2/3.
- Rówińska M. (2009), *Wartość godziwa jako kategoria wyceny*, „Zeszyty Teoretyczne Rachunkowości”, vol. 53 (109), p. 175-189.
- So S., Smith M. (2009), "Value-relevance of presenting changes in fair value of investment properties in the income statement: evidence from Hong Kong", *Accounting and Business Research*, Vol. 39, Issue 2.
- Szychta A. (2008), *Paradygmaty w nauce rachunkowości w świetle koncepcji Thomasa S. Kuhna, Wybrane prace z dorobku 60-lecia Katedry Rachunkowości Uniwersytetu Łódzkiego 1948-2008*, Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Tweedie D. (2007), "Interview with Sir David Tweedie", *Insight*, Q3.
- Veron N. (2008), "Fair Value Accounting is the Wrong Scapegoat for this Crisis", *Accounting in Europe*, Vol. 5.
- Wier H. (2009), "Fair Value or Conservatism: The Case of the Gold Industry", *Contemporary Accounting Research*, Vol. 26, Issue 4.
- Yamamoto T. (2008), "Asset Impairment Accounting and Appraisers: Evidence from Japan", *Appraisal Journal*, Vol. 76, Issue 2.
- Zielke C., Starkie M., Seeberg T. (2008), "Reporting move could break the write-down spiral", *Financial Times*, April 2.