

# Research on Basic Issues of State-Owned Asset Management in Higher Education Institutions

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**Abstract:** In recent years, the quantity, quality category and form of state-owned asset allocation of colleges and universities have undergone a fundamental transition and transformation from extensive to precise, management to performance, single allocation mode to efficient utilization, and from property ownership to shared utilization, which also fundamentally reflects the overall requirements and reform achievements of comprehensively deepening reform in the field of state-owned asset management since the 18th National Congress of the CPC. Based on the reform of delegating powers, enhancing regulation and strengthening public service, this paper analyzes the inherent bottlenecks and contradictions in the operation, supervision and performance evaluation of state-owned asset management, as well as the shortcomings and deficiencies in the construction of governance system and governance capacity. From the perspective of control specification, the path and measures to standardize the management of state-owned assets are proposed, and the improvement of quality and efficiency, resource allocation, performance management and whole-process supervision are taken as the core values and ultimate goals of improving the governance system and governance capabilities. The ultimate value of state-owned assets management is realized from two dimensions: the reform of delegating powers, enhancing regulation and strengthening public service, and living on a tight budget.

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## 1. Preface

With the development of higher education institutions entering a new stage and the continuous advancement and deepening of the scale of asset allocation in higher education institutions and the reform of “streamlining administration, delegating power, improving regulation and upgrading services”, new goals, new requirements and new tasks have been put forward for the reform and development of improving the quality and efficiency, preserving and increasing value, and performance management of state-owned assets. State-owned asset management has undergone a complete transformation: The first is the transformation from asset scale expansion to efficient asset operation, the second is the transformation from stock management to optimized resource allocation, the third is the transformation from extensive management to precise use performance and benefits, the fourth is the transformation from self-supervision as the main body to integrated supervision effectiveness (institutional reform), and the fifth is the transformation from asset stock management to supervision throughout the entire process of asset existence. Sixth, the shift from a purely property-owning purchase orientation to a value-oriented

shared utilization, which is also the fundamental aspect of implementing the new development philosophy and promoting high-quality development in the new era, and the ultimate value and goal of comprehensive deepening of reform.

Since the Third Plenary Session of the 18th Central Committee of the Communist Party of China, in accordance with the “Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening Reform”, the “Decision of the Central Committee of the Communist Party of China on Deepening the Reform of Party and State Institutions”, the “Plan for Deepening the Reform of Party and State Institutions”, and the strategic direction, strategic tasks and strategic goals established by the Central Committee of the Communist Party of China and The State Council, first, the intensity of institutional reform has been increased Reform and reorganization of state-owned asset management, operation and supervision institutions, thorough integration, reconstruction and optimization of confusing functions and responsibilities that were not independently distinguished in the original state-owned asset operation, supervision and oversight aspects, transfer and reorganization of relevant functions, institutions and personnel, with a focus on establishing a new pattern of independent operation, independent supervision and all-round independent supervision, A three-in-one institutional operation and functional performance framework has been formed, with the operation part belonging to the market entity or the actual user entity, the supervision part belonging to the government’s dedicated regulatory agency or the superior administrative department, and the supervision part belonging to the dedicated audit supervision agency, fundamentally solving the inherent systemic fundamental problems in the management and operation of state-owned assets;

<sup>[1]</sup>Second, the state-owned assets management system and mechanism have been further improved and perfected. The Central Committee of the Communist Party of China, The State Council and the superior authorities have successively issued the “Opinions on the Full Implementation of Budget Performance Management”, the “Regulations on the Management of State-owned Assets of Administrative and Public Institutions” (State Council Decree No. 738), and the “Opinions on the Full Implementation of Budget Performance Management” (Jiaocai [2019] No. 6) of the Ministry of Education. It put forward clear opinions and requirements on the performance management of state-owned assets of administrative and public institutions throughout the entire process and all links, mainly focusing on the established goals of comprehensive deepening of reform and promoting the modernization of the governance system and governance capacity of state-owned assets.

