# APPLICATION OF THE ENTITY ASSETS MEASUREMENT METHODS IN PREPARING THE FINANCIAL STATEMENTS

**Marina MAISURADZE**
*Ivane Javakhishvili Tbilisi State University, Georgia*
*Marina.maisuradze@tsu.ge*

**Abstract**
*In conditions of globalization of the world economy, development of the assets measurement uniformed rules and methods is deemed one of the most important factors for ensuring competitiveness of entities of the international markets.*
*According to requirements of the International Financial Reporting Standards, a clause that meets a meaning of element of the financial reporting, should be recognized and reflected in the financial statement if it has a par value or a value and, can be measured reliably. This requirement relates also to the assets reflected in the financial reporting, which fair value may be changed during a time due to various reasons. Therefore, an entity should re-measure within certain intervals of time the assets it holds and, fix their fair value as at a given moment. Considering the aforementioned, the issues of measurement of the assets of enterprises, is critically important.*
*The present Article deals with the methods of measurement used for certain classes of assets, as well as the real value measurement issues and, and the author's opinion on all this.*

**Key words:** *Asset; Measurement; Fair value, Financiasl reporting.*

**JEL Classification:** *M41*

## I. INTRODUCTION

One of the most important issue in the accounting is the one relasted to measurement of the elements of financial reporting. Financial state of an entity and the results of its operations depend considerably on the methods of measurement applied by the entity. During the years the assets were measured through their purchase value (past value). In conditions of the fixed prices, this method provided a true and reliable information about the financial state of enterprise. However, the rising inflation, current economic processes, and various uncertainties, have preconditioned development of different methods of measurements, such as: the Distortion Method, Expenditures Method, Fair Value Method, Net Sales Method, Average Expenditures Method, Recoverable Cost Method, Discounted Value Method , etc.

In the last period, the Fair Value Method has gained higher popularity. This method is governed by IFRS 13 where the fair value is determined and the grounds of measurement of the fair value are specified

Authors of the literature listed below (Maisuradze M., 2012, 2013, 2015, 2016, 2017; Vardiashvili M., 2016, 2017; Chelidze I., 20120, 2016) dealt with various aspects of research of the assets measurement-related problem.

## II. ESSENCE AND TYPES OF ASSETS MEASUREMENT

Measurement is the cash amounts determining process according to which the given elements of the financial reporting are recognized in the balance and the profit-and-loss account of an entity and, which implies selection of this or that specific method of measurement.

When preparing the financial reporting, the entity applies various methods of measurement with different extent and combinations .The methods of measurement of clauses of the financial reporting, are as follows:
1. Initial Value
2. Balance Value
3. Current Value
4. Recoverable or Reimbursable Value
5. Sales Value
6. Service od Discounted Value
7. Residual Value

8. Depreciation or Amortization Value

The Initial Value i.e. Par Value is a cost by which the assets are recognized according to the cash or its equivalent or other fair amount paid at the moment of purchase or creation of the asset. Th par value includes the following:

Purchasing price of the asset including the customs duties reimbursable amounts, but excluding discounts and benefits;

Transportation and installation costs directly related to delivery of the asset to the place of destination and put it into the operable state

Costs od disassembly liquidation, rehabilitation of site by their initial value and discounted value, which the company undertakes at the moment of purchase of the asset,, or later on.

Balance Value is the cash amount by which the fixed assets are reflected in the Balance Sheets after subtraction of the accumulated depreciation and the impairment loss.

The assets are accounted by their current value in amount of cash or its equivalent, which could be paid at the moment when the company has purchased them or their analogical item.

Recoverable or Reimbursable Value is the highest amount between the net selling price and the value in use of the asset.

The assets are accounted by their sales value in amount of cash flows or their equivalent which can be received in the current period as a result of sale-and-purchase deal between experienced persons wishing to make a relevant deal according to the established market prices, provided that the deal is to be concluded between the independent, not related to each other, parties.

