Historical Cost and Fair Value: Advantages, Disadvantages, Application

Natalia V. Tkachuk

Abstract
The purpose of the study is to identify the scope of application of historical cost and fair value accounting. Historical cost is the purchase price of an asset acquired by a company. Fair value accounting is based on the current market situation as of the current date. Each type of valuation can be conditionally defined as subjective. However, either historical cost or fair value can be used to form the reporting indicators necessary for key users and stakeholders. The study is based on the analysis of fundamental accounting assumptions (static and dynamic balance-sheet), research papers on accounting, and the legislation of the Russian Federation governing the business activities of legal entities. The study resulted in a logical basis for the use of both fair value and historical cost in producing reporting data, as well as in finding solutions to the problem of their combined use in a single statement. Fair value is necessary to characterize the returns on investments and financial position of a company (static balance-sheet), and historical cost is necessary to calculate returns from ongoing business operations (dynamic balance-sheet).

Keywords: Fair value, Historic cost, Reporting, Financial statement, Balance-sheet.

1 Candidate of economic Sciences, associated professor Saint-Petersburg State Economic University, Russia 191023, St. Petersburg, Sadovaya Street, 21. E-mail: nattkachuk71@mail.ru
1. Introduction

The ongoing debate on how to evaluate the indicators of financial (accounting) reports has led to the question whether historical cost or fair value should be used? For many years in Russia, the historical value was considered as the only possible indicator. It was used both for reporting and comparison of actual indicators with the planned ones in the analysis of the effectiveness of economic activity. But the development of market economy and private property has changed the users' requirements for financial reports.

Currently, the key users of financial statements are investors: owners and creditors. Investors are interested not only in the yesterday's value, but also in the current market price of items, to make adequate investment decisions. Information generated in the statements should be relevant to the users' needs and priorities (Tkachuk, 2016; 2018). In many companies, the owners, not to mention the creditors, are separated from the actual control. The relationship between the company's administration and investors is described in the article of J.P.H. Fan and T.J. Wong “Corporate ownership structure and the informativeness of accounting earnings in East Asia” (2002).

But this does not mean that information about historical cost of items is no longer needed by anyone. Each method of valuation has its advantages and carries some information about the items. The main challenge is to find the correct application for each of them.

2. Literature Review


Choosing the right method for assets and liabilities valuation is one of the most important tasks of accounting. This was emphasized by many scientists. E. Britton and C. Waterston (1998) are convinced that financial situation and results of economic activities, represented in balance sheet and profit and loss statements, depend not only on the current reality, but also on methods of estimating and calculating the reported indicators.

The debate on reliability of fair value began long ago, as evidenced by articles of S. Fearnley and S. Sunder (2007) and continue to this day. G. Whittington (2015), and earlier J.M. Hitz (2007) considered fair value as a specific hypothetical price under ideal conditions. The choice of an appropriate basis for assessing financial statements is a fundamental and controversial issue noted by R.P. McDonough and C.M. Shakespeare (2015). S. Nobes (2001) believes that special standards should describe different approaches in determining fair value depending on asset type. The problems of using the fair value of non-financial assets are reflected in the article by R. Barker and S. Schulte (2015). S.B. Anderson, J.L. Brown, L. Hodder, P.E. Hopkins (2015) focused on the feasibility of using fair value to evaluate businesses. In particular, the valuation of financial assets at fair value has been criticized in many studies by authors such as C. Laux and C. Leuz (2010), F. Allen and E. Carletti (2008), and G. Plantin, H. Sapra, and H.S. Shin (2008). Russian specialists in accounting actively participate in the discussion about fair value. L.A. Chaykovskaya expresses that “the opposition of historical cost to fair value is false, the choice of one of this concepts and the complete denial of another lead to a distortion of certain characteristics of an economic entity” (2007).

Chairman of the IASB, Hans Hoogervorst (2015), in one of his speeches, called the issue of valuing assets and liabilities one of the most controversial in accounting.

