

Analysis of Internal Control of Fixed Assets in Universities from the Perspective of the Whole Life Cycle

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Abstract: Fixed assets are the basic guarantee for the development of teaching and research activities in universities. In recent years, with the continuous increase of investment in higher education, the number of fixed assets and management risks have also increased. In this situation, it is particularly important to do a good job in internal control of fixed assets. Based on this, this paper first introduces the basic content of internal control of fixed assets in universities, then analyzes the problems existing in the internal control of fixed assets in universities from the perspective of the entire life cycle, and finally proposes improvement measures from the stages of project initiation and procurement, acceptance and registration, daily use, inventory, and asset disposal based on the perspective of the entire life cycle.

Keywords: full lifecycle, fixed assets, internal control

1. Introduction

In recent years, with the continuous increase in investment in higher education, the scale and quantity of fixed assets in universities have also increased, providing strong support for the development of teaching and research activities. The increase in the number of fixed assets brings development opportunities to universities, but also poses risks to their daily management. Therefore, it is imperative to strengthen internal control of fixed assets. However, compared with enterprises, the internal control of fixed assets in universities is relatively lagging behind, which is not conducive to the daily management and development of the school. Therefore, strengthening the research on internal control of fixed assets in universities and proposing solutions based on a full lifecycle perspective to address the problems existing in internal control of fixed assets in universities can help improve the overall internal control level of fixed assets in universities and better serve teaching and research in universities.

2. Overview of internal control of fixed assets in universities

2.1 Connotation of fixed assets in universities

According to the Government Accounting Standard No. 3- Fixed Assets, fixed assets of universities refer to assets controlled by universities that have been in use for more than one year, have a unit value above the prescribed standard, and maintain their original physical form during use, such as buildings and structures, teaching equipment, office supplies, books and archives, etc[1]. As a public institution in the education industry, the ownership of fixed assets in universities belongs to the state, and universities only have the right to use and manage them.

2.2 Connotation and characteristics of internal control of fixed assets in universities

In order to strengthen the management of fixed assets, universities have established functional departments such as the Procurement and Tendering Office, the Finance Department, and the State owned Assets Management Department, which work together to manage fixed assets. Internal control of fixed assets in universities refers to the process in which the school management, together with

functional departments such as the Procurement and Tendering Office, Finance Department, and State owned Assets Management Department, formulates management systems, procedures, measures, etc., to prevent risks in fixed asset business, and to reasonably allocate and efficiently use fixed assets[2].

The internal control of fixed assets in universities has the following characteristics. Firstly, there are significant differences in the demand for fixed asset procurement among different majors in universities. Some specialized precision instruments and teaching and research equipment have high requirements for procurement and acceptance, and internal control needs to pay attention to procurement and acceptance; secondly, there are numerous classifications of fixed assets in universities, some of which are used by multiple departments. Internal control involves multiple departments, resulting in a lack of centralization in management and use. There are also many daily management issues with fixed assets, which increases the difficulty of internal control work; finally, various secondary departments of universities can use fixed assets for free. There is a phenomenon of repeated purchases of fixed assets, and it is necessary to conduct regular inventory of fixed assets through internal control, understand the asset situation, and make reasonable allocation to improve asset utilization efficiency.

2.3 Internal control of fixed assets in universities from the perspective of the whole life cycle

The internal control of fixed assets in universities from the perspective of the entire lifecycle covers various stages of fixed asset procurement, acceptance registration, daily use, inventory, asset disposal, etc. Each stage is crucial [3]. This requires universities to analyze the characteristics and existing problems of fixed asset management at each stage and propose solutions.

3. Problems in internal control of fixed assets in universities from the perspective of the entire lifecycle

3.1 Problems in the fixed asset procurement stage

Project initiation procurement is the starting point for internal control of fixed assets in universities. The management team of the university, in conjunction with functional departments such as the Procurement and Tendering Office, Finance Department, and State owned Assets Management Department, prepares a budget to purchase assets. The main issues at this stage are reflected in the following two aspects. One is the disconnect between budget preparation and actual procurement needs. Universities often attach great importance to budget preparation and budget execution rate, while neglecting the effectiveness and supervision of budget execution. Some functional departments lack understanding of future fixed asset and teaching and research equipment procurement needs when preparing budgets, and the budget content is vague. The actual procurement needs in the future may be less than the budget amount. In order to improve the budget execution rate, some functional departments suddenly use budget funds at the end of the year, purchasing assets that do not meet the needs of teaching and research. This not only wastes limited funds, but also causes idle fixed assets. Secondly, the communication efficiency in the procurement approval process needs to be improved. The financial budget system, procurement management system, and asset management system of universities are independent of each other, and data sharing has not yet been achieved. There is a lack of convenient information exchange channels, and the communication efficiency in the procurement approval process is low, which prolongs the fixed asset procurement cycle.

