E- Global Congress
Hosted online from Dubai, U. A. E., E - Conference.
Date: 30th June 2026
Website: https://eglobalcongress.com/index.php/egc
ISSN (E): 2836-3612

EMPIRICAL NECESSITY AND TAX CONSEQUENCES OF COMPONENT ACCOUNTING FOR LONG-TERM ASSETS IN JOINT-STOCK COMPANIES

Rizakulov Abdurauf Abdimutalibovich
Senior Lecturer of the "Audit" Department at
Tashkent State University of Economics
ORCID: 0009-0008-9833-2519 /rizakulovabdurauf005@gmail.com

Abstract
This research paper reveals the empirical (practical) necessity of component accounting for complex long-term assets on the example of large joint-stock companies (including railway transport and infrastructure enterprises). The article analyzes the approach to resolving conflicts between accounting and tax accounting by recognizing assets separately by components and applying individual depreciation rates to them in accordance with the requirements of the international standard IAS 16 “Property, Plant and Equipment”. Specific scientific and practical proposals have been developed aimed at reducing the unjustified tax burden of enterprises when partially replacing older parts of assets.

Keywords: Long-term assets, Component Accounting, IAS 16 international standard, partial replacement, capital repair, corporate income tax base, depreciation rates, joint-stock companies.

INTRODUCTION

At the current stage of development of the economy of the Republic of Uzbekistan, adapting the financial and economic activities of large corporate entities, particularly joint-stock companies, to international standards remains one of the most pressing issues. On the balance sheets of all large-scale industrial, transport (including railway), and manufacturing enterprises, long-term assets—specifically fixed assets—account for an extremely high proportion. Consequently, maintaining accurate accounting for these assets, fairly calculating depreciation, and evaluating their physical and functional obsolescence in real-time directly impacts the financial

ISSN (E): 2836-3612

performance of the enterprise.

Although many large taxpayers in our country have transitioned to International Financial Reporting Standards (IFRS), a traditional (holistic) approach to fixed asset accounting still persists in practice. That is, complex long-term assets (e.g., locomotives, aircraft, large factory equipment) are recognized as a single, unified inventory item, and a general, uniform depreciation rate is applied to them. However, IAS 16 "Property, Plant and Equipment" strictly requires that parts of an asset that have a significant cost in relation to the total cost and possess different useful lives must be accounted for as separate components.

Traditional accounting practices create serious empirical contradictions. Certain components of a complex asset (such as engines or chassis) depreciate several times faster than the main frame. During the replacement or overhaul of such rapidly depreciating parts, clear misunderstandings arise between corporate accounting and tax authorities. While the enterprise attempts to recognize repair expenses as current period expenses to reduce the corporate income tax base, tax legislation often classifies this as "modernization" and demands its capitalization into the asset's value. Consequently, old, worn-out, and replaced spare parts artificially remain on the enterprise's balance sheet as "carrying amount," which in turn distorts the transparency and fair value of the financial statements.

This research paper is dedicated to scientifically substantiating the objective (empirical) necessity of transitioning to component-based accounting for long-term assets in large joint-stock companies (specifically using the infrastructure and transport sectors as examples), as well as developing a practical methodology aimed at eliminating the discrepancies (tax consequences) between financial and tax accounting that arise during the partial replacement of assets.

LITERATURE REVIEW

Accounting and auditing of long-term assets, as well as the issues of adapting them to international standards, have been extensively researched by numerous foreign and domestic scholars. Currently, international academic circles primarily approach this issue through three major paradigms:

Scholars such as M.A. Vasarhelyi and D.A. Wood [4] advocate in their

research for the complete automation of long-term asset accounting through ERP systems and "Digital Twins," which enables the continuous auditing of asset depreciation without human intervention.

International researcher M.E. Barth [3] and CIS scholar L.I. Kulikova [5] have developed models to evaluate assets at current market prices rather than historical cost under conditions of macroeconomic instability, and to recognize their impairment based on the IAS 36 standard. Furthermore, issues regarding risk and uncertainty assessment in long-term asset accounting have also been reflected in domestic studies [7].

C.A. Adams [6], in her research, emphasizes the principles of assessing not only the financial but also the environmental value (carbon footprint) of assets, and integrating environmental indicators into depreciation models. Meanwhile, the managerial accounting of repair processes in transport corporations has been studied by L.N. Masko [8].

Although the aforementioned conceptual approaches function impeccably for financial markets and the IT sector [3, 4], the specific physical reality of highly capital-intensive heavy industries and infrastructure sectors (including railways) has been overlooked in these theoretical models. Specifically, while IAS 16 requires component-based accounting for assets [1], the existing literature does not comprehensively address the clash between accounting standards and national tax legislation [2] regarding partially replaced major components. That is, when a rapidly depreciating part of a complex asset is replaced, the discrepancy between recognizing it as a "current expense" that reduces the tax base versus "capitalization," as well as the issue of the remaining carrying amount of the worn-out spare part on the balance sheet, has not been fully elucidated from the perspective of tax consequences in the studies of the aforementioned scholars [3, 5, 8]. It is precisely this empirical gap that defines the aims and objectives of this study.

ANALYTICAL SECTION

The most fundamental issue in accounting for long-term assets within joint-stock companies—specifically in railway transport—is the mismatch between the actual physical deterioration period of asset components and their accounting depreciation rates. Our research and empirical observations indicate that enterprises tend to account for large-scale assets as a single,

ISSN (E): 2836-3612

unified inventory item, failing to fully comply with the mandates of paragraph 43 of IAS 16 (which requires separate depreciation for each significant part).

