

## METHODICAL APPROACHES TO THE ACCOUNTING OF FIXED ASSETS REVALUATION

### МЕТОДИЧНІ ПІДХОДИ ДО ВІДОБРАЖЕННЯ В ОБЛІКУ ПЕРЕОЦІНКИ ОСНОВНИХ ЗАСОБІВ

*On the basis of studies of current legal requirements and accounting practices in the public sector, the paper discusses accounting procedures that should be carried out in the process of revaluation of fixed assets. The paper grounds necessity, purpose, objectives, and positive effects of fixed assets revaluation of public institutions. The paper determines the range of subjects taking a direct part in the reassessment and responsible for relevant information on fixed assets in statements of budget-funded entities.*

**Key words:** accounting, assessment, fixed assets, revaluation, budget-funded entities.

*У статті на основі дослідження чинних законодавчих вимог та практики бухгалтерського обліку в державному секторі систематизовані облікові процедури, що повинні здійснюватися розпорядниками бюджетних коштів в процесі переоцінки вартості об'єктів основних засобів. Обґрунтована необхідність, мета, завдання та позитивні наслідки проведення переоцінки основних засобів для розпорядників бюджетних коштів. Визначено коло*

*суб'єктів, що приймають безпосередню участь у переоцінці та відповідають за релевантність інформації щодо основних засобів у звітності бюджетних установ.*

**Ключові слова:** облік, оцінка, основні засоби, переоцінка, бюджетні установи

*В статті на основі дослідження дійсуючих законодавчих вимог та практики бухгалтерського учета в государственном секторе систематизированы учетные процедуры, которые должны осуществляться распорядителями бюджетных средств в процессе переоценки стоимости объектов основных средств. Обоснована необходимость, цели, задачи и положительные последствия проведения переоценки основных средств для распорядителей бюджетных средств. Определен круг субъектов, которые принимают непосредственное участие в переоценке и отвечают за релевантность информации о основных средствам в отчетности бюджетных учреждений.*

**Ключевые слова:** учет, оценка, основные средства, переоценка, бюджетные учреждения

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**Problem definition.** Ukraine's cooperation with international organizations, financial institutions, activity in foreign exchange and stock markets require openness and transparency of information on economic issues, in particular on accounting that should meet requirements of international standards.

The subjects of accounting in the public sector are the Ministry of Finance, which provides the state policy in the field of accounting, Treasury and state social insurance funds as well as budget-funded entities. Mainly budget-funded entities while forming the primary information upon assets increasingly face problems of identifying assets and objective determination of their fair value.

**Analysis of recent research and publications.** Problems of accounting processes organizing and development are subject to interest of numerous researchers, including L. Hizatulina, A. Doroshenko, M. Koshchynets, N. Martseniak, S. Levitsky, S. Sushko, I. Tkachenko, A. Farion.

Cabinet of Ministers of Ukraine approved the Strategy for Modernization of the Accounting System in the Public Sector for 2007–2015 [7]. One of the main reasons for the development of the Strategy was the improvement of assets valuation procedure. The changes in limit value for the recognition of an asset as fixed one, as well as in the legislative base of fixed assets depreciation led to the unrecorded fair value of fixed assets in accounting. On the other hand, the value of fixed assets accounting entities in the public sector is essential information for decision-making at different management levels (Fig. 1)

A change in the value of assets is an objective process that primarily depends on the economic processes taking place in the country, as well as on a number of other factors. So, the urgent task of accounting is an objective and timely reflection of these changes in statements to meet requirements of different information users.

According to the National Standard of Accounting in Public Sector (NSA PS) 121 «Fixed Assets» (part 3, paragraph 3) [8], if the residual value of fixed asset is significantly different from its fair value at the balance sheet date, public sector entity may decide on asset revaluation.

**Task definition.** The paper aims to develop methodological approaches to the implementation and accounting of fixed assets revaluation for budget-funded entities.