At the same time, the issue of tying a specific type of assessment to a certain financial indicator, relevant to the needs of financial statements users, was not given sufficient attention.
3. Methods
Fundamental assumptions of accounting theory: the static and dynamic balance-sheet, have provided the methodological framework to the current study. The study is based on the analysis of research papers in the field of accounting and regulatory documents governing the process of creation and functioning of legal entities in the Russian Federation.

4. Discussion and Results
Financial information contained in accounting (financial) statements is commonly quantifiable in monetary terms. The method of evaluating items is inextricably linked to the static and dynamic theories on balance-sheet. The dynamic theory uses historical cost, and the static one often evokes market value.

Clearly, any item valuation is subjective and conditional. Some scientists hold the same point of view. In particular, N.N. Karzaeva argues that “valuation is not a characteristic of an item, but a quantification of its certain property. The characteristic inherent in an item is objective, because it is there or it is not. The way to measure this property is subjective, since it depends on the researcher” (2005). V. Kovalev notes that the valuation “can vary significantly depending on various factors and circumstances, such as: multiplicity of properties potentially available for quantitative assessment, preferences of appraisers and users for which the assessment is made, existence of objective and subjective limitations, degree of elaboration of the regulatory framework, etc.” (2014).

From the point of view of accounting (financial) statements, valuation is a method to determine the amount of money reflecting the facts of economic activities in accounting and reporting. The evaluation of an item is always carried out for some purpose. If we want to know how much we have spent on its acquisition, there will be one price, and if, for example, we want to know for which price it can be sold, it won’t be the same. In parallel, the sale price can be determined in different ways, since appraisers use different sources of information.

V.Ya. Sokolov insists that “the task of an accountant comes down to choosing from the whole set of valuation methods those that are of direct interest for managing business processes and to apply them correctly to the object of valuation” (2007).

We have to dwell on the main approaches to evaluating the historical cost and fair value, which are the main characteristics of dynamic and static balance-sheet (features of static balance-sheet are reflected in the works of S. N. Karelskaya (2010)).

Historical Cost
The historical cost helps identify the financial result of company’s activities, since it allows to generate information about the actual expenses of a company comparing them with revenues and other income. The fact that, for the most part, the components of historical value are based on external documents, makes this estimate reliable.

Historical cost principle is currently predominant in Russian accounting system. However, the standards for accounting of fixed and intangible assets provide for a voluntary revaluation based on their market value. But this option is not often used, since in Russia accounting is traditionally perceived, first of all, as a source of information for tax purposes (first of all, income tax).

Historical cost is formed at the moment of transferring the item to the corresponding type of asset or liability. The cost of an asset is closely related to the way it enters the company. At the same time, only when an asset is purchased for money, its cost represents the amount of funds spent by the company on its acquisition. The formation of historical cost can be described by the following formula:
Historical cost (original cost) = Basic component (applied if the asset comes from outside) + Cost associated with acquired asset

The basic component depends on the way the asset comes to the company:

− When purchasing an asset it's the price set by the seller;
− When received in payment for stocks, shares, stakes in the authorized capital it's the agreed value of asset;
− At free acquisition it's the market value of the asset, determined based on prices for similar products or established by an independent appraiser.

The company's expenditures may include: delivery, remuneration of intermediaries, production costs, costs associated with bringing the asset to a usable state (installation, adjusting, mounting), etc. Any costs common for several items (indirect costs related to finished products, works, services) are distributed between them based on the methodology established by the company's managers. If the object is acquired in exchange for other assets, then its initial value is determined by the value of assets transferred to the seller in exchange.

Obligations are estimated based on the amount of charged or received cash, cash equivalents or other benefits acquired in exchange for an obligation, or expected payments necessary to repay obligations in the normal course of events (payment of taxes, wages, etc.).

However, this type of valuation has some significant drawbacks.

