

# *Features of identification, recognition and initial assessment of fixed assets in Russia and China in the era of new industrialization*

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**Abstract** — This article discloses the features of the definition, composition, recognition and initial assessment of fixed assets in Russia in accordance with domestic and international financial reporting standards and in China. The main goal of the work is to compare domestic and foreign methods of reflection in the accounting and financial reporting of buildings, structures and equipment, as well as the development of convergence directions of these areas. The review is based on the methods of analysis, comparison, analogy and extrapolation. The main part of the work formulates the definitions of fixed assets in Russian and Chinese accounting systems, lists the criteria according to which an asset can be recognized as an item of fixed assets and lists the elements that form the initial cost of assets. The conclusion is made that the rules of identification and assessment are closer in recognizing fixed assets, but significant differences are also noted in the countries under consideration. Perspective directions of the development of accounting are outlined with the main trend towards the unification of norms and rules and the development of a single terminological apparatus, taking into account the peculiarities of the translation of accounting standards into national languages.

**Keywords** — *fixed assets, buildings, structures and equipment, initial cost, actual costs, recognition of assets*

## I. INTRODUCTION

Fixed assets (terms "buildings", "constructions" and "equipment" are used in international practice) are the most important accounting objects that form the production potential of an enterprise, which is especially important in the context of new industrialization. Their reliable identification and assessment determines the correctness of the indicators formation of the enterprise's financial condition. At the same time, in connection with the ongoing integration processes in the world at the present stage, the question of convergence of the rules for identifying and evaluating fixed assets arises, so the interested users can make effective decisions regarding the provision of resources to economic entities for carrying out industrial activities.

The works of a number of scientists, including Druzhilovskaya E.S. [1], Kuznetsova O.N. [2], Sukharev I.R. [3], Popov A.Yu. [4] and others discuss the issues of identification and valuation of fixed assets in Russia. The problems of applying international accounting standards for fixed assets in foreign countries are considered by foreign

researchers Buren I. [5], Fayldild S. [6], Tsalavoutas I. [7], Trumbetta M. [8], and others. Trushkina I.R. [9], Kulikova L.I. [10], Mullinova S.A. [11] and others addressed the problems of convergence of Russian and international financial reporting standards in relation to the initial recognition of fixed assets. Noteworthy are the dissertations defended on this topic, in particular, by Boronina E. S. [12], Abdalova E.B. [13]. The scientific works by Petrov A.M. and Lymar M.P. are of a particular interest. They are dedicated to issues of valuation and accounting of fixed assets in China [14]. Despite the importance of these developments in the era of new industrialization, the corresponding reform of accounting and the constant review of existing norms and rules, the issues of identification, recognition and initial assessment of fixed assets in Russia and China require updating, which determined the purpose of this article: to consider the key features of identification, recognition and initial assessment of fixed assets in these countries, to identify their similarities and differences, as well as the direction of convergence.

## II. METHODOLOGY

The study is based on the use of universal and empirical general scientific methods: analysis of the norms of the current Russian legislation, international financial reporting standards and transferable sources, description and generalization of theoretical provisions and practical methods, comparison of rules and principles for determining, recognizing and evaluating fixed assets, drawing an analogy in accounting approaches and other logical methods.

## III. RESULTS

According to the accounting standard PBU 6/01 "Accounting for fixed assets", currently in force in Russia at present, "fixed assets are a part of the organization's property used as a means of labor in the production of goods, the performance of work, the provision of services, or intended for rental, and also for the management needs of the organization for a period exceeding 12 months, or the usual operating cycle if it exceeds 12 months".

International financial reporting standards recognized in the Russian Federation, in particular, IAS 16 "Fixed Assets",

treat fixed assets as “tangible assets, which are intended for the use in the production or delivery of goods and services, for rental or administrative purposes, and are also intended to be used for more than one reporting period”.