Based on a comprehensive consideration of a series of problems existing in the management of state-owned assets, such as the management system, functional performance, regulatory system, stock management, performance evaluation management, etc., in the practical need of modernizing the governance system and governance capacity in the field of state-owned assets, it is necessary to coordinate the management efficiency of state-owned assets themselves and the supervisory efficiency of state-owned assets, In two dimensions, it is necessary to fully implement the overall goals and tasks of the comprehensive deepening of reform and make the “streamlining administration, delegating power, improving regulation and upgrading services” reform a priority strategic task for state-owned asset management, that is, to clarify the main business and main responsibilities of state-owned asset management and distinguish between the investment subjects, regulatory (supervisory) subjects, operation subjects and market relationship subjects of state-owned assets<sup>[2]</sup>; Clarify the relationship between the government, the market and the responsible entities, and distinguish the basic functional positioning of operation, regulation and supervision; Clarify ownership and interests, distinguish rights, responsibilities and entrusted responsibilities, and then sort out institutional and mechanism obstacles, solve problems such as unclear rights and responsibilities, ambiguous duties, buck-passing and other blank or overlapping duties, and improve the governance system. On the other hand, taking the optimization of audit office and government audit responsibilities as the starting point, following the unified and efficient audit supervision system, taking the division and reconstruction of responsibilities in the field of state-owned asset management as the opportunity, adhering to problem-oriented and result-oriented, taking management effectiveness, operational efficiency, business performance and the level of risk (supervision) management as the ultimate goal and value, giving full play to the synergy of responsibilities, Comprehensively enhance the modernization level of governance capacity.

## 2.Raising the Problem

From the perspective of the overall strategic goals and tasks of the comprehensive deepening of reform in the field of state-owned asset management, the implementation of laws and regulations and the adjustment of policy basis, theoretical research

and practical level, value orientation and practical demand, the inherent bottlenecks and contradictions are mainly reflected in aspects such as the operation of state-owned asset management, regulatory supervision and performance evaluation and assessment. The main problems, such as the implementation of systems and the fulfillment of duties, the management of stock and the allocation of resources, the implementation of procedures and the management of processes, the main business and the division of rights and responsibilities, have restricted the progress and intensity of the “streamlining administration, delegating power, improving regulation and upgrading services” reform from both subjective and objective perspectives and hindered the effective improvement of the governance system and governance capacity in the field of state-owned assets management. It is difficult to fundamentally and effectively address the transformation related to state-owned asset management. In order to adapt to the reform of the social and economic system, respond to a series of policies issued by our country, meet the regulatory requirements and the goal of strengthening the internal management of state-owned assets in various units, there are still problems such as the need to improve the internal control management system, the need to standardize and diversify asset allocation, the need to improve the efficiency of asset use and the need to enhance the quality of state-owned asset reporting management<sup>[3]</sup>.

## **2.1 Poor implementation of internal control and confusion of functional positioning relationships**

From the perspective of comprehensive deepening of reform, the “streamlining administration, delegating power, improving regulation and upgrading services” reform and the “abolition, reform and establishment” of systems are two important paths to consolidate the achievements of comprehensive deepening of reform, and there are mainly two levels of problems and contradictions: On the one hand, in addressing the issue of institutionalized guarantees at the system (architecture) level, there are often problems of incomplete systematization and systematization in aspects such as the improvement and evaluation of internal control mechanisms, the comprehension and judgment of laws and policies, the construction and implementation of institutional systems, and the review and performance evaluation of institutional implementation. There is a mechanistic paradox between the fragmented guarantee operation mode and the practical need to systematically construct the governance guarantee system; On the other hand, in addressing the issue of implementation at the governance (practice) level, there are often problems of rough simplicity, regulation for the sake of regulation and incomplete mechanisms, and a lack of working mechanisms based on the synergy of internal control and internal checks and balances for the fulfillment of duties, institutional guarantee and performance assessment. The professional, scientific, information-based and clear governance pattern is far from the top-down policy requirements and institutional designs<sup>[4]</sup>.