Service value is a discounted value of the cash flows to be received in the future from the assets or cash-generating units through ordinary course of activity of the company. The factors listed below should be taken into account, when calculating the service value of the asset:

Measurement of volumes of the future expected cash flows to receive from the assets and, their in-time distribution;

Expected results of possible changes in the volumes of the future cash flows and, their in-time distribution;

Time value of cash, based on the current marketable non-risky interest rate

In-cash expression of existence of the asset-related inherent uncertainty

Residual value is a measurable amount the entity could receive at the given moment from sale of the fixed assets, with subtraction of the sales expenses, if the asset had not any more the expected state at the end of the useful service term. The useful service term is defined by period during which the asset could be used or the products could be manufactured from the assets in a volume expected by the entity.

Depreciation or amortization value is a value of the fixed assets as recognized in the financial reporting, with subtracting the residual value.

In the International Financial Reporting Standards, the issues of assets, their recognition and measurement, are governed by: IAS 2 –"Inventories", IAS 16 – "Property, Plant, and Equipment", IAS 38 – "Intangible Assets", IAS 40 – "Investment Property", IAS 41 – "Agriculture", IFRS 5 –"Assets classified for sale", IFRS 9 – "Financial Instruments".

On the seminar held by ECCB[7] in 2012, devoted to classification of the assets based on the International Financial reporting Standards, the following assets were introduced, on which the standards apply and which meet the conditions of the international definition of the "asset" (Table 1).

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[7] ECCB(Eastern Caribbean Central Bank)

**Table 1. Assets Classification**

| Type of Assets | Application in business | Type of future economic benefit |
|---|---|---|
| IAS 2 –"Inventories", | For sale, or making reay the gods or sdervices | Cash or other asset received by means of exchange |
| IAS 16 – "Property, Plant, and Equipment" | For use in the industries or in cases of delivery of goods and services. rental, or administrative purposes (for more than 1 period) | Cash received as a result of sale of the final products or services |
| IAS 38 – "Intangible Assets", | For use in the industries or in cases of delivery of goods and services | Cash received as a result of sale of the final products or services |
| IAS 40 – "Investment Property" | to generate rent or capital incomes, or both | Independent cash flows from other assets |
| IFRS 9 – "Financial Instruments" | Instrument for generating or hedjing the returnability of cash flows | Cash or other financial assets received by means of exchange |

Source: : www.ifrs.org

Based on the International Financial Reporting Standards, let's consider the methods of recognition and measurement of each asset.

The Inventories are measured by the lowest amount between their par value and net sales value

The net sales value is an ordinary sales price typical for the economic process, from which the expenses for finishing the products and other sales costs are subtracted.

At the same time, when measuring the net sales value, the estimated changes in prices or values are to be taken into account, which are directly related to those economic events which mat happen after the end of the reporting period. These events confirm to a high extent the conditions existing at the end of the reporting period.

Par value of the inventories includes: all the costs related to their picase and processing, as well as the expenses incurred to their tyransportation to the point of destination and put into approprate conditions.

Methods of determinagtion of the par value, such as the Normatives and Retal Price Method, may be used by pratical point of view, if the results are approxi. near to the par value. In case of the Normative Method, the rated levels of spending the raw materials and components, use of the workforce, and the production capacity are to be envisaged. These norms should be revised on a regular basis and, modified according to the existing conditions.

IAS 16 – "Property, Plant, and Equipment" provides opportunity of use of two models of measurement: Cost Model and Revaluation Model . The Cost Model is deemed a traditional one, used in almost all national accounting systems, regarding the fixed Assets.

IAS 16 is intended for determining rulers of accounting the Property, Plant, and Equipment in sic a manner that the customers of the financial statements could receive information about the company's investments to the Property, Plant, and Equipment, as well as about changes in such investments.