Recognition of an asset as property, plant and equipment according to Russian rules is carried out upon the simultaneous fulfillment of four criteria specified in paragraph 4 of PBU 6/01, including:

- the purpose of the object in order to use it in the production process, perform work or provide counterparty services, and in addition, to carry out the management functions of the organization, or to provide it with this asset for a temporary possession and use under rent contract, leasing, etc;
- the purpose of the facility for operation for a long time (more than 12 months) or the usual operating cycle, in case of a longer duration;
- lack of intention to carry out subsequent resale of this object;
- the ability of the object to bring the organization economic benefits (income) in the future.

The Russian standard provides for a mandatory cost criterion for the recognition of an object as fixed assets - 40,000 rubles.

The International Standard for Financial Reporting "Fixed Assets" provides only two criteria for recognition of this type of asset, in particular:

- the likelihood that the enterprise will receive future economic benefits associated with the object
- the possibility of a reliable assessment of the cost of the specified fixed assets.

Acceptance of an item of fixed assets for accounting under Russian rules is carried out at initial cost, which is formed depending on the method of receipt of objects in the organization, in particular:

The initial cost of fixed assets acquired under purchase and sale, supply and other agreements providing for the monetary performance of an obligation is determined as the sum of the actual costs of acquiring the property, excluding VAT and other recoverable taxes. The list of actual costs that are included in the initial cost of fixed assets purchased for a fee is given in paragraph 8 of PBU 6/01, in particular it includes:

- the amount of the contractual value payable to the supplier (seller), as well as the cost paid for the delivery of the object and bringing it into a usable condition of the amount;
- Amounts payable to third parties for the implementation of construction and installation works under construction contracts, etc. agreements;

- the cost of information and consulting services directly related to the acquisition of facilities;
- customs payments, duties and fees;
- non-refundable taxes, state duty and other payments paid in direct connection with the acquisition of the facility;
- remuneration payable to intermediary organizations through which an item of property, plant and equipment is acquired;
- all other costs directly related to the acquisition, construction and manufacture of fixed assets.

In accordance with PBU 15/08, if an organization uses the funds of loans and credits received to acquire an item of fixed assets, then the initial cost includes interest on the loan accrued before the fixed asset was taken into account if the latter meets the criteria of an investment asset.

In the case of the creation of an object of fixed assets by the organization itself (construction by an economic method, self-production), its initial cost is the amount of actual costs directly associated with the manufacture.

Upon receipt of a fixed asset under a gift agreement and other cases of gratuitous receipt, its initial value is determined as the current market value at the date of capitalization. The current market value is determined by the organization independently according to available data (statistical collections, published prices, etc.), or by engaging an independent appraiser (by expert means).

In case of receipt of the fixed asset from participants (founders) as a contribution to the authorized (joint-stock) capital, its initial value is the monetary value agreed upon by the owners (participants) provided for in the constituent documents.

If a fixed asset is received under barter and other agreements providing for non-monetary fulfillment of obligations, then its initial cost is the cost of the values that the organization transferred or plans to transfer in exchange (based on the usual selling price). If it is impossible to determine the cost of the values that the organization has transferred, the cost of the incoming objects is determined by the cost at which, in comparable circumstances, the organization acquires similar fixed assets.

The initial cost of fixed assets received as a contribution to the authorized capital, free of charge and under non-monetary contracts, also includes the amount of actual costs associated with the acquisition of the object (transportation, loading) and bringing the object to a condition suitable for use (mounting, installation of the object) [11].

IFRS 16, on the basis of which PBU 6/01 was originally prepared, also prescribes the rules for recognizing fixed assets at historical cost, the elements of which include:

1) the cost of its purchase (acquisition), including import duties and non-refundable purchase taxes, adjusted for the amount of trade discounts and concessions;

2) all direct costs related to the delivery of the asset to the intended location and bringing it to the state necessary for operation in accordance with the intentions of the organization's management;

3) the initial calculated estimate of the costs of dismantling and removing the fixed asset and the restoration of the land occupied by it, if the organization assumes the indicated obligation.