The problems and contradictions at these two levels are mainly manifested in several aspects in management practice: First, the problem of subjective rent-seeking caused by imperfect or looped systems, mainly manifested as: Differentiated implementation of the system (lack of rigid constraints), regular implementation of special provisions of the system (circumvention of normal procedures), inversion of system authorization and functions (reverse influence of non-functional departments on the performance of functional departments); The second is the failure of internal control caused by the improvement of the system and the operation mechanism, which is mainly manifested as: Deficiencies in the internal control mechanism (the failure of checks and balances due to insufficient authorization and performance of duties), the tendency of the authorization approval process to reverse (the degradation of forward process management to reverse process avoidance), the conflict between the actual needs of internal control governance and the formalization of evaluation (contrary to the original intention of internal control evaluation - to improve internal control and governance); The third is the problem of functional positioning, which is mainly manifested as: unclear boundaries of duties (unclear authorization or unclear division of duties), problems of performance ability (awareness of duties and professional skills), authorization deficiency (authorization not based on duties); Fourth, the problem of the coordination and balance mechanism between asset management and supervision, mainly manifested as: mismatch between management links and supervision links (some links have not established supervision mechanisms), incomplete coverage of control nodes (insufficient systematicness of supervision), incomplete regulatory governance system (effectiveness).

From the two aspects of bottleneck problems and practical manifestations, the ultimate manifestation of the poor implementation of all internal controls and the confusion of functional positioning relationships is the finiteness and limitation

of their own functional performance, that is, the deviation from the strategic positioning and goals of the organization (higher education institution), and there must be problems of overlapping or vacuum of rights and responsibilities between their own institutional responsibilities and the responsibilities of related parallel institutions. This leads to low overall governance effectiveness, mismatch of powers and responsibilities, confusion of authorization, insufficient capacity for performance, and low efficiency within the organization, making it difficult to systematically, efficiently, and scientifically construct the organizational governance system<sup>[5]</sup>. In the absence of a sound supervision and restraint mechanism within the organization, not only is it difficult to achieve good results in management, but it also hinders the smooth implementation of internal control work and makes it difficult to solve the bottleneck of the “streamlining administration, delegating power, improving regulation and optimizing services” reform from the source.

## **2.2 The overall efficiency of stock management and resource allocation is not high**

From the perspective of the process of the urgent and management demands for the transformation and upgrading of state-owned asset management, all along, The demand for the stock of assets, which is mainly based on the expansion of the scale of higher education institutions, the evaluation of teaching disciplines and levels, the construction of “Double First-Class” universities (disciplines), the application for scientific research levels and major projects (awards), and the upgrading of some higher education institutions, has objectively contributed to the traditional extensive operation and management model, which blindly pursues blind scale expansion as the direct goal. Stock management, as a relatively direct and single indicator and evaluation standard in the field of performance management in state-owned asset management, is monotonous, extensive and direct. This is reflected in management practice mainly as purchasing instead of allocation, increment instead of efficiency, emphasis on ownership (ownership) over utilization (sharing), and emphasis on stock scale (quantity) over quality improvement (efficiency). It is difficult to align with the overall strategic goals of the transformation and upgrading of state-owned asset management, the reform of “streamlining administration, delegating power, improving regulation and upgrading services”, and performance management, and there are several problems<sup>[6]</sup>;

On the one hand, the management of the state-owned assets stock is limited to simply increasing the self-owned stock through purchase, ignoring the value orientation of demand orientation, performance as the result, and effective allocation as the ultimate goal. It lacks systematic inventory management, scientific evaluation of utilization, sufficient argumentation of the process, and realistic prediction of actual demand, which leads to the blindness and randomness of stock management. In the practice of state-owned asset management, it is mainly manifested as: the lack of overall planning and argumentation of stock in the early stage (stock inventory, allocation and demand management), purchasing independently (lack of unified and scientific argumentation), replacing process management with formalized process operation (process virtualization and thus becoming a disguise to avoid procedures), and taking the allocation of funds as the sole basis for asset allocation (purchase as long as funds are available).

