THE IMPACT OF INTRODUCING FAIR VALUE TO ACCOUNTING

Introduction

Accounting applies various kinds and categories of value which results from the impact of several factors such as: the object of valuation, unit of valuation, principles of valuation, methods of valuation, etc. Methods of valuation are a particularly important criterion of value measurement. With the aim to standardize the accounting system, it would be sensible to conduct the measurements with the application of one, commonly accepted method. However, the variety of objectives among the users of financial statements makes it impossible to satisfy their needs with one valuation method. This is the reason why several methods have been appearing recently. The latest one applied both in international and domestic accounting is the valuation at fair value. It involves substantial controversies and the aim of the article is to focus both on its advantages and disadvantages. Moreover, the last part of the article presents the opportunities for further development of accounting as regards ways of valuation.

1. Value measurement in accounting

Valuation is a process aiming at the identification of money amounts in which the components of a financial statement will be accounted for in a balance sheet and profit and loss account. This purpose implies the necessity to choose one of the existing principles of valuation. At this moment the basic risk area in accounting appears: the measurement of value. Value is a term with many meanings and is the object of interest of different fields of study: mathematics, philosophy, economics, law and accounting. The concept of value originates from philosophy and means “…everything which is precious and desired by man”.

However, when considering value as regards accounting, the following definition should be used: “it is something which is worth from a material point of view; a feature of an object that can be expressed in terms of money or other tender; a price, and also a feature or a set of features typical for a person or object that constitute its qualities (e.g. moral or artistic) and

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are precious to people and can meet their needs; importance, significance\textsuperscript{3}. When trying to establish how much something is „worth from a material point of view”, accounting should consider several factors that affect the value, i.e. time, expenditure, degree of wear, market price, economic benefits, future money flow, etc. As a result, it is difficult to assign the attribute of complete objectivity to the valuation process in accounting. Additionally, there is the issue of the change of money value in time, which is particularly significant under inflation. Although the experts in accounting are aware of the problem, there is no one common approach how the change of money value in time should be taken into consideration in the course of the valuation process.

The variability of factors that decide on the value of a given category, the imperfect measures, the possibility to accept different assumptions and finally, different expectations of the information users result in the situation that a particular balance sheet category may obtain different values. The valuation of assets and liabilities can be performed, among other things, on the basis of the market price, purchase price, production cost, current replacement cost, adjusted purchase price, amount due for payment, nominal value, liquidation value, expected cash flows and other reliably estimated values\textsuperscript{4}. As a result, there is a danger that the method chosen to evaluate assets and liabilities will be inadequate and consequently, the financial statement of a business will not reflect its position.

S.T. Surdykowska also states that valuation in accounting is not as evidently objective as in technological processes, medicine or physics. There are four stages of the process of measurement\textsuperscript{5}:

1) what is to be measured,
2) how to measure (valuate),
3) what information should financial statement include,
4) how the information should be presented in financial statements.

As far as stages 3 and 4 are concerned, it can be stated that there is a precisely determined set of principles. However, in the case of stages 1 and 2, the determination of the number of possible combinations of factors that should be considered is difficult. This can be exemplified by the valuation of some components of assets that is often based on

\textsuperscript{3} Nowy słownik języka polskiego PWN, Wydawnictwo Naukowe PWN, Warszawa 2003, p. 1110.
\textsuperscript{5} Por. S. T. Surdykowska, Ryzyko finansowe w środowisku globalnej gospodarki. Kulisy najbardziej spektakularnych afer finansowych ostatnich lat, Difin, Warszawa 2012, p. 105.
discretionary valuation of data selected from the whole range of accessible information. In this context the idea of creative accounting appears as the opposite of codified accounting, where defined norms make it impossible to withdraw from a strictly determined calculation procedure. It turns out that in many cases the determination “what to measure” and “how to measure” is impossible since it often depends on individual and group decisions based on estimations. Thus, it is impossible to make assumptions that there are unquestionable criteria of measurement in accounting as it is in the case of technical science. As a result, creative accounting is just a reaction to the “helplessness” of norms in situations, where a definite determination of a measurement method is not possible. In other words, creative accounting accounts for all kind of innovations concerning the way of measuring values presented in financial statements that are both within the determined norms and beyond them. It can be stated, that “creative accounting means the use of the range of freedom on the part of the financial statement authors that is the result of the lack of adequate patterns, standards, rules and procedures, all of which constitute the basis for the decision making process in the four main stages of preparing the information in company financial statements: recognition, valuation, revealing and presentation”⁶.