Examples directly related to the acquisition of fixed assets are:

1) the amount of employees' benefits payable, determined in accordance with IAS 19 "Employee Benefits" and arising directly from the construction or acquisition of fixed assets;

2) the cost of preparing the site;

3) the cost of delivery of building materials, structures and equipment, as well as the loading and unloading operations;

4) installation and mounting costs;

5) the costs of checking the proper functioning of the asset, remaining after deducting the net proceeds from the sale of products made in the process of delivering the asset to the intended location and bringing it into the required condition (for example, samples obtained during testing of equipment);

6) the amount of remuneration of performers (contractors) for the rendered professional services related to the acquisition (creation) of an object.

The statutory regulation of fixed assets accounting in China is carried out in accordance with the new accounting standard 4 "Fixed assets", which is largely harmonized with the provisions of IFRS 16.

This standard refers fixtures to fixed assets that are an essential component of an enterprise for the production of goods and services, for rental, or for administrative purposes, the use of which is planned for more than 12 months and the cost of which exceeds a certain standard value and differs from others non-monetary assets, including dwelling houses, buildings, cars, equipment, vehicles, tools and other equipment, devices, etc., associated with industrial and commercial activity.

From the point of view of the Chinese methodology fixed assets are the means of labor and fixtures, on which the production and operation processes of enterprises are directly dependent. From the point of view of accounting, fixed assets are usually divided into fixed assets for production, fixed assets for non-production purposes, fixed assets for rent, unused fixed assets, fixed assets for financial leases and fixed assets for donations.

As Petrov A.M. and Lyman M.P. noted "fixed assets in China are called 固定资产 (literally - permanent, fixed assets). It's the funds associated with the main activities of the enterprise, used for more than a year. These include: 1) housing facilities (dwelling houses, dormitories, apartments,

etc.); 2) objects of external improvement; 3) equipment and vehicles; 4) cultural monuments and culturally significant objects. The facilities and equipment which cost is more than 2,000 yuan and that are not a part of the production and operation and with a useful life of more than two years should also be regarded as fixed assets [14].

As the Chinese Accounting Standard No. 4 states, initially fixed assets should be measured at cost. This cost is the sum of all reasonable funds for the use that the company will acquire or produce to create the main asset and bring it to a usable condition. This cost includes the so-called necessary expenses, which include:

- direct costs, which include transport and other duties, packaging fees and installation costs;
- indirect costs, such as interest on loans, the difference in borrowings in foreign currencies (exchange differences), as well as other indirect costs that must be divided between the assets.

For certain types of fixed assets in a particular sector of Chinese industry, the cost of potential disposal of an asset at the end of its life should also be taken into account when determining the initial cost of acquisition. Payments for the rejection of disposal usually also refers to the expenses stipulated by the obligations of the enterprise to protect and restore the environment, in particular, they include payments for the rejection of the restoration of the environment after the use of nuclear facilities such as nuclear power plants. in accordance with the national legislation and administrative regulations of China, international conventions, etc.

For certain fixed assets in various special industries, industrial enterprises should include the amount of so-called residual costs in the corresponding cost of these objects. These industries include oil production and gas production; accordingly, oil and gas companies should include the estimated costs of utilization in their production costs when creating oil and gas production assets (for example, wells). During the useful life of a fixed asset (oil and gas asset), interest expenses calculated on the basis of the amortized cost of the estimated liability and the actual interest rate are included in finance costs as incurred.

Other industrial and commercial enterprises do not include the estimated liability for dismantling and disposal in the initial cost of fixed assets, as provided for oil and gas companies.

Under the conditions of the new industrialization in China, the initial cost of fixed assets is also formed differently depending on the type of income, among which they distinguish a purchase, also using a third-party organization (outsourcing), self-creation of fixed assets, obtaining fixed assets for rent and receiving in exchange for other assets.

When purchasing a fixed asset, its value includes, in addition to the purchase price, the corresponding taxes and fees, as well as transportation costs, loading and unloading

fees, installation fees and service fees, which can be correlated with the acquired fixed assets in order to prepare it to intended use.

