CONSIDERATIONS ON THE FAIR VALUE OF REVENUES RECOGNIZED IN FINANCIAL STATEMENTS

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This paper approaches a frequently discussed subject in the context of the current global economic crisis, namely the fair value. The accounting concept, which implies that entities—in a different degree from one accounting system to another—should recognize assets and liabilities at market values and often in the profit and loss account, has been accused of exacerbating the dramatic decrease in value of tangible and financial assets. The transparency ensured by fair value and its credibility are subject to polemics. In our opinion fair value increases the quality of accounting information, if it is correctly determined, disclosed and controlled. After a theoretical and normative presentation of the concept, we herein supply a solution for establishing fair value according to the international accounting regulations. The paper focuses on the issue of revenues and explains the fact that their corresponding fair value is determined through the discounted value. Using demonstrative case studies, it develops punctual methods for establishing discount rates and present values specific to revenues.

Keywords: fair value, revenues, discounted value

JEL classification: M40, M41

1. Introduction

The study analyzes from the point of view of value, including fair value, one of the outcome elements of an economic entity i.e. revenues. Generally, the recognition and measurement of balance sheet elements (assets, liabilities and equity) influence the related expenses and revenues, which will receive the same value. However, there are circumstances in which some expenses or revenues imply a distinct valuation from the corresponding balance sheet element, circumstances which will be outlined hereinafter in the case of revenues. The particularity of their valuation is outlined when their fair value is determined.

Fair value is an accounting concept, mainly used in the Anglo-Saxon accounting systems, but undertaken in the last years by the European accounting, starting with the Fourth Directive of the European Union. In the Romanian regulations applicable to all enterprises, according to OMFP no. 1752/2005, the concept has a limited utility, as it is explicitly mentioned only in few cases and assumed in others. The historical cost remains predominant as a valuation basis for financial statements elements. However, the situation is different for listed companies which apply international financial reporting standards, IFRS, for their consolidated accounts, and optionally for their individual accounts. These standards require the application of fair value in several more cases, including the case of revenues.
2. What does the concept of fair value imply?
Internationally there have been, and still exist, active debates concerning this subject on a conceptual and practical level.
In Romanian the term is translated from the Anglo-Saxon expression “fair value” but, from a literary point of view, it would rather have the significance of honest or loyal value (Obert, 2004: 61).
In what regards the content of the concept, there are opinions according to which its main quality would be valuation basis, other consider it to be an implementation of market value, some view it as an accounting convention or principle, and lastly, there are arguments that fair value is an estimation and not an estimation as in the case of market value. Following the facts mentioned above, or coming as a conclusion, FASB shows in its norms issued in 1999 that fair value is not a method of valuation for assets but an objective of valuation, an attribute of value (Casta, Colasse et al., 2001: 97).
Other authors refer to the exchange value which represents the price for an item that could be exchanged in a bargained transaction (Tournier, 2001: 39). Another variant for the previous definition is: the amount resulted from the sale of an asset in a bargained transaction between knowledgeable, willing parties, different from a sale forced by bankruptcy (Holmes et al., 2000: 49). A similar definition is offered by the International Accounting Standards Committee (IASB, 2006). Other authors that could be cited for the definition of the concept are Obert (2004), Holmes and Sugden (2002), Feleagă and Malciu (2004), Matiș et al. (2005). Also, fair value is defined in the International Valuation Standards issued by the International Valuation Standards Committee (IVSC, 2005)
Thus, one can notice that the concept of fair value is assimilated with the meaning of market value. This assimilation has its origins in the type of asset reflected in accounting, assessed at another value than the one it had when entering the patrimony (entity). This is the case for financial instruments, which, as they are listed on the capital market, can offer at any time a market value in the shape of their quotation. Thenceforth however, there was the need to extend over other or all financial statements elements of an enterprise the measurement of their current value. As their nature, way of usage within the economic entity and the conditions on their specific markets were different, their proper market value could not be established anymore and thus, there was the need to resort to other valuation models (Champness, 1998: 23, IVSC, 2005). These models apply the cost and income approach when valuating assets (Deaconu, 2002; Stan, 2003; IVSC, 2005).
We consider that the above arguments highlight the fact that fair value has multiple interpretations. It is a much larger concept than market value. The different established values become the different implementations of fair value. The literature shows many forms of fair value, for example, market value, actual cost or replacement value, net realizable value, value in use, value of discounted cash-flows and others. Out of these, we consider that the market value, value in use and replacement cost can be set out (Deaconu, 2002). Each of these correspond to the globally accepted accounting valuation bases, with the following corrections between the valuation basis and its actual application: the realizable value – market value, present value – value in use or discounted value, actual cost – net replacement cost.
In the case of revenues, their corresponding fair value is the discounted value, as it will be shown hereunder.