On the other hand, the effectiveness, systematization and scientification of the overall allocation, disposal and utilization cannot effectively meet the actual needs of “living frugally” and asset utilization efficiency. Its essence is based on departmentalism as the main body, lacking a systematic institutional design and working mechanism for top-down overall allocation of existing resources and bottom-up performance evaluation of utilization. In practice, it is mainly manifested as: No systematic mechanism for selecting asset allocation schemes has been established (determining how to allocate state-owned assets based on top-down pooling of existing resources and whether the decision-making mechanism is strictly followed), and no effective mechanism for determining and evaluating the use value of assets has been established (simply judging whether they have use value based on years, The absence of a value assessment mechanism and the lack of a scientific and effective operational mechanism for the utilization of asset value (shared allocation and utilization platforms and operational models).

## **2.3 There are inappropriate asset disposal mechanisms and models**

In the practice of state-owned asset management, no management behavior at any stage can be isolated from other stages and links, especially in the asset disposal stage, in addition to strict decision-making mechanisms, work procedures and approval processes, there must also be strict inventory clearance, value appraisal, evaluation and revitalization mechanisms, That is, it is necessary to improve and perfect the trade-off and confirmation mechanism based on the value of the asset itself

and its use value, fundamentally solve the problem of purely formalism, simplification and one-size-fits-all in the process of asset disposal and clearance, and re-evaluate and confirm the mechanism and model of asset disposal on the basis of fully considering “living a tight life”, the actual function of the asset and the effectiveness of revitalization and reuse.

First, the asset disposal mechanism and standards need to be improved. Although there are relatively mature institutional guarantee mechanisms in asset disposal, they are limited to procedural and procedural operation levels and lack a top-down trade-off, evaluation and confirmation mechanism, that is, not exercising substantive authority in accordance with the main business and main responsibilities of asset management. In practice, the main responsibilities and decision-making authority are essentially delegated to the departments to which the assets belong (use), which objectively leads to differences in disposal mechanisms and standards due to differences in funds, usage requirements, and departmental decision-making mechanisms, and further leads to blindness and arbitrariness in stock management, mainly manifested in two aspects: On the one hand, from the perspective of value level, there is a lack of necessary value assessment mechanisms for asset disposal and renewal. It cannot be simply based on the level of years, nor purely based on the level of financial guarantee, but only on the value level of revitalization and reuse; On the other hand, from the perspective of systematically improving the performance of the use of state-owned assets, an effective trade-off mechanism between asset allocation and asset disposal has not been established, and a mechanism for asset disposal has not been constructed from the perspective of organizational strategic goals and strategic asset allocation, that is, asset disposal must be based on the premise of systematic asset allocation and the necessity of disposal. The establishment of an asset disposal mechanism with clear standards (including premises and basis), unified standards (including mechanisms and procedures), and practical needs, of course, does not have sufficient funds as a prerequisite factor<sup>[6]</sup>.

Second, there is a lack of standardized and effective process management for the disposal of state-owned assets. The existing asset disposal process is generally limited to the back-end process, that is, the basis for asset disposal is the existing system norms and work processes at the disposal stage, and its starting point is set as the asset usage life set by the system norms and as the determination to be disposed of, simply following the main processes and links such as application, approval and disposal. There is a lack of necessary working mechanisms and procedural designs such as pre-disposal inventory and clearance, use value (exploitable value) assessment and evaluation, and asset revitalization. It is difficult to avoid simplistic and one-size-fits-all disposal models, which are mainly manifested in the practice of state-owned asset management: There is a lack of systematic full-process design (the absence of top-down decision-making and assessment mechanisms at the front end of the disposal process), a lack of systematic and scientific assessment and confirmation of the use value of assets to be disposed of (the working mechanism for asset revitalization), and a resource allocation model for coordinating asset disposal and stock optimization (the disposal mechanism based on the systematic optimization of resource stock).