First, historical cost becomes irrelevant over time. Therefore, to calculate a number of indicators a different method of valuation is required. The assets data based on their historical cost do not give information about the current value of an enterprise as an integral property complex. In addition, the values of items acquired at different points in time are summed up in the balance sheet, when using the historical cost. This indicator is very doubtful for analysis. Hence, the use of historical cost of assets is not always necessary, even for reference. Different scientists hold the same opinion. In particular, N.V. Breslavtseva, I.N. Bogataya, S.V. Romanova, E.V. Grudnina (2004) believe that the universal use of historical cost makes the balance sheet data at least questionable.

Secondly, some subjectivity characterizes the historical cost formation, although public economics literature contains statements about the objectivity of this type of valuation. The list of other costs included in the production cost of an asset is never closed. The following principle is applied: a specific type of cost is included in the asset cost if it is associated with this asset. Here, a certain amount of subjectivity is inevitable. For example, a company acquired an item of property and paid certain amount for delivery to the vendor. The distribution of delivery services is determined in each case by the company itself, based on the specific conditions of the situation. Thus, the value of items, their quantity, and other characteristics of objects can serve as a base.

If the assets are manufactured by the company itself, then there is even more subjectivity in the formation of cost. The main type of assets that appear in this way (or rather, only this way) are finished goods. It is worth mentioning one of the elements of accounting policies - the procedure for the allocation of indirect costs. The cost of specific types of products, works, services also depend on the base for their distribution fixed in accounting policy of the company. If the amount of indirect cost is not large, it will certainly not have a strong impact. But if the amount of allocated indirect costs is substantial, then the question about objectivity raises.
Example
Let us consider how the different cost of production can be obtained at the same direct costs of the products A and B.

Initial data:
1. Progress LLC manufactures two types of products: A and B. The information related to their production and sales is presented in the following table:

<table>
<thead>
<tr>
<th>Indices</th>
<th>Products</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>1. Worker wages, rubles.</td>
<td>125 000</td>
<td>60 000</td>
<td></td>
</tr>
<tr>
<td>2. Material costs, rubles.</td>
<td>100 000</td>
<td>120 000</td>
<td></td>
</tr>
<tr>
<td>3. Equipment operation, machine hours</td>
<td>20 000</td>
<td>42 000</td>
<td></td>
</tr>
<tr>
<td>4. Working time, man-hours</td>
<td>250 000</td>
<td>100 000</td>
<td></td>
</tr>
</tbody>
</table>

2. The indirect production costs of the enterprise amounted to 180 000 rubles.

<table>
<thead>
<tr>
<th>Allocation base</th>
<th>Distribution rate</th>
<th>Indirect costs</th>
<th>Cost of production</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Product A</td>
<td>Product B</td>
</tr>
<tr>
<td>1. Working time</td>
<td>180 000 / (25 000 + 10 000) = 5,1429</td>
<td>128 573</td>
<td>51 427</td>
</tr>
<tr>
<td>2. Worker wages</td>
<td>180 000 / (125 000 + 60 000) = 0,973</td>
<td>121 625</td>
<td>58 375</td>
</tr>
<tr>
<td>3. Hours of equipment operation</td>
<td>180 000 / (20 000 + 42 000) = 2,9032</td>
<td>58 064</td>
<td>121 936</td>
</tr>
<tr>
<td>4. Material costs</td>
<td>180 000 / (100 000 + 120 000) = 0,8182</td>
<td>81 820</td>
<td>98 180</td>
</tr>
<tr>
<td>5. Direct costs</td>
<td>180 000 / (225 000 + 180 000) = 0,4444</td>
<td>99 990</td>
<td>80 010</td>
</tr>
</tbody>
</table>

In general, it should be noted that the information on the costs valuation comes into the accounting system of a company from outside, therefore it does not depend on the accountant. This fact may be considered as positive, since any accountant cannot influence the valuation of factors of economic activity. This lends more credence to accounting information. Further, the distribution of information will depend on accountant’s actions; and this may cause impacts on the formation of assets cost. Thus, it is possible to distinguish the subjective component in the formation of historical cost (Table 1).