**The main material of research.** International Standards of Accounting propose two approaches to the evaluation of fixed assets: basic one and an alternative one. These concepts ground different assessment. Based on the first concept, fixed assets are evaluated on original (historical) cost. This means that after primary recognition, fixed assets are reported on net book value calculated as original cost less accumulated depreciation. Another concept is based on an assessment of fixed assets at current value, which is computed after the revaluation and amount to the fair value of fixed assets less accumulated depreciation after the revaluation. It is assumed that regular revaluations are conducted to maximize

approximation of the book value to the fair value of fixed assets.

The process of fixed assets revaluation is among crucial accounting operations because its main objective is to change book value of fixed assets in accordance with their market value and allows pursuant assessment of fixed assets of public sector entities.

In international practice, the concept of market value and the methods of its determination are set by the International Valuation Standard 1 «Market Value Basis of Valuation» (IVS1). Market value in the context of International Valuation Standard 1 is defined as: «calculated value – the monetary amount, for which the property is to pass from hand to hand at the date of valuation between a voluntary purchaser and a voluntary seller as a result of a commercial agreement after adequate marketing. It is assumed that each party acted competently, prudently and without compulsion.

According to International Valuation Standard 1, the most common methods of assessment of market value are the sales comparison approach, the method of capitalized income (discounted cash flow) and cost method. In evaluating fixed assets, cost method consists of calculation the estimated cost of restoring assets less depreciation and impairment. Cost method is based on the principle of substitution, which assumes that the buyer will not pay for the property more than the amount needed to replace it with another object, similar

in beneficial characteristics. In evaluating the material fixed assets, the use of the cost-effective method is to calculate the estimated cost of restoring assets less all forms of wear. The cost of reproduction may be defined as the reproduction expenses or the replacement expenses. The reproduction expenses are expenditures necessary to produce the object with the same or similar materials, calculated at current prices. Replacement cost is the current cost of a new facility, which is in its characteristics closest analogue of the object that is measured.

Professor I. Blank in the study of this issue focused on such differences: reproduction cost reflects the cost of reproduction copies of the asset, while replacement cost is the amount of expenditure at current prices for the reproduction of the asset that is the functional equivalent benefits but made in modern design with using modern materials, advanced construction and design standards [1].

Revaluation of fixed assets is understood as adjustment of net book value of the fixed assets to their fair value [4] or as accounting procedure that agrees the residual value of fixed assets to its fair value [3].

There are some reasons for adjustment of net book value of fixed assets to their fair value: physical wear during operation, which may differ from the depreciation expenses charged as a result of depreciation; obsolescence; changes in market prices; inflation. Statistical indices represent a summary of changes in market prices. The survey of prices for facilities and