It should be noted that in the developed economies, impact of inflation on value of the assets may be insignificant, however, in case of long-term assets, inflation will have an impact on a truthfulness of the information provided in the financial statements, that violates the fundamental principle of the financial reporting. Reflection of such long-term assets by their initial (past) value will cause (and causes) submission of a incorrect information in the financial reporting and, the latter swill not be the basis for making a right economic decision. All the above mentioned confirms that for the companies it becomes more acceptable to apply the cost measurement method.

IAS 38 "Intangible Assets", like IAS 16, provides two models of measurement – cost model, and revaluation model, however, unlike IAS 16 – "Property, Plant, and Equipment", the intangible assets mat be accounted by their fair value in cases only, if the active market exists. On such markets, the value of the intangible asset is the same as its fair value.

IAS 41 – "Agriculture" deals with recognition and measurement of the specific assets – biological Assets. The characterizing feature of the biological assets is the process of biotransformation i.e. the process of growing up reproduction, and degeneration, as a result of which the qualitative and quantitative changes take place in the biological asset. The Standard requires that the biological assets and the agricultural goods be recognized by their fair value, with subtracting the sales-related expenses, in order to trace the results of biotransformation since the time of their origination ( Maisuradze.M 2012).

At the initial stage, the purchased or own-produced investment property, must be recognized by its cost (Maisuradze M. Vardiashvili M. 2017).

Cost of the purchased investment property must include the purchasing price and the professional legal service fee (if any, of course), as well as the property transfer fee and other costs of the deal (Maisuradze M. Vardiashvili M. 2017).

According to IAS 40, the company must select the cost model or the fair value model as the accounting policy, for measuring the investment property after the initial recognition thereof and, apply this policy towards the whole investment property.

IAS 13 determines that the investment property must be measured by its fair value as at each reporting date and that the changes should be reflected in the profit-and-loss account of the reporting period. Considering that in some countries the investment property's market is not developed and thus, determination of the fair value is difficult, IAS assumes that a company must measure the value of the investment property with using the Cost model specified in IAS 16 (Maisuradze M. Vardiashvili M. 2017).

The company measures the asset classified for sale with the lowest figure between its balance value and the fair value reduced by the selling expenses.

When sale is expected to take place a years later, the company will measure the sales expenses with their discounted value. Any increase in the discounted value of the expenses, which may be cause by the time-related factor, must be recorded in the profit-and-loss account as the financial costs.

Until the asset will have been initially classified as the one intended for sale, its balance value should be measured according to relevant IAS.

The financial asset may be measured by:

1) Depreciation Cost;

2) Fair Value.

According to the principle of superiority of a content – one of the characteristics of reliability of the information of the financial reporting over the form thereof, the asset taken in lease and the related obligations shall be subjected to reflection in the financial reporting, since an object taken in lease, meets the main criteria of its recognition as the asset:

An economic benefit gained by lessee through the use of the leased asset, is transferred to it for a certain term of usable service of such asset;

It becomes possible to assess reliably a value of the leased asset.(Maisuradze M.Vardiashvili M.2016).

## III. APPLICATION OF FAIR VALUE IN ASSETS MEASUREMENT

Most of the International Accounting Standards (IAS) contain the regulations for measurement of the fair value, however, in the explanatory notes for the fair value and its measurement , the requirements of disclosure of the information were not gathered together and, in some cases, a purpose of the measurement was not formulated clearly. These deficiencies are removed by IAS 13. The Standard provides definition of the fair value, directives of its use, methods of measurement chart, etc. (Maisuradze M. Vardiashvili M. 2016).

A purpose of the fair value measurement is to determine as at the date of measurement the price that would be received to sell an asset or paid to transfer a liability voluntarily in an orderly transaction between market participants under the current market conditions. Thus, a fair value by position of the market participant holder of the asset (or with certain liability) is the price of the asset for positioning on the market as at the date of measurement (25, 2014). however, the Standard provides no explanation, what date is meant in the "date of measurement".

IASS 13 did not modified in full the former definition of "Fair Value" , however, clarified it considerably (Maisuradze M. Vardiashvili M. 2016).