Table 1. Subjective components of historical cost

<table>
<thead>
<tr>
<th>Ways of adding assets</th>
<th>Subjective component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase</td>
<td>Different ways (options) of distributing delivery services while purchasing several objects simultaneously</td>
</tr>
</tbody>
</table>
Assets received in payment for stocks, shares, stakes in the authorized capital | The basic component of historical cost is determined not as a result of a real purchase and sale transaction, but just as fair value — by an appraiser and/or founders

Uncompensated receipts | Different ways (options) of indirect costs distribution

Manufacturing by company itself | Distribution

Thirdly, the complexity of determining the historical cost is due to several points: 1) The process of calculating the cost of items manufactured by the company itself (fixed assets, finished products). 2) The need to engage an appraiser in case of uncompensated receipts and assets coming from owners in payment for shares and stakes.

**Fair Value**

Ya.V. Sokolov argues that “historical prices mean little or nothing; current prices are only a benchmark for their changes in the future. Consequently, the financial position of an economic entity is not measured by what its value is at the current moment, and certainly not by what it was before, but only by what it will be in the future” (2010). The discrepancy between the historical cost and market estimates can be attributed to the following:

1. Inflation resulting in a rise of average price level for all goods, works and services, and money depreciation.

2. Changes in market situation for specific assets: depreciation, increase or decrease in assets value under the influence of supply and demand patterns, etc.

3. Initial discrepancy between the original (historical) cost and market value: valuation of property coming in payment for stakes by its owner; asset acquisition at a large discount from the seller, etc.

The fair value gives an opportunity to estimate the value of an enterprise as a property complex and the return on invested capital. The users' desire to get information about “today's”, rather than “yesterday's” business value, caused a gradual replacement of historical cost by other estimates in financial reports: market value, replacement cost, net realizable value, discounted value. The replacement cost is the amount of money that must be paid if the need arises to replace an item with a new one. Net realizable value is the selling price of an item less the costs associated with its sale. Discounting is based on the assumption that a dollar today is worth more than a dollar tomorrow, due to the fact that it can generate income in the form of interest.

In the early 1980s, a new term appeared, combining various types of non-historical estimates: fair value. Fair value is called, and rightfully so, a revolution in accounting. The fair value importance in IFRS is constantly increasing.

The term “fair value” first appeared in IFRS in 1982, but began gaining ground between 1998 and 2000. In May 2011, IFRS 13 Fair Value Measurement was issued. The purpose of this standard is, above all, to define a mechanism for establishing fair value when necessary or permitted in accordance with the requirements of other standards. IFRS 13 “Fair Value Measurement” was to identify contradictions between various international standards in terms of determining fair value. The IASB has consolidated all guidance on fair value measurement into one standard, since some standards of determining fair value contradicted each other.

Fair value is 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 (i.e. exit price).

At the same time, market participants (buyers, sellers, etc.):
- Must be unrelated parties;
- Must be well aware of asset, liability and transaction;
- Must be able to participate in a transaction with this asset or liability;
- Must enter into transaction willingly, without coercion (i.e. the transaction must not be enforced).

To determine the fair value of an asset or liability, an enterprise chooses a valuation technique that allows greater use of observable inputs and minimal use of unobservable ones. The fair value measurement must be based on the data from 1) main market (the market with the largest volume and level of activity for chosen asset or liability) or 2) the most profitable market for this asset or liability, which allows to maximize the amount of money that would be received selling the asset, and to reduce the sum to pay during the transfer of liability, taking into account all the transaction costs.

When determining the fair value, three levels of data can be used: the first and the third levels are, respectively, the most and the less recommended. Level 1 inputs are quoted prices for identical assets or liabilities in active markets at the valuation date. Since valuations are made for identical assets or liabilities, no adjustment is required. This applies mainly to quoted financial assets and liabilities. The cost calculated based on data from this level is the most reliable, since these data are 1) easy to verify and 2) do not need any adjustment nor professional judgment.