It must be stated that the measurement in accounting will always be subject to the subjective evaluation of people preparing financial statements. It is mainly the result of the concept of economic categories that undergo the process. They are the categories that are influenced by several factors and it can be assumed that practically only the market is able to determine their real value. That situation results in a significant difference between the book and the market values of company assets. What is more, a dynamic development of new technologies results is revealing the discrepancies between the book value and the market valuation of the companies listed on the stock market.

2. Fair value

The notion of Mark to Market Accounting was introduced to accounting on the 10 August 1990 in the speech of the president of SEC R.C. Breeden for the Committee on Banking, Housing and Urban Affairs. He urged to apply the instruments listed on the market when valuating debt securities that were kept as assets by financial institutions. Such valuation was first called Market them to Market, and then Mark to market Accounting. In the last part of his speech R.C. stated that financial institutions run business operations that

consist in buying and selling financial instruments, all of which have their values measured in the conditions of current market. (...) In the valuation process financial statements should as soon as possible make use of adequate measures that are based on the market. Accounting based on historical costs developed in a radically different economic environment from the one in which most institutions are functioning at present.

R.C.Breeden’s initiative was not a novelty. Before that, in the early 1970s, the American Accounting Principles Board (APB) considered the approach based on the market value as regards some financial instruments. Unfortunately, it was not supported by the majority of the APB members. Moreover, the banking lobby, mainly the FED was decidedly against the introduction of the Mark to Market Accounting. The fact was stressed that market values were often inaccessible and the acquisition of data might be expensive. The possibility to manipulate the value of some assets was also pointed out. However, the supporters of the method believed that it would make it possible to present real values of securities since in the case of historical cost valuation manipulating the value of securities was facilitated. There was an opportunity not to show or to delay infinitely the fall of the value of securities using the argument that the decrease of value is temporary. Thus, the historical cost model made it possible to overvalue the securities.

As a result of the above presented controversies, numerous surveys concerning the usefulness of the information included in financial statements were conducted at the end of the 20th century. The results showed clearly that the readers of financial statements expect long-term information. Hence, it was decided to introduce fair value to the canon of valuation methods applied in accounting. That was the answer to the need for information on the part of investors, for whom the data presented on the basis of the historical cost and with the use of conservative accounting were not fully useful. Thus, introducing the opportunity to value the components of assets on the basis of fair value to accounting is an attempt to make valuation more objective and market-based, which makes it more useful for the capital market participants. It does not mean, however, that data historical in character were to be eliminated. At present they are commonly used because of the easy verifiability of the valuation, the continuity of the valuation principles and easy procedures, as they constitute the

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price of the effective transaction. Yet, it should be noted that in time the historical value becomes outdated and, as a result, its significance diminishes. Historical price becomes invalid when it departs from market prices or the expectations as regards future profits from particular resources.

The relationship between fair value, historical cost and the prudence principle is presented by scheme 1.

Scheme 1. Accounting orientation with the application of fair value

<table>
<thead>
<tr>
<th>„departure” for the sake of creditors’ interests</th>
<th>Historical cost and principle applied</th>
<th>„departure” for the sake of investors’ interests</th>
</tr>
</thead>
<tbody>
<tr>
<td>prudence principle</td>
<td>capital and financial result</td>
<td>fair value</td>
</tr>
<tr>
<td></td>
<td>subjected to fair presentation of business efficiency</td>
<td></td>
</tr>
</tbody>
</table>

According to the act on accounting, the fair value is the amount for which a particular component of assets could be exchanged, and the obligation should be settled with regard to market situation, between parties that are interested, well-informed and unbound.

When analyzing the regulations, a certain algorithm measuring the fair value of a selected asset component can be made. First, it should be checked whether there is an active market for the component. If so, its current market value reflects best its fair value. If there is no active market, the fair value can be estimated on the basis of the current prices of similar assets or the value given by an independent expert. Companies may also make use of other commonly accepted estimation techniques.