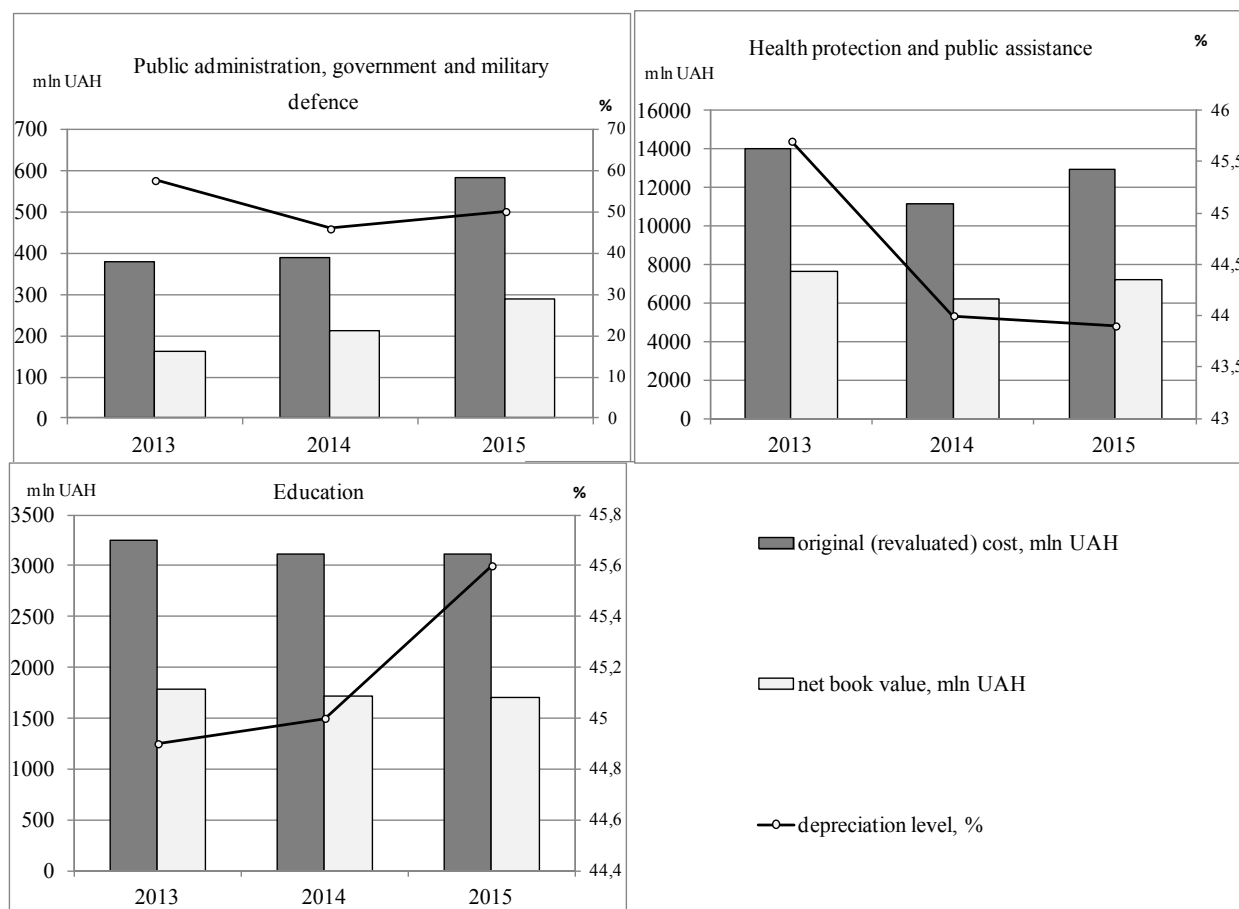


Fig. 1. Availability and condition of fixed assets for certain types of economic activity

equipment made in Ukraine shows annual price growth of 6 to 11% (Fig. 2).

According to the latest requirements in addition to markdowns and revaluation, in the process of revaluation of fixed assets, the concept of impairment is used. Impairment should be understood as the loss of economic benefit in the amount exceeding the residual value of the asset over recoverable amount. Under increasing utility – on the contrary, that is the economic gain in the amount equal to the excess of the residual value of the asset over recoverable amount. [6]

If the revaluation of fixed assets is carried out, the simultaneous revaluation of a group of fixed assets, to which belongs the object should be conducted. A group of fixed assets means a series of fixed tangible assets with similar technical characteristics, purpose, and terms of employment. During the process of revaluation, legally provided a classification of fixed assets or more detailed one, developed by budget-funded entity individually, can be applied. The degree of detail grouping of fixed assets for the purpose of a revaluation is to be determined in the order of accounting policies of budgetary institutions.

The decision on the revaluation of fixed assets of the public sector entity should be agreed with the body authorized to control of state (municipal) property if defined. Budget-funded entities of double subordination are required to coordinate decisions on revaluation of the budget institution of higher level, which approves the budget. Materiality threshold for the revaluation of fixed assets is accepted value equal to 10 per cent of the residual value of fixed assets rejected to their fair value.

Ministry of Finance in the letter on 07.04.2015 № 31–11420–07–5 / 12145 emphasizes that public

sector entity is entitled but not obliged to reevaluate fixed assets in certain conditions.

According to experts of expert appraisal agencies, revaluations of fixed assets have positive effects, such as: allows bringing accounting in line with the requirements of national and international accounting standards, to obtain reliable assets; ensures efficient management and dynamic dimensions depreciation fund and helps increase the confidence of the international financial institutions. But despite the benefits, there are drawbacks, which include additional financial costs to attract on a contractual basis of evaluation activity and the cost of labour for continuously monitoring the change in the fair and residual value of fixed assets [8].