3.2 Problems in the stage of fixed asset acceptance registration

To ensure the safety and integrity of fixed assets, acceptance registration is essential. The specific process of fixed asset acceptance registration includes acceptance, registration and entry into the account. The participating units include the Finance Department, State owned Assets Management Department, and Asset Use Department. There are two main issues at this stage, as follows. One is that the acceptance procedure is merely a formality. The procurement of assets by universities should be organized by the procurement personnel, acceptance personnel, and department heads responsible for the use of assets, who should be present at the same time. However, in the actual acceptance process, some acceptance personnel may not be able to arrive on site at times. For some valuable large teaching equipment, the lack of qualified personnel for on-site inspection has resulted in poor acceptance results. Secondly, the registration of fixed assets is not timely. Some newly added assets in universities were directly put into use after being recorded, but labels were not posted in a timely manner, and some

labels were not subsidized in a timely manner after they fell off; Failure to timely register changes in the custodian or user of the equipment; When the position of asset management personnel changes, the asset handover work cannot be completed in a timely manner.

3.3 Problems in the daily use stage of fixed assets

To ensure the efficiency of fixed asset utilization, universities need to strengthen daily usage management. This stage is mainly carried out by functional departments such as the Procurement and Tendering Office, the Finance Department, and the State owned Assets Management Department, in conjunction with the asset utilization department, for the maintenance, allocation, and adjustment of fixed assets. There are two main issues at this stage, as follows. One issue is the lack of timely maintenance and upkeep of fixed assets. As the scale of fixed assets in universities gradually expands, the school attaches more importance to fixed asset maintenance. The asset administrator of the asset utilization department can submit an application for on-site maintenance. However, the hierarchical approval and maintenance process based on unit price is still not perfect, and small fixed assets face difficulties in maintenance. Some universities have not established a fixed asset maintenance system, resulting in a lack of maintenance awareness and inability to carry out asset repairs and maintenance in a timely manner, leading to rapid consumption of fixed assets. The second issue is the failure to achieve reasonable adjustment of idle fixed assets. To avoid the inconvenience caused by borrowing fixed assets, some asset using departments blindly pursue the completeness of asset allocation, resulting in lower efficiency in the use of purchased fixed assets. To address this issue, some universities have established large-scale instrument sharing management platforms, requiring departments to upload idle asset sharing information and activate idle assets through unified adjustment at the school level. However, during the operation of the platform, some asset utilization departments did not upload idle asset information in a timely manner, making it impossible to achieve idle asset scheduling from the perspective of the school.

3.4 Problems in the fixed asset inventory stage

Inventory is a key step in ensuring the consistency between fixed asset accounts and actual assets, mainly carried out by the Procurement and Tendering Office, Finance Department, State owned Asset Management Department, and Asset Utilization Department in collaboration. The inventory of fixed assets in universities is often conducted through online and offline collaborative methods. The fixed asset user of the asset utilization department logs into the asset management system, enters the asset inventory module, confirms the status of fixed assets, performs inventory work, and the asset administrator reviews the inventory situation, forms paper materials, and synchronously modifies the asset information in the asset management system. However, in the actual operation process, some asset utilization departments' inventory process is superficial, only conducting inventory of large fixed assets, and the inventory is highly arbitrary, resulting in the inability to guarantee the authenticity of the inventory; After the inventory is completed, there is a lack of punitive measures for those responsible for the loss of assets.

3.5 Problems in the fixed asset disposal stage

The disposal of fixed assets is the last line of defense for universities to prevent the loss of state-owned assets. It is mainly carried out by the Procurement and Tendering Office, the Finance Department, the State owned Asset Management Department, and the asset utilization department to jointly scrap and dispose of fixed assets. There are two issues at this stage, as follows. One issue is the untimely declaration of fixed asset disposal. Universities generally conduct a regular cleaning of scrapped fixed assets every semester, and the disposal proceeds are included in the school's unified financial accounting. The disposal costs cannot be reimbursed. However, due to the lack of incentive measures for asset disposal, the asset utilization department is not proactive in declaring the disposal of scrapped assets, and the information update in the asset management system is slow, which cannot truly reflect the situation of fixed assets. Secondly, the disposal of fixed assets is relatively arbitrary. Due to the ownership of fixed assets belonging to the state and not directly linked to the interests of the asset using department, the asset using department generally simplifies the disposal of fixed assets. For some slightly damaged fixed assets, they choose to directly scrap them, resulting in resource waste.