Thus, the fair value can be defined as a substitute of the market value of the items in financial statements for which there is no active market. However, the lack of market prices results in the fact that valuation is performed with the application of different models, e.g. DCF model. Due to such approach, the parameters of models happen to be the subject to subjective valuation.

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The valuation of a balance sheet component based on fair value carries some consequences. The negative change of the assets (or the positive of the liabilities) is a common practice applied in accounting, which results from the application of the prudence principle. However, the increase of the asset component value due to the increase of its fair value results in the creation of a hypothetical and difficult to define resource. At present, in the IAS/IFRS there are the following models of taking into account the increase of the fair value of an asset component:

1) fair value model I – the valuation of a given component is based completely on fair value, and any of its value changes are accounted for directly in the profit and loss account,

2) fair value model I – the valuation of a given component is based completely on the fair value, and any of its value changes are accounted for directly in the equity,

3) model based on the revalued value – it assumes revaluating the asset components to fair value (the results of the overvaluing affect the capital, while undervaluing results first of all in the decrease of the re-valued capital and the unsettled part is accounted for in the costs of the profit and loss account;

4) mixed model – the valuation is based in fair value and the purchase price/ cost with the application of the prudence principle. The valuation considers the lower of the two values. The effects of re-valuation are given in the profit and loss account.

Selected information on the valuation models in question are presented in table 1.

<table>
<thead>
<tr>
<th>Model</th>
<th>Balance sheet component value increase given in</th>
<th>Balance sheet component value decrease given in</th>
<th>Balance sheet components where model is applicable</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>fair value model I</td>
<td>profit and loss account</td>
<td>profit and loss account</td>
<td>- financial assets and liabilities classified as valued at fair value by financial result</td>
<td>- a negative value of revalued capital may occur,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- investment properties (if the entity chose this model)</td>
<td>- amounts in the capital are transferred to the results account only after the sales of a given component or the loss of its value</td>
</tr>
<tr>
<td>fair value</td>
<td>equity</td>
<td>Equity</td>
<td>- biological assets valued at fair value diminished by estimated sales costs</td>
<td></td>
</tr>
</tbody>
</table>

| Model II | | | | |
| --- | --- | --- | --- |
| | | assets and debt instruments (the difference between the fair value and a corrected purchase price is transferred to capital, while interests shown in profit and loss account) | |
| Model based on re-estimated value | equity | equity, the unsettled part in current period costs | - tangible fixed assets  
- intangible assets |
| Mixed model | profit and loss account | profit and loss account | - stock  
- fixed assets held for sale  
- amounts in the revaluated capital are transferred to the profit/loss of previous years when economic benefits related to a given component are realized |


Models described in table 1 can be applied to strictly defined components of the balance sheet. Thus, in one financial statement all the models may be used.

3. The impact of applying valuation at fair value

When analyzing the changes in both domestic and international accounting, one can have the impression that the acceptance of fair value aims at the reduction of the risk of improper valuation of assets and liabilities. Its purpose is to present the current values of assets, liabilities, earnings and costs in financial statements. According to M.Barth, there is no better alternative than fair value. This is the reason why the IASB concentrated on it, as it is the only comparable and inherently consistent approach that may improve the quality of a financial statement\(^\text{15}\). It cannot be denied that fair value reflects current economic conditions in which the user of statements must make a decision. Fair value is comparable because it is the same in reference to particular components of assets and liabilities in an entity. It is logical, since it reflects the changes in economic conditions while they are taking place. However, all the benefits cannot cover the problems associated with fair value. It should be remembered that it is the market value that really reflects current economic conditions. On the

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\(^{15}\) M. Barth, Including estimates of the future in today’s financial statements, BIS Working Papers, No 208, 2006, p. 3.
other hand, it may change being influenced by market moods, whims of market players, trends, fluctuations on the market, etc. Moreover, the market value related to the object of transaction may be treated only as an estimate until a company is not really involved in a transaction. Hence, there is a risk that such estimates may be reliable only in strictly determined circumstances. In the case of assets that are not a frequent object of transaction, the valuation at fair value is even more difficult. Valuations performed by experts have some drawbacks. Experts often cannot disagree as regards their valuations and a question arises which value is correct and reflects best the value of a given balance sheet component in a financial statement. The application of estimation techniques also involves some amount of subjectivity. They are usually based on predicted data, and – as everybody knows – predictions depend largely on people who prepare them.