Two types of fixed assets are allocated for accounting purposes: fixed assets to be installed and mounted (analogue of Russian equipment for installation) and fixed assets that do not require installation. If an object requires assembly from certain components, then its initial cost is determined by summing the fair value of the components and the share of the organization's total expenses related to the assembly. The total costs of the company should be reasonably allocated to the cost of the facility using the appropriate distribution base.

If the purchase price of a fixed asset is payable outside the normal conditions of lending, and the acquisition of an object has the signs of a financing operation, then the value of this object is determined on the base of the current value (purchase price payable immediately). The difference between the actual amount of the payment and the current purchase value is amortized using the effective interest method during the credit period. Amortization of the loan relates to current expenses, excluding capitalized borrowing costs, which are included in property, plant and equipment. The indicated loan amortization amounts not included in the property value are recognized as financial expenses during the deferral period and relate to current profit or loss.

When self-creating fixed assets, their initial cost in accordance with Chinese accounting standards includes all necessary expenses incurred by the organization from the beginning of the construction of these assets until they are ready for their intended use. Among these costs are the amounts of material costs, labor costs, taxes related to the creation of interest expenses, which should be capitalized in value, distributed amounts of indirect costs, etc. When preparing construction materials and other components necessary to create a fixed asset, their purchase price should be determined on the basis of the actually paid price, including non-refundable taxes, transportation costs, insurance and other related payments, similar to the creation of other materials that the organization takes on record. Borrowing costs, which should be included in the cost of fixed assets, are subject to accounting in accordance with Chinese accounting standard 14 "Contributions on borrowings".

Chinese industrial enterprises build their facilities on their own or with the involvement of contractors, which is called outsourcing construction.

All types of materials prepared by the enterprise for the construction are evaluated at the actual purchase price, with particular emphasis on non-inclusion of VAT in their cost. However, the cost of materials includes transport duties, insurance premiums and other relevant taxes and fees, thereby forming the actual cost.

After the completion of the project, the remaining construction materials must be transferred to inventory accounts of materials accounting in accordance with their

actual cost or planned cost. At the same time, if the value-added tax that is supposed to be deducted, was not taken into account when transferring materials for construction, it should be converted into the inventory value of the company's materials in accordance with the actual cost or planned value after tax deduction.

Surpluses, shortages, losses and damage to building materials, excluding the reimbursement received from insurers, the difference between other resources spent and compensation for their overruns, should also not be included in the cost of construction and should be attributed to non-operating income and expenses.

The cost of building fixed assets in China also includes all engineering surveys in the amount of actual costs, but they should be accounted for separately, taking into account the following features. Firstly, when the company carries out independent construction, the cost of research includes the cost of direct materials, direct labor, direct use of mechanical and construction equipment, used as a complex component of a construction project in accordance with the price of the contract payable to the counterparty. The equipment installation project determines the cost of the entire project, depending on the cost of the installed equipment, the cost of installation and the costs incurred during its commissioning. Secondly, the cost of surveys includes the net costs associated with testing the load on the equipment when the project reaches the expected phase of readiness for use. The cost of products obtained during testing before the project is completely ready for use, which can be sold, is subject to conversion from the cost of construction in progress to the cost of inventories (in IFRS this is referred to as reclassification). In this case, the design costs are offset by the actual revenue from the sale of this product or the estimated selling price. Thirdly, if during the construction process one element or unit of the project is utilized or damaged, then the cost of the entire complex is formed excluding the residual value of the materials and net losses resulting from their irrational use excluding the coverage from the insurance company. If the project has not yet reached the level of readiness for use in accordance with the main goal, the accumulation of costs continues until the specified time. If the project has reached the expected state of readiness, but is not yet in operation, then of preparation its cost is not repaid and is not included in the management costs in the specified period. The costs associated with such training are also not related to expenses associated with operating activities. If, in the process of preparing the organization, damage was caused due to the reasons for the ineffective management of construction in progress, all losses should be excluded from the value of the object and the net loss should be directly included in current non-operating expenses. Fourth, if the constructed fixed assets have reached the expected state, but the settlements on the accounts have not yet been completed, the accepted amounts should be included in a fixed cost in accordance with the project budget.