The second-level inputs are not quoted prices for identical assets or liabilities, but they are directly or indirectly observable, in other words, based on public information (for example, real estate prices), and any interested person can easily verify them. In determining the fair value, such prices have to be adjusted to take into account the characteristics of a particular asset or liability, and the adjustments require a professional judgment, which supposes certain subjectivity. The inputs of third level are unobservable data on an asset or liability for which market prices are not available, but are set by the company, based on all the available information about the assumptions that market participants would apply when setting the price for an asset or liability. Such data are practically not verifiable for outsiders.

Valuation (market, cost and income) methods are commonly chosen based on the availability of basic data to determine the fair value. The market approach is essentially applied when the initial data of the first and second levels are available, the cost approach is used with the second and third levels, and the income approach - only with third level inputs.

According to N.N. Ilysheva and O.S. Neverova, “the hierarchy of information sources for fair value set in IFRS 13 actually draws up a clear methodological chain, which can help avoid mistakes and incorrect estimates” (2014).

However, IFRS 13 contains some provisions that have to be clarified. We share the opinion of E.S. Druzhilovskaya (2014) who noted some contradictions in the interpretation of "fair value" concept. Hence, paragraph 2 emphasizes that fair value is a market-based valuation, which naturally assumes that market value and fair value are the same. However, in accordance with paragraphs. 62, 65-811 of IFRS 1, replacement cost and discounted value can also be used to calculate fair value. These requirements, unlike paragraph 2 of IFRS 13 indicate that fair and market values are not synonymous.

The following advantages of using fair value should be mentioned:
- It allows to determine the value of a company as a property complex at the reporting date and provides an objective calculation of the estate per unit of property (share or stake);
- It provides an objective basis for evaluating future cash flows;
- It is the basis for assessing an enterprise as a business and, as a result, for determining the market value of stakes and shares;
- It facilitates comparisons of data across different organizations at one date;
- It allows owners to evaluate the effectiveness of company’s management;
- It provides the company managers with up-to-date information on the value of the property complex entrusted to them.

At the same time, it is hard to argue that a number of inherent weaknesses in fair value method call into question the possibility of organizing accounting on its basis: the incorrectness of the very name “fair”, the possibility of abuse when calculating it, the subjectivism of formation in the absence of an active market, additional costs associated with the involvement of independent appraisers.

The use of fair value is an objective reality. According to Jacques Richard, static accounting aims at determining whether the sale of all assets will allow the entrepreneur to receive the amount needed to pay the accounts payable (Richard, 2000). The problem of using fair value comes down to the need for credibility of its evaluation. The company’s management should not be able to manipulate the accounting (financial) statements, which significantly reduces the value of such reports for potential users. One of the ways of doing this is the involvement of an independent specialist - a professional appraiser who would determine the fair (market) value of company’s assets.

The formation of historical cost and fair value is, however, a subjective and labor-intensive process. Therefore, the emphasis should be shifted, first of all, to identifying the scope of their application in order to ensure the high-quality statements. Thus, when it comes to the calculation of company’s value and returns on investment, company’s assets and liabilities should be measured at fair value. But, if the user is interested in the financial result of company’s current activities (the difference between the current income and expenses), then the estimates at historical cost cannot be avoided. Profit is a calculated indicator, i.e. subjective. Therefore, both static and dynamic interpretations of company’s financial performance will be useful to users. The mechanism of managing financial results is considered in the article by A.I. Borodin, A.A. Tatuev, N.N. Shash, S.S. Galazova, V.V. Rokotyanskaya (2015).

5. Conclusion

The following conclusions can be drawn from the results of the study:

1. Both historical cost and fair value are very important for the formation of financial statements for external users.
2. Both historical cost and fair value can be characterized by subjectivity of their evaluation, which makes it meaningless to compare them by this parameter.
3. The main problem of accounting theory is to find the way to use historical cost and fair value in a single report, not by mixing them, but in a reasonable combination to calculate the indicators corresponding to both static and dynamic balance-sheets.
References


Sokolov, Ya. V. (2010). Accounting as the sum of factors of economic activity: training manual. Moscow: Magister; INFRA-M.