It should be noted that the increase of fair value of an asset component may be referred directly to the profit and loss account as revenue of current period (as it is, for example in the fair value model 1). As a result, the results account includes unearned income, because the sale transaction did not take place. It is only an estimated figure, which may be realized in the future. In this way, both the accrual basis (according to which the results of transactions are considered the moment they occur) and the prudence rule (according to which only unquestionable revenue should be considered) are not applied. Consequently, the financial result takes into consideration the revenue that does not only reflect the effects of company’s business operations but also includes the results of changes in company’s surrounding. It is so, because the increase if the fair value of an asset component is not the result of company’s operations but of the conditions on the market at that moment. According to M. Gmytrasiewicz, such a result can be determined as the function of the increase or decrease of the net asset value (often being estimated) and not an algebraic sum of the value of actual result operations. It is rather associated with the whole period of capital management and does not describe real effects of the management process. Such a result should not be applied for the division and payment of the dividend, as it is not covered by current cash value and there is no certainty that it will be covered in the future cash flow.

The most significant differences between historical and fair values are presented in table 2.

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17 A. Mazur, Wartość..., op. cit., s. 127.
Table 2. Comparison of fair value with historical value

<table>
<thead>
<tr>
<th>Historical value</th>
<th>Fair value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflects future cash flows</td>
<td>Reflects future cash flows</td>
</tr>
<tr>
<td>Subjective</td>
<td>Subjective</td>
</tr>
<tr>
<td>Unpredictible in the future</td>
<td>Close to the market value</td>
</tr>
<tr>
<td>Relatively small variability</td>
<td>Significant variability</td>
</tr>
<tr>
<td>Requires specialist knowledge – as a result often</td>
<td></td>
</tr>
<tr>
<td>estimated by experts, which generates additional</td>
<td></td>
</tr>
<tr>
<td>costs</td>
<td></td>
</tr>
</tbody>
</table>

From author’s resources

One more issue is worth concentrating on. At present, fair value is applied only when valuating some components of a balance sheet. As a result, the balance sheet constitutes a cluster of non-additive items where balance sheet component values calculated at various valuation bases, e.g. fixed assets valued at manufacturing costs and financial instruments valued at fair value19 are added. Varied valuation bases of the balance sheet components affect evidently the ratio analysis of financial statements. The ratios added in this way certainly require some more explanation. Moreover, with the present condition of accounting, there is no possibility to compare ratios between companies. This is due to the optionality of some solutions chosen to value the balance sheet components (e.g. when valuating investment properties). One company may select a cost model to value certain asset component, while the other a fair value method to value the same type of component. Even if the same model was chosen, different parameters could be used (e.g. different discount rate) in the case of fair value. The result is, that the valuation of asset components is not comparable and consequently, the comparison of ratios calculated on its basis is not possible.

It seems that the idea of introducing fair value to the valuation of the components of assets and liabilities is a just one. However, from the practical point of view it means an increase of discretionary estimates in valuations performed in accounting. Consequently, the risk of both, unconscious and purposeful distortion of the information in financial statements is growing. M.Gawart stated even that such a valuation method is burdened with a potential risk of the lack of credibility 20.

20 M. Gawart, Ryzyko..., op. cit., p. 201.
4. Development trends in accounting as regards the application of fair value

On the basis of the hitherto history of balance sheet theories, two systems can be differentiated, depending on the application of fair value in balance sheet valuations:

- partial valuation at fair value,
- full valuation at fair value.

In the first system the valuation is performed with the prudence rule, i.e. assets are valued at the lower value, either the historical or the market one, while the historical value is the dominating one. The partial use of fair value results in the anticipation of losses (so both the costs incurred and expected are accounted for) without the possibility to anticipate profits. Consequently, the system provides incomplete information on the financial standing of an organization.

The system of the full valuation at fair value enables the anticipation of both the losses and profits. This is the result of the common application of fair value when valuating the components of assets. Thanks to this, the financial statement can account for both the decrease and the increase in the value of assets and liabilities under valuation.