Depreciation of fixed assets in China is calculated in accordance with the provisions on depreciation of fixed assets, but only after all adjustments to the cost have been made after final settlement procedures have been completed.

In case of obtaining fixed assets under finance lease agreements, i.e. all the risks and benefits associated with ownership of the asset are transferred, regardless of the transfer of ownership, the initial value of the fixed asset received is determined as the lower of the fair value of the fixed asset and the amount of the minimum lease payments calculated on the date the lease begins. In this case, the difference between the actually paid amount of payments and the amount of the minimum rental payments is not included in the value of the object, but is taken into account as financial expenses.

In the case when fixed assets are acquired in exchange for other assets or in other ways, the Chinese standard prescribes the following rules from the valuation.

The value of the investor's investment in fixed assets is determined in accordance with the value agreed upon in the investment contract or agreement, unless the contract or agreement indicates that the value is not fair.

The value of fixed assets acquired through the exchange of non-monetary assets or in the course of debt restructuring is determined in accordance with other accounting standards, in particular with standard 8 "Exchange of non-monetary assets" and standard 9 "Debt restructuring", respectively.

#### IV. ANALYSIS

Thus, according to the analysis of the norms of Russian, international and Chinese accounting standards, it was concluded that there is a relative approximation of the methods and rules governing the recognition and initial assessment of fixed assets, while the distinctive features in Russia are a larger number of criteria for recognizing an asset as part of this group of objects, and in China: the allocation of a separate object of cultural monuments and objects of cultural significance. The relative brevity of the listing of the elements forming the initial cost of fixed assets in Russia is noted, and the distinguishing features of the initial assessment of fixed assets created by the organization in China (separate accounting of costs for engineering surveys, adjustment of the cost of the object for unproductive costs, reclassification of unused materials during construction to other inventory assets, adjustment of the value of the object to the estimated value received during the testing of the product, inclusion in the initial cost of the share of the organization's total costs, etc.). Significant emphasis is placed on the analysis of the industry approach to the inclusion in the initial cost of the estimated values for the removal (liquidation) of facilities in China, the so-called estimated obligations, the rules for the formation of which in Russia are still in the process of formation.

In contrast to IFRS, neither the Russian nor Chinese approaches to assessing the initial cost of fixed assets are provided with an alternative to including or not including the amount of state aid in the initial cost of fixed assets. In our

opinion, this provision should be the subject of discussion in the professional community.

#### V. DISCUSSION

Considered similarities and differences in approaches to the identification, recognition and measurement of fixed assets in Russia and China made it possible to identify the main areas of convergence of accounting systems, which, in our opinion, include: 1) Approval of the official translation of accounting standards from Chinese and into Chinese in order to avoid discrepancies in definitions and the procedure for recognition and assessment, which will allow developing a single conceptual framework and identifying the category of main (fixed) assets in a uniform manner; 2) The unification of the criteria for the recognition of fixed assets in various accounting systems based on IFRS with the exception of the cost criterion that is impossible to use in connection with the requirement to account for objects in national currencies; 3) Development of uniform approaches to the description of the elements forming the initial cost of fixed assets; 4) Approval of the methodology for calculating and including objects of the value of estimated obligations for the disposal of the object and restoration of the environment into the initial cost.

With further convergence of the norms and rules of identification, recognition and valuation of fixed assets, a uniform understanding of financial indicators of international companies will be ensured, which will allow to implement global investment processes that contribute to the recovery of the global economy, while the historical aspects of the formation of national assets should be included in areas requiring further detailed analysis. accounting systems and national economic conditions in order to take into account these features when building integrated global accounting systems.

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