According to the Law of Ukraine N2658-III on 12 July 2001 «On Assessment of Property, Property Rights and Professional Valuation Activities in Ukraine», in the case of revaluation of fixed assets for accounting purposes, property appraisal can be made exclusively by evaluation activity bodies.

The bodies of evaluation activity in Ukraine are:

evaluation agencies – registered in accordance with legislation individuals – entrepreneurs and legal entities regardless of their organizational and legal form and ownership performing economic activities, which include running at least one appraiser and which received a certificate of evaluation of the Law of Ukraine N2658-III on July 12, 2001;

– public authorities and local governments, who have the authority to conduct assessment activities in the performance of the functions of administration and management of state property and (or) property that is in municipal ownership, and which include those working evaluators.

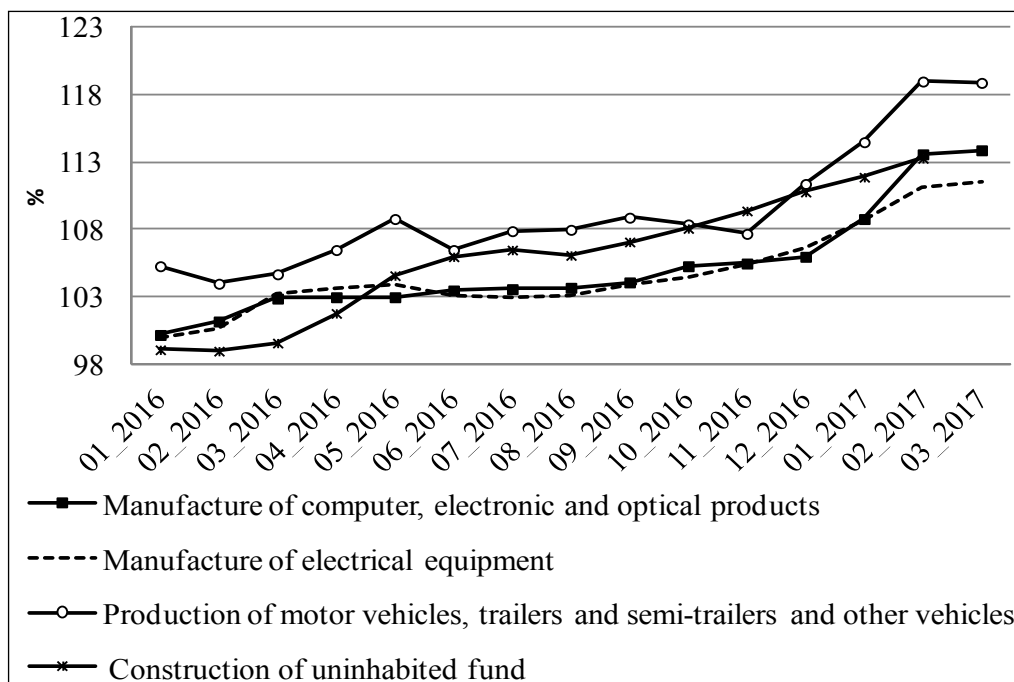


Fig. 2. Basic (to December 2015) producers' prices indices on certain fixed assets in 2016 and 2017

Implementation of assessment is confirmed by a report on the evaluation of property (the act of property assessment), signed by the appraiser and signed by the head of evaluation activity. In this report (act), estimator gives its opinion on the fair (market) value of the related assets. Revalued original cost and depreciation of fixed assets are determined by multiplying the original value, respectively, and depreciation of fixed assets revaluation index:

$$ROC = OC \cdot IR \quad (1)$$

where *ROC* – revalued original cost of fixed asset;  
*OC* – original cost of fixed asset;  
*IR* – revaluation index.

$$RAD = AD \cdot IR \quad (2)$$

where *RAD* – revalued accumulated depreciation of fixed asset;

*AD* – accumulated depreciation of fixed asset.