In continental Europe the partial valuation is more commonly used. This is due to the main purpose of the accounting in these countries, which is to secure the interests of creditors and long-term investors. That is why these countries are called credit-tax countries. The target is reached through the application of the prudence valuation and the attachment to nominalism in balance sheet valuation.

On the other hand, in the Anglo Saxon countries the purpose of accounting is to provide particular information for potential investors that are interested mainly in short-term profits and the dividend. As a result, the matching principle is dominating and the focus is laid on presenting the situation of an organization as close to the market as possible. It should be noted, however, that in Anglo-American countries the valuation at historical value is still performed, although the valuation at fair value plays an increasingly bigger role. Thus, it can be stated that these countries apply the system of partial – extended, though – valuation at fair value.

The future of accounting depends now on the accepted development trend of valuation methods. There are three possible solutions:

- preservation of the system of partial valuation at fair value, which is being introduced now;
- a move to a full system of valuation at fair value;
• a move to a dual system that considers simultaneously both the valuation at fair and historical values.

The preservation of the system of partial valuation at fair value that is being introduced now would, unfortunately, result in maintaining information asymmetry. On the one hand, the move towards a full system of valuation at fair value would eliminate the information asymmetry. On the other hand, it would limit the role of financial statements to purely informative one for the sake of investors.

The third trend consists in the creation of a dual system where financial statements account for both historical and fair values of particular components of assets and liabilities. This solution is the most adequate one as regards the range of information included. Both the investors and the creditors would receive the required data (the first – the fair value of the components of assets, the latter – the historical value).

In the dual system, apart from the additional information, the cash flow account or the statement of changes in equity, companies could also prepare:

• balance sheet reflecting historical values together with the profit and loss account;
• balance sheet reflecting fair values together with the profit and loss account.

The balance sheet based on historical values would only reflect the decrease in value of the components. The differences would be accounted for in the profit and loss account related to the balance sheet. Consequently, the financial result would be measured on the basis of effective transactions and the reasonably anticipated value decreases of the balance sheet components. In the profit and loss account that would be structured in this way, the financial result would not consider a potential increase of the market value of particular assets; thus, it would not be artificially overvalued.

In the other balance sheet the components would be valued at fair value. As a result, their current market prices would be known. Their increases and decreases could be accounted for in the profit and loss account related to the balance. Evidently, in this case the financial result would be mainly created by potential rises and falls of the market prices of the balance sheet components. Obviously, the financial result determined in this way could not be the basis for the division and payment of the dividend.

The set of financial statements presented in the dual option is presented in scheme 2. Such a dual system would inevitably involve some additional amount of work costs resulting from the necessity to value the components of the assets at fair value. In the author’s opinion, the scope of information offered to the readers of such financial statements would be
incomparably wider, clearer and easier to read. What is more, predictions and interpretations would be facilitated.

Scheme 2. Components of financial statements in a dual system

<table>
<thead>
<tr>
<th>Balance sheet at historical values</th>
<th>Profit and loss account</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance sheet at fair values</td>
<td>Profit and loss account</td>
<td>Cash flow account</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Changes in equity</td>
</tr>
</tbody>
</table>

Author’s own resource

**Conclusion**

The idea of introducing into accounting the valuation of selected balance sheet components at fair value seems to be a just one. It aims at providing its readers the financial information at current prices. Thus, it is the proper development direction of accounting and in accordance with the requirements on the part of investors. However, the valuation at historical values is still valid and it is one of the basic methods of valuation. Consequently, financial statements include, apart from historical values, future cash flows that may not happen. This results in interpretation problems. The introduction of a parallel valuation at historical and fair values of the same balance sheet components could be a solution. The proposal of such financial statements is presented in the article. It would obviously require additional work and cost; however, the scope of information provided to the users of financial statements would undoubtedly be improved.

**Bibliography**

[5] Hasik W., *Wartość godziwa a bezpieczeństwo obrotu gospodarczego* [in:] Micherda B. (red.), *Sprawozdawczość i rewizja finansowa w procesie poprawy*
Summary
This article focuses on the valuation of the components of the balance sheet at fair value. It shows the advantages and disadvantages of this method of valuation. The article includes a proposal to introduce some solutions to the currently prepared financial statements, which would help the reader to make a proper assessment of the economic and financial situation of an organization.