Third, the quality of state-owned asset reporting management needs to be improved. Before the Central government issued the “Opinions on Establishing The State Council’s Reporting to the Standing Committee of the National People’s Congress on the Management of State-owned Assets” in December 2017, universities had established corresponding systems for the reporting of state-owned assets, but the problem of not attaching importance to the reporting of state-owned assets still emerged. The concept of “big state-owned assets” management that combines physical assets and assets has not been fully formed. Data statistics only achieve real-time grasp and point-based statistics at the end of the year without comprehensive control of the data. State-owned assets reports only do information statistics without using data for analysis of the utilization and disposal of state-owned assets. All of these problems are, to varying degrees, hindering the all-round construction of the state-owned assets supervision system.

## **2.4 Imperfect asset performance evaluation system and mechanism**

From the above, it is not difficult to see that in the context of “living frugality”, asset allocation should be regarded as a systematic asset management event, that is, it must be based on the premise of coordinating purchase funds, stock management, resource allocation and asset disposal, and on the basis of necessity, value and efficiency. Simply classifying asset allocation into a process model of declaration, approval, purchase, evaluation (formal meaning), and disposal is manifested in practice as a lack of asset management level and governance effectiveness, lacking both the necessary cognition



and evaluation of the asset itself and the necessary evaluation and revitalization mechanism at the front end. A systematic, scientific, and effective asset performance evaluation mechanism needs to be established<sup>[8]</sup>. The lack of supervision and incentive mechanisms and mutual restraint mechanisms in the property rights system of state-owned assets in universities, coupled with backward management concepts, imperfect management systems and non-standard management organizations, makes it difficult to quantitatively measure the conversion efficiency from resource input to target output of university organizations in China in the practice of state-owned asset management. There are several main bottlenecks and problems in the asset performance evaluation system and mechanism:

First, the standard system is limited. The existing standard system for asset performance evaluation is based on the main standards and factors such as actual holding (ownership nature), stable stock (pursuing scale and quantity), useful life management (depreciation period), and value pursuit (residual value after depreciation), which formally meets the basic requirements of asset evaluation regulation, but in management practice, There is a contradiction between the formal satisfaction of assessment results and the substantive need for improving the quality and efficiency of asset management, which is divorced from the asset value system and the use value system to manage value assessment standards, which is contrary to both the requirement of “living frugally” and the need for the effectiveness of asset management and governance, and requires the construction of a standard system based on value and demand in management practice.

Second, the assessment system is limited. As mentioned earlier, the existing assessment system is based on the existing standard system and assessment model, which contrasts with the policy expectations and practical needs of state-owned asset performance management, “living frugally”, and asset revitalization and utilization, and lacks support in several dimensions such as demand, value, and process management. The evaluation system itself has shortcomings and bottlenecks in the value management, decision-making mechanism, professional evaluation, and all-domain supervision of state-owned assets throughout their life cycle, namely inherent flaws in the compatibility (demand argument management), extension (value front-end management and back-end reuse management), and systematicness (element comprehensive analysis) of the state-owned assets performance evaluation system. The lack of necessary value assessment, process reengineering and mechanism optimization is mainly manifested in two aspects: on the one hand, performance assessment is based on depreciation, useful life and value, divorced from the use value itself; On the other hand, the performance evaluation system is based on value recognition, formal processes and existing cognition, and is disconnected from value reuse and development.

Third, technical means are limited. From the perspective of the trend of digital management, in the face of the current situation and limitations of asset management that is large in scale, complex in form and diverse in value, the performance evaluation of inherent assets is difficult to achieve precise, effective and clear performance management level by relying on human means and subjective judgment, and the pursuit of modernization of the performance evaluation system is even more out of reach. Therefore, The technical means of performance evaluation of state-owned assets are mainly manifested in two aspects: informationization of stock and digitalization of node management. In terms of the level of informationization of stock<sup>[9]</sup>, it is difficult to effectively solve the basic problems of information asymmetry and performance evaluation of state-owned assets in stock in specific practice, mainly including: Asset stock information (the stock of assets that can be included in performance evaluation) and value information asymmetry (the availability of asset value); In terms of the level of digitalization of node management, the problem of the accuracy of node information data and actual value information data cannot be effectively solved in practice, mainly manifested in several aspects: System node information (stock data based on time points), process node information (stock data based on adjustments), terminal node information (stock data based on physical objects) and value node information (stock data based on users).