Suppose an enterprise registers a locomotive valued at 15 billion UZS under the traditional approach with an average useful life of 15 years (resulting in an annual depreciation of 1 billion UZS). However, in physical reality, the engine component of the locomotive (valued at 4.5 billion UZS) becomes completely obsolete after 5 years. The greatest contradiction between financial and tax accounting arises when the engine is replaced after the 5th year: under traditional accounting, the remaining carrying amount of the obsolete, old engine is not derecognized from the balance sheet, and unjustified "phantom" depreciation continues to be calculated on it for another 10 years. Conversely, when transitioning to the component-based method, this specific part depreciates fully over its actual 5-year useful life, and its value is legally and timely written off.

Conflicts in maintenance and partial replacement

Analytical indicators	**Traditional approach (Current status)**	**Component-based approach (Recommended status)**
Recognition of asset replacement	Repair expense or modernization (capitalization)	Acquisition of the new component and derecognition of the old one
Remaining carrying amount of the old (obsolete) part	It remains on the balance sheet, and "phantom depreciation" is unjustifiably calculated on it	The remaining carrying amount is immediately reduced to 0 and derecognized from the balance sheet
Impact on the corporate income tax base (Tax burden)	The tax burden increases. Because the value of the new component is deducted over a long period of years	The tax burden becomes fair. The remaining value of the old component is immediately written off to losses, reducing the tax base
Transparency of financial reporting	The carrying amount of the asset appears artificially inflated (Overvalued)	The carrying amount of the asset reflects the real market condition (objectively)

ISSN (E): 2836-3612

The observation results show that the traditional approach creates the "Phantom assets" phenomenon. That is, even though the enterprise is installing and using a new engine, the value of the old engine, which has already been scrapped for metal, remains on the balance sheet and depreciation is calculated on it. This distorts the enterprise's financial stability indicators. On the other hand, due to strict requirements in our tax legislation, major repair works are often recognized not as a "Period expense," but as an "Expense increasing the value of the asset" (modernization). As a result, the enterprise can neither receive a timely tax incentive (deduction) for new expenses nor is it forced to pay more property tax. For large joint-stock companies and transport enterprises, it is necessary to introduce a mandatory "Component inventory sheet" that divides long-term assets into major structural parts (components) right at the recognition stage. It is proposed to introduce a rule into the profit taxation part of the Tax Code of the Republic of Uzbekistan in accordance with international standards: if a structural part of a long-term asset is replaced and it has been accounted for as a separate component, the remaining carrying amount of the replaced (old) part should be recognized in full as an expense reducing the tax base. If the enterprise has not divided the asset into components in a timely manner, it is necessary to legalize the practice of applying special accounting entries for discounting (reducing) the value of the old asset proportionally to the market value of the new component during partial replacement.

CONCLUSION AND RECOMMENDATIONS:

The conducted research, scientific observations, and analyses indicate that accounting for long-term assets using the traditional unified method no longer meets the requirements of the times in joint-stock companies, especially in highly capital-intensive sectors such as railways. This approach not only reduces the credibility of financial statements for international investors but also imposes an unjustified tax burden on enterprises during partial replacement and major repair processes. The emergence of "phantom assets" on the balance sheet has been proven to be one of the largest empirical contradictions between financial and tax accounting. In order to systematically resolve these issues and harmonize financial-tax relations

with international standards (IFRS), the following scientific and practical recommendations are proposed:

1. A separate section on "Component Accounting" must be included in the Accounting Policies of large joint-stock companies, and in accordance with the requirements of IAS 16, each complex asset (object) must be recognized under individual inventory numbers based on its major parts that depreciate over different periods.
2. An additional norm should be introduced into the Tax Code of the Republic of Uzbekistan to distinguish between modernization and repair costs. In this regard, when an individual component of an asset is replaced, the mechanism of unconditionally recognizing the derecognized remaining carrying amount of the old component as a deductible expense reducing the corporate income tax base of the enterprise must be legalized.
3. It is necessary to implement specific "Asset Management" modules of ERP (Enterprise Resource Planning) systems in railway and infrastructure enterprises to synchronously track the physical deterioration and accounting depreciation for each part of the assets. The implementation of these proposals into practice will increase the operational transparency of large joint-stock companies in our republic, eliminate contentious situations in taxation, and elevate the efficiency of utilizing long-term assets to an international level.

REFERENCES

1. International Financial Reporting Standards (IFRS). IAS 16 "Property, Plant and Equipment" and IAS 36 "Impairment of Assets" standards. (IFRS Foundation).
2. Tax Code of the Republic of Uzbekistan (New edition). – T.: "Adolat", 2020. (With amendments and additions).
3. Barth M. E., & Landsman, W. R. (2025). Fair Value Accounting and Asset Impairment in Capital-Intensive Industries: A Global Perspective. Journal of Business Finance & Accounting.
4. Vasarhelyi M. A., & Wood D. A. (2026). Digital Twins and Continuous Audit of Non-Current Assets in the ERP Environment. The International Journal of Accounting.

ISSN (E): 2836-3612

5. Kulikova L. I., & Stepanov S. (2025). Accounting for Non-Current Assets under IFRS: Component Approach and Impairment Issues in Conditions of Macroeconomic Instability. Journal "Accounting. Analysis. Audit".
6. Adams C. A. (2025). The Integration of ESG Metrics into Long-Term Asset Depreciation Models. Journal of Management and Governance.
7. Rizakulov A.A. (2025). Introduction of the "economic risk profile" methodology in the accounting of long-term assets. International scientific journal “Global Science and Innovations 2021: Central Asia”, № 4(15), pp. 45-47.
8.Masko L. N. (2026). Accounting and Audit of Modernization and Repair Processes of Fixed Assets in Transport Corporations. Audit and Financial Analysis.