In the definition of Fair Value a notion of "exchange" is preserved, but, the open hand distance" principle contained in the former definition of the Value, is deleted (Maisuradze M. Vardiashvili M. 2016).

Likewise the former definition of Fair Value, the updated definition too implies a voluntary exchange transaction. It means that this is not a case of a factual sale or enforced transaction, however, in the former definition:

a) It was not clarified whether the entity was selling or buying the asset;

b) It was unclear a meaning of "performance of obligation" since there were indicated experienced market participants – wishers to make deal, not the creditors;

c) it was not formulated clearly whether the measurement was performed at the date of exchange of the asset. or at any other date.

The definition provided by IFRS 13 it is [provided more clearly that the fair value is a measurement based on the market data, and reflects the current market conditions and not the company's expectations to the future market conditions. Fair value is the price the sellers can receive, not the price they wish to receive from selling the asset (Maisuradze M. Vardiashvili M. 2016).

A fair value is measured for a specific asset. At the same time, when a company measures a fair value of the asset, it must envisage the following characteristics:

a) Conditions and location of the asset;

b) Any restriction if any related to sale or use of the asset.

### IV. FAIR VALUE MEASUREMENT METHODS AND HIERARCHY

There exist three most spread methods: Market Approach, Costs Approach, and Revenue Approach (Maisuradze M. Vardiashvili M. 2016).

In case of the Market Approach, those process are used, which are received as a result of the market transactions implemented by identical or similar group of assets, liabilities, or assets and liabilities (like an enterprise).

 The Costs  Approach reflects a cash amount which could be needed for replacement of the operational capacity of the asset  at the current moment, i.e.   the current cost of replacement  (Maisuradze M. Vardiashvili M. 2016).

In case of the Revenue Approach, the mounts of future period (e.g.  cash flows, or incomes and expenses) are transformed into one current (i.e. discounted) amount. If an enterprise applied the Revenue Approach, measurement of fair value reflects the current market expectations on the future sums.

IASD 13 establishes the fair value hierarchy, according to which , the inputs used to measure the fair value are  categorised in three  different levels, where the quoted prices (unadjusted) for identical assets or liabilities in active markets are of the highest priority (Level 1 inputs data )while the non-empiric input data are of the lowest priority (Level 3 inputs data) Maisuradze M. Vardiashvili M. 2016).

Level  1 input data  are quoted prices (unadjusted) in active markets for identical assets  that the entity can access at the measurement date. As a rule, these prices provide the most reliable information on the fair value, so they must be used in all cases of the fair value measurement .

Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3 inputs are  unobservable inputs for the asset or liability.

### V. CONCLUSION

Thus, different assets, die to their nature and peculiarities, require different types of measurement. It is obvious also that the fair value model is used for measurement of assets of various classes, despite the fact that IAS 13 has entered into the force not so long ago.

The economist scientists have various pinions regarding use of the fair value model . Some of them supports actively its application, while others – oppose, however, the fact that this model of measurement has become a topic of discussions among scientists, indicates that it can be assessed positively.

Measurement of fair value of the assets has its positive and negative sides. The positive factors,  in particular, are:

Objective assessment of future cash flows;

Maximally  comparable information on the assets;

Efficient assessment of  activities of an enterprise.

Negative factors are:

Conditional nature  of fair value;

High level of uncertainty in case of inexistence of the active market, because, in addition to the standard assets there exist also the rare (unique) assets as well for which even a single deal may not exist, to say nothing about an active market. So, a question is how to measure a fair value of such asset. The Standard says nothing to this end.

Moreover, IAS 13 dopes not  identify measurement methods  for the assets received free-of-charge and the assets revealed as a result inventory.

By our view, a fair value of such assets should be measured based on a reasonable judgement, namely:

1)  By the discounted value of the cash flows to be gained in future (Revenue Approach)

2) Costs-based measurement

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