The revaluation index (*IR*) is calculated by dividing the fair value of the asset which is revalued by its net book value:

$$IR = \frac{FV}{NBV} \quad (3)$$

where *FV* – fair value of fixed asset;

*NBV* – net book value of fixed asset before revaluation.

According to National Standard of Accounting in Public Sector 121 «Fixed Assets» (part 2, paragraph 1), fixed asset is recognized as an asset, if there is a probability to obtain future economic benefits and / or it has the potential benefits to society. Given this, if the fixed asset continues to be used and bring economic benefits, it meets the definition of an asset. So, if a budget-funded entity uses fixed asset whose value is fully depreciated, reassessment is obligatory. In this case, the residual value of objects that continue to be used is necessarily determined.

The residual value – is the amount of money or value of other assets that public sector entity expects to get from the sale (liquidation) of fixed assets at the end of their useful life (operation), minus expenses related to the sale (liquidation) (part 4, paragraph 1 of NSA PS121). Given the above, if the residual value of fixed assets, which continues to be used, equal to zero, and it is impossible or impractical to determine the fair value of such an object a budget-funded entity should determine residual value, the amount of which increases its cost. And the depreciated value of this object equals to zero. The residual value is determined by the commission set up by the CEO of the budget-funded entity.

All changes of the original value and the amount of depreciation are recorded in the registers of analytical accounting.

In result of the revaluation, the value of the fixed assets may be written up as well as written down. The amount of surplus residual value of fixed assets of the public sector entity is included in the capital

surplus and the amount of reduction – to the costs of the reporting period.

In accounting and financial statements, these business transactions are reflected on the basis of relevant primary documents according to Typical Correspondence of accounts for the reflection of operations with assets, capital and liabilities of budgetary institutions in Annex 2 to the Plan of Accounts for Budgetary Institutions, approved by the Ministry of Finance of Ukraine on 26.06.2013 N611 (Table 1).

For registration and compile information on the amount of the surplus (markdown) tangible, intangible and financial assets, budget-funded entities use account 53 «Capital in Surplus». Credited account 53 shows an increase in capital surplus; debited account shows a decrease in capital surplus.

Table 1

**Book entries that reflect revaluation of fixed assets of budget-funded entities**

The content	Correspondence of accounts	
	Debit	Credit
1. Reflection revaluation (write up) of fixed assets in the amount of:		
original value write up	10 «Fixed assets»,	5311 (5321) «Revaluation (write-down) of fixed assets»
depreciation adjustment	5311 (5321) «Revaluation (write-down) of fixed assets»	1411 (1421) «Depreciation»
2. Reflection revaluation (write down) of fixed assets that were not previously written up:		
depreciation adjustment	1411 (1421) «Depreciation»	10 «Fixed assets»
original value write down	8411 (8421) «Other expenses for exchange operations»	10 «Fixed assets»

The account 53 «Capital in Surplus» has such subaccounts:

5311 (5321) «Revaluation (write-down) of fixed assets»;

5312 (5322) «Revaluation (write-down) of other assets.

The subaccount 5311 (5321) «Revaluation (Write-Down) of Fixed Assets» keeps records of amounts (of reduction) of fixed tangible and intangible assets of reduction of such facilities within the amounts previously conducted revaluations, referring to the surplus amounts accumulated the financial result.

The subaccount 5312 (5322) «Revaluation (Write-Down) of Other Assets» reflects the results of revaluation (markdown) of financial assets that is performed in cases stipulated by law, as well as another capital surplus.

If in past periods there was a write-down of fixed assets value, the amount of its surplus revenues recognized by public sector entity in the amount not exceeding the amount specified markdown, with

enrolment exceeding the amount of capital surplus in the year (Table 2).