4. Improvement measures for internal control of fixed assets in universities from the perspective of the entire lifecycle

4.1 Improvement measures for fixed asset planning and procurement stage

4.1.1 Strengthen the supervision of asset budget execution

Universities should strengthen dynamic supervision of the budget execution process to improve the efficiency of asset procurement budget execution. Firstly, during the budget execution period, regular budget execution meetings should be held to report on the budget execution status, analyze existing problems, and propose solutions to improve budget execution efficiency; Secondly, the Procurement and Tendering Office, Finance Department, and State owned Assets Management Department will work together to establish a budget execution information communication and feedback system, reducing human interference in budget execution, and monitoring the budget execution of each department in real time to promptly correct budget deviations.

4.1.2 Standardize the approval process for asset project initiation and procurement declaration

Firstly, to achieve interoperability among the procurement management system, financial management system, and asset management system, so that asset procurement information can be updated and shared in a timely manner in the system. The finance department constrains the asset utilization department's procurement behavior of deviating from the budget by comparing the annual procurement budget with the purchase amount, and promotes the asset utilization department to formulate procurement plans based on the procurement budget. Secondly, further optimize the approval process. For procurement budgets included in the government procurement system, after the asset utilization department submits an application and obtains the approval of the responsible leader, the functional department reviews whether it meets the configuration standards, and then reports it to the school meeting for research and approval before proceeding with procurement. For assets with small amounts, they are directly reported to the responsible leader for approval before procurement, in order to shorten the procurement cycle.

4.2 Improvement measures for fixed asset acceptance registration stage

4.2.1 Improve asset acceptance requirements

Universities should strictly follow the acceptance process to ensure the quality of newly purchased fixed assets. The Procurement and Tendering Office takes the lead in organizing asset requisition departments, finance departments, state-owned asset management departments, etc. to implement fixed asset acceptance and storage work. For sporadic purchases and fixed assets without purchase contracts, the acceptance process requires on-site acceptance by the acceptance personnel, procurement personnel, and relevant responsible persons of the asset utilization department, and all participating personnel shall sign and assume corresponding responsibilities. For professional teaching equipment and precision instruments, they should be jointly inspected by the Procurement and Tendering Office and the acceptance team. The acceptance team must include an industry expert who can test the parameters and indicators of the instruments and equipment and issue a technical acceptance report. After the acceptance of fixed assets is completed, the head of the acceptance team, procurement personnel, and the head of the purchasing department shall sign the acceptance report. For bulk fixed assets with low unit price and large quantity, sampling inspection can be conducted, while fixed assets with high unit price need to be inspected one by one[4].

4.2.2 Timely registration of fixed asset usage

There are various classifications and scattered locations of fixed assets in universities, and the frequency of fixed asset usage is high, which can easily lead to label detachment or loss. To address this issue, asset managers should strengthen the maintenance of fixed asset information, implement weekly fixed asset inspections, update fixed asset ledgers in a timely manner, and indicate custodians and storage locations. If the fixed asset label falls off, the asset administrator should promptly sign it. When the asset administrator of the asset utilization department is transferred, timely complete the verification of fixed asset accounts. When there is a change in the department using fixed assets, a transfer application should be submitted in a timely manner. After confirmation by the asset administrators of both parties and approval by the department head, the fixed asset handover and ledger update should be completed.

4.3 Improvement measures for daily use of fixed assets

4.3.1 Strengthen the daily maintenance and repair of fixed assets

To improve the efficiency of fixed asset utilization, universities should regularly maintain fixed assets to ensure their service life and reduce safety accidents. One is to enhance the scientific usage awareness of fixed asset users. The second is to establish maintenance records and assign maintenance responsibilities for fixed assets to individuals. Asset managers should regularly inspect the appearance and function of fixed assets, maintain them in a timely manner, and register them in the records [5]. The third is to improve the fixed asset maintenance process, develop fixed asset repair plans, timely release warranty phone numbers and responsible person information for different types of fixed assets, and ensure that fixed assets are repaired in a timely manner when damaged.