3. Applying fair value to revenues
Sales valuation starts with the final price (disregarding any price cuts) established between the seller and the buyer.
Although this valuation method is generally valid, there are circumstances which require the estimation of certain fair values. IAS 18 Revenue presents these circumstances.
According to the accounting norm, the revenues from current activities are: incomes resulted from the entity’s internal investments (from performing in its business domain or from its operating activity), and incomes resulted from the entity’s external investments (acquisition of financial instruments, leasing of goods).

Directly, the corresponding value of these incomes is the present value established on a discounted basis, but also the other valuation bases which represent the fair value of assets that generate the respective income.

Thus, in the case of incomes, fair value corresponds either to:

a) the fair value of assets/services object of the transaction, if the entry of the transaction’s counterpart is not deferred.

Historical cost represents the valuation basis of the transaction from the buyer’s point of view. From the seller’s point of view, the valuation basis is realizable value or, rarely, actual cost (Deaconu, 2002). These two bases correspond to the situation in which the asset is sold.

b) the fair value of the amounts (cash or cash equivalents) which will be received, if the entry of the transaction’s counterpart is deferred.

In this situation, the present value is the valuation basis.

Out of the two cases, the standard specifies on case b), which leads to establishing the discounted value.

The discounted value of incomes is obtained by applying a discount rate to the initial or invoice value. This will decrease the initial value according to the dalliance in its cashing in.

In what regards the discount rate that should be used for establishing the fair value of revenues with deferred counterpart, IAS 18 indicates the interest rate as a reference for the neutral rate. This is because the dalliance in cashing in the commercial transaction’s counterpart is considered a financial transaction. Naturally, the standard implies that the rate of interest includes a risk premium. The following are mentioned as references for the discount rate (interest rate):

- The predominant rate of a similar instrument for an issuer, having credits with the same risk level;

This method of calculating the interest rate is based on comparison with alternative investments. We consider this to be the average profitability of the financial market i.e. the average interests for the loans granted for similar activities to the discounted transaction (for operating activities or for investments), with the same risk level (estimated for the client of the respective transaction), for a period equivalent to the one until the settlement of the transaction and for the same type of interest rate (variable or fixed) (IASB, 2006).

Example no. 1: The Alfa enterprise sells commodities initially considered hardly marketable. It offers a sale on a 90 days credit compared to the one of 30 days applied in normal circumstances. The selling price for the commodities is 200,000 MU (monetary units) plus VAT.

Taking into consideration the fact that the entity has offered a sale for a three times longer credit than the normal one and the fact that the value of the transaction is considerably high, in accordance with IAS 18, in the profit and loss account the entity will recognize an operating income in the amount of the discounted values which will be cashed in after 3 months (fair value), and a financial income representing the difference between the recognized amount and the nominal value of the amount (Deaconu and Pântea, 2004).

In order to estimate the fair value of the income with the deferred inflow of cash or cash equivalents, the Alfa enterprise looks into the present references of the financial market. The average interest rate on the market for commercial loans granted by banks for a period of 3 months is 8%.

The fair value of the income (Fv) will be estimated by discounting the nominal value of the income (Nv) with the discount rate (interest rate) of 8% (d), according to the period of 3 months until the cashing in of the income.
The interest rate which updates the nominal value of the instrument to the current cash selling price of goods and services.

The second method for determining the interest rate is based on the comparison of present transactions with identical goods and services, transactions that were cashed immediately and thus reflect the fair value of incomes. As both the nominal value and fair value of the income are known, the interest rate is implicit.

**Example no. 2:** We consider the situation presented in example no. 1.

In order to determine the fair value of the income, the Alfa enterprise uses the information about the amount that another buyer has offered to pay for the same commodities. His offer is 180,000 MU and represents the fair value of the income (Fv).

Knowing the nominal and fair value of the income, the interest rate can be calculated. But for this example, as the interest income is recognized only once (there is only one return, there are no installments), determining the interest rate is unnecessary.