Table 2

**Book entries that reflect revaluation of budget-funded entities' fixed assets previously written down**

The content	Correspondence of accounts	
	Debit	Credit
1. Reflection revaluation (write up) of fixed assets in the amount of:		
depreciation adjustment	10 «Fixed assets»	1411 (1421) «Depreciation»
original value write up in the amount of surplus of residual value within the previous revaluation expenses	10 «Fixed assets»	7411 (7421) «Other income from exchange operations»
original value write up in the amount of surplus the fair value upon previous revaluation expenses	10 «Fixed assets»	5311 (5321) «Revaluation (write-down) of fixed assets»

If in past periods revaluation of fixed assets resulted in write up, the amount of current caused reduction is credited to capital surplus reduction, but not more than the amount of the surplus, with the inclusion of the difference in expenses of referenced period (Table 3).

Table 3

**Book entries that reflect revaluation (write down) of budget-funded entities' fixed assets previously written up**

The content	Correspondence of accounts	
	Debit	Credit
1. Reflection revaluation (write up) of fixed assets in the amount of:		
depreciation adjustment	1411 (1421) «Depreciation»	10 «Fixed assets»
original value write down in the amount reduction of the residual value of the previous revaluation	8411 (8421) «Other expenses for exchange operations»	10 «Fixed assets «
original value write down in the amount previous revaluation	5311 (5321) «Revaluation (write-down) of fixed assets»	10 «Fixed assets»

Amounts of excess previous write-ups of fixed assets over the amount of the previous write-downs of fixed asset residual value refer to the accumulated financial result of budget institutions with a simultaneous decrease in the capital surplus and in cases of liquidation of property reveal an excess of write-ups of a fixed asset over the amount of the previous write-downs.

NSA PS121 provides depreciation on tangible assets belonging to fixed assets. Therefore, after the revaluation, the budget-funded entity should set a

new lifetime for each of fixed assets based on their technical condition and degree of deterioration. Further depreciation of revaluated fixed assets will be carried out based on a new service life.

Since the purpose of the initial accounting of fixed assets is the collection and processing of the facts of economic activities and their subsequent transformation into information that enables administrative staff to make decisions and avoid economic pitfalls and the content of the primary account is the primary observation of economic facts, measurements in natural and value terms, a recording media registration information – documents, data reassessment necessarily be reflected in primary documents and registers analytical accounting of fixed assets. In particular, changes to the original cost and the amount of depreciation are reflected the inventory cards of fixed assets, in the form approved by the Ministry of Finance of Ukraine N818 on 09/13/2016.

According to the Order of Drafting the Budget Reporting by Managers and Recipients of Budget Funds, Reporting by Funds of Obligatory State Social and Pension Insurance approved by the Ministry of Finance of Ukraine on 24.01.2012 № 44, increase (decrease) in value of fixed assets as a result of revaluation (of reduction) should be reflected:

- on line 370 «Capital surplus» of the form 1 «Balance Sheet»;
- on line 050 «Capital in surplus» (general fund) of the form N9d, № 9m «Statement of financial results»;
- on line 700 «Capital in surplus» (special fund) of the form N9d, № 9m «Statement of financial results»;
- on line 750 «Revaluated fixed assets (write-up)» of the form N5 «Statement of fixed assets»;
- on line 840 «Revaluated fixed assets (write-down)» of the form N5 «Statement of fixed assets»;
- The revaluation of fixed assets is carried on the annual balance sheet date. According to section 3 of NSA PS121 «Fixed Assets», revaluation of fixed assets of the group, objects, which are subjected to reassessment, in the future should be made with such regularity that their residual value of the annual reporting period would not significantly differ from the fair value. Thus, the frequency of revaluation depends on the frequency of fluctuations in the fair value of fixed assets. So information base for planning costs for the revaluation of the next year consists of forecasted inflation rates and price indices for real estate and vehicles. Since the cost of these assets is largely reacting to inflationary pressures in the economy, price monitoring and comparison of the carrying value of fixed assets to their market value allows management of the budgetary funds to argue decisions regarding the necessity of fixed assets revaluation

**Conclusion.** Proposed methodical approaches to the revaluation of residual value of fixed assets used by budget-funded entities can unify the appropriate accounting procedures and create a knowledge base for appropriate management decisions. The actual direction

of further research is monitoring the revaluation of fixed assets of budget-funded entities to the aggregation level of government to determine the effect on the change of the state budget of Ukraine.

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