4.3.2 Strengthen fixed asset allocation and adjustment

To activate idle assets and improve the efficiency of fixed asset utilization, universities need to allocate and adjust idle assets within the school. Firstly, establish a fixed asset sharing incentive mechanism to mobilize the initiative of asset utilization departments to adjust idle assets. For example, the asset transfer department pays a certain usage fee to the asset transfer department, in order to stimulate the enthusiasm of various departments to transfer idle assets. Asset managers in various departments need to dynamically grasp and update idle asset information in a timely manner for other departments to choose from. Secondly, standardize the process of transferring and adjusting idle assets. Departments with corresponding usage needs can initiate transfer applications. With the consent of the asset transfer department, approval from the State owned Assets Management Office, and approval from the responsible leader, asset transfer can be carried out, and asset change registration can be carried out in the asset management system.

4.4 Improvement measures for fixed asset inventory stage

Universities need to organize annual asset inventory work in a unified manner, and various asset using departments should also conduct fixed asset inventory from time to time to ensure that accounts match reality and maintain the safety and integrity of state-owned assets. Universities should organize the establishment of an inventory team consisting of members from functional departments such as the Procurement and Tendering Office, Finance Department, and State owned Assets Management Department to carry out the inventory work [6]. Some universities purchase online asset inventory modules to comprehensively sort, classify, evaluate, and manage assets, which can provide a clear understanding of the type, source, scale, quality, and value of their own assets. Before the inventory, the State owned Assets Management Office first prepares an inventory plan. During the inventory process, a combination of departmental self inspection and spot checks by the inventory working group is implemented. After the inventory is completed, the State owned Assets Management Office forms a fixed asset inventory report and clarifies the rectification plan. For fixed assets with surplus inventory, the asset utilization department shall submit explanatory materials, the State owned Assets Management Office shall handle the registration of new assets, and the Finance Department shall handle the accounting processing; For fixed assets with inventory losses, the reasons should be identified, relevant personnel should be held accountable, and penalties and recovery should be imposed.

4.5 Improvement measures for fixed asset disposal stage

4.5.1 Strengthen incentives for declaring and disposing of assets

In order to enhance the timeliness of declaring the disposal of scrapped assets, universities should strengthen incentives for declaring the disposal of assets, and mobilize the enthusiasm and initiative of departments using assets to declare. The department asset administrator should pay full attention to the asset usage status and quality throughout the process. If it is found that the asset meets the scrapping standards, a scrapping application should be promptly submitted in the asset management system.

4.5.2 Strictly implement the fixed asset disposal process

In order to avoid the arbitrary scrapping of fixed assets by asset using departments, universities should organize experts to demonstrate the proposed scrapping assets and clarify the disposal methods. For slightly damaged fixed assets, the asset using department should apply for maintenance. Fixed assets with no maintenance value should be scrapped and eliminated, and the disposal results of fixed

assets should be announced on the school's official website at the same time.

5. Conclusion

Internal control of fixed assets is an important part of internal control in universities. The internal control of fixed assets from the perspective of the entire lifecycle of universities covers various stages of fixed assets. This paper analyzes the problems in the internal control of fixed assets in universities from the perspective of the entire life cycle, proposes targeted improvement measures, and hopes to promote the improvement of fixed asset management level in universities and provide reference for the implementation of fixed asset internal control.

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References

- [1] Zhang X. *Analysis of Internal Control of Fixed Assets in Universities* [J]. *Investment and Entrepreneurship*, 2023, 34 (13): 172-174.
- [2] Dai Y N. *Research on the Problems and Countermeasures of Internal Control in Universities* [J]. *Administrative Assets and Finance*, 2022, (18): 72-74.
- [3] Tao X P, Yuan M. *Internal Control Construction of Administrative Institutions: Problems and Improvements* [J]. *Finance and Accounting*, 2020, (22): 83-84.
- [4] Chen B. *Construction of Internal Control System in Administrative Institutions under the New Situation* [J]. *Financial and Accounting Studies*, 2021 (12): 178-180.
- [5] Zhang S G. *Problems and Countermeasures of Internal Control in Administrative Institutions* [J]. *Administrative Assets and Finance*, 2021, (8): 52-53.
- [6] Zhao P. *Research on Methods and Practices of Data Asset Inventory* [J]. *Industry Observation*, 2024, (11): 184-189.