Thus, in order to demonstrate the second method mentioned in the standard for determining the interest rate (d), it will be calculated as an implicit or internal profitability rate (Deaconu and Pântea, 2004). According to the investment theory this is the rate for which the fair value (the present amount of income) is equal to the nominal value of income to be returned after 3 months. The interest rate is obtained by solving the following equation, where d is the unknown factor:

\[
F_v = \frac{N_v}{1 + d}
\]

\[
180,000 = \frac{200,000}{1 + d} \quad \text{thus} \quad d = 11\%
\]

Another situation regarding recognition of financial incomes generated by deferred returns of commercial transactions, whose understanding we find useful in regards to the methods of determining the fair value of incomes is the sale at a higher price than the market price using commercial loan.

**Example no. 3:** At the 1st of January N, the Alfa enterprise sales commodities worth 40,000 MU, with the following installment plan: 40% in the moment the contract is signed, 35% after a year, 25% after two years. On the financial market the average annual interest rate (disregarding inflation) is 10%. VAT is 19%.

This is a sale involving a commercial loan with a longer period of settlement than the one on the market, thus the fair value of the generated income will be different from the nominal value. The amount of generated income is 40,000 MU, but only a part of this, equal to the fair value, is operating income. The difference in amount until the nominal value (initial value) represents a financial income (interest income).

Interest income (Ii) = Nominal value (Nv) – Fair value (discounted value of future returns) (Fv)

\[
F_v = 16,000 + \frac{14,000}{(1 + 0.1)^1} + \frac{10,000}{(1 + 0.1)^2} = 16,000 + 12,727 + 8,264 = 36,991 \quad \text{MU}
\]
For this example the recognition stages are the following:

<table>
<thead>
<tr>
<th>Explanation</th>
<th>Amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognizing the sales income at the 1st of January N:</td>
<td>47,600</td>
</tr>
<tr>
<td>- operating income for the fair value</td>
<td>36,991</td>
</tr>
<tr>
<td>- deferred financial income</td>
<td>3,009</td>
</tr>
<tr>
<td>- VAT of the sale</td>
<td>7,600</td>
</tr>
<tr>
<td>(the discharge of duty for commodities is not accounted for)</td>
<td></td>
</tr>
<tr>
<td>Cashing in the first installment</td>
<td>19,040</td>
</tr>
<tr>
<td>Recognizing an annual interest income at the 31st of December N</td>
<td>2,099</td>
</tr>
<tr>
<td></td>
<td>([(36,991 – 16,000) \times 10%])</td>
</tr>
<tr>
<td>Cashing in the second installment</td>
<td>16,660</td>
</tr>
<tr>
<td>Recognizing an annual interest income at the 31st of December N+1</td>
<td>910</td>
</tr>
<tr>
<td></td>
<td>([(36,991+2,099–16,000–14,000) \times 10%])</td>
</tr>
<tr>
<td>Cashing in the third installment</td>
<td>11,900</td>
</tr>
</tbody>
</table>

The operating income was immediately recognized at the fair value of 36,911 MU.
The interest incomes, which were recognized as the installments, were cashed in the over the two financial years, are in the amounts of 3,009 MU (2,099 + 910), as the interest cashed in periodically would have been recognized for a loan initially granted to the client of this transaction. The credit would have been of 36,991 MU and its return of 3,009 MU. The nominal value of the income, of 40,000 MU, is cashed in gradually.

We broadly presented the method for calculating the discounted value in the case of revenue recognition as in our view this is the main type of value directly established for incomes. As we mentioned, there are circumstances in which (e.g. the counterpart of the transaction is not deferred) incomes are measured using the fair value of the delivered assets/services. However, we do not find it necessary to elaborate them in this study as the fair value of assets/services is established through their selling price, with no need to resort to other estimations.

**Conclusions**

Fair value is a concept lesser used in today’s Romanian accounting practice. One of the causes is the poor urge of the accounting regulations in accordance with European Directives. However, taking into consideration the accounting convergence which stresses on IFRS and which in our view is an irreversible process, the implementation of fair value will have larger proportions in Europe and in Romania. The economic global crisis also highlights the importance of supplying transparent and unbiased information, no matter the accusations brought to the concept of fair value according to which it amplified the fall in the price of assets.

We believe that understanding and controlling economic phenomena, and developing a better prevention system for financial instability, is linked to disclosed accounting information and its quality. In this context, fair value and its applications, which we believe outline the role of accounting information, should be properly known. This paper shows the method of establishing fair value in the case of revenues, through the means of a conceptual/normative presentation and case studies.

Connecting balance sheet elements and outcomes to the market is benefic for the information which is valuated, recognized and disclosed in the financial statements and which enables users to make informed decision, whilst managing the implied risk.
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