## **2.5 Low level of asset categorization identification and management efficiency**

From the perspective of the overall requirements of the regulatory system and the policy trend of policy mechanism adjustment, precise asset classification and identification management is one of the prerequisite, fundamental and procedural conditions for achieving asset efficiency utilization and performance realization. In practice, it is mainly limited by the implementation mechanism and implementation efficiency, mainly manifested in: First, precise category identification is limited. In practice, the classification management of assets often adopts traditional methods based on inherent thinking and

experience for category identification, lacking the guidance of scientific classification. Such as whether the identification of fixed assets is based on value limits or actual uses, and whether the identification and management of cultural relics assets are based on historical value conservation management (intrinsic intrinsic value) or real valuation depreciation management (formal artificial valuation), etc. Second, the value management mechanism is limited<sup>[10]</sup>. In practice, asset value is generally restricted by financial management and book treatment, lacking a systematic value revaluation mechanism based on revitalization and reuse, resulting in a one-size-fits-all simplification of asset value management. Such as the asset exit mechanism based on life expectancy and depreciation, the value recognition mechanism based on book value, the stock management mechanism oriented by user demands, etc. Third, the management model is limited. In practice, the management of state-owned assets is restricted by the top-down management system construction and approval mechanism and the bottom-up demand management and user self-control mechanism for stock demand, lacking a two-way value selection, shared utilization and revitalization mechanism. For example, user demand is detached from the demand for asset stock balance, and the exit mechanism of assets is simply based on age value management and user demand, etc.

### **3.Pathways, measures and methods for regulating state-owned asset management based on control**

In terms of the current situation of value orientation, performance management, policy orientation and institutional system construction, the basic problems of state-owned asset management are mainly manifested as a series of bottlenecks and limitations in scale expansion, stock management, self-control demand, value management, control effectiveness, etc. In essence, they still manifest as deficiencies and deficiencies in governance system construction and governance capacity construction. In management practice, it is necessary to strengthen systematic control management from aspects such as mechanism reconstruction, model selection, application of technical means, value revaluation and responsibility supervision, and then find the path, measures and methods for the standardized management of state-owned assets in the new era. Quality improvement and efficiency enhancement, resource allocation, performance management and full-process supervision are the core values and ultimate goals for improving the governance system and governance capacity in the field of state-owned assets.

From the perspective of regulations, policies and institutional design, the ultimate goal of state-owned asset management should be the overall optimization and improvement of performance levels, resource allocation, value activation and efficiency play, and thereby achieve the ultimate value of state-owned asset management in the two dimensions of “streamlining administration, delegating power, improving regulation and upgrading services” reform and “living frugally”.

#### **3.1 Build an effective model management mechanism for state-owned assets based on internal control**

From a practical perspective, the model is mainly “institutional norms (procedures and processes) - division of responsibilities (boundaries of responsibilities) - guarantee mechanisms (operation and supervision)” : First, establish a regular institutional mechanism for the abolition, amendment, and review and interpretation of systematic systems, and review the main contents and mechanisms such as dynamic management of asset stock, coordinated review mechanism of incremental, systematic allocation of resources, effective limitation of specific matters, and checks and balances of responsibilities as the main matters to plug institutional loopholes and prevent rent-seeking behavior, The essence of this is to establish procedural operation and operating procedures at the institutional normative level to make up for deficiencies in internal control; The second is to establish a clear demarcation of responsibilities with consistent rights and responsibilities and distinct authorizations, and to implement authorization approval and internal checks and balances in all areas, links and nodes of asset management, including project initiation and resource allocation in the early stage<sup>[11]</sup>, process stock management and value assessment, revitalization and invalidation in the later stage, and evaluation and reflection after the event. Effectively connect systematic matters such as resource allocation, revitalization and utilization, and performance evaluation with specific duties such as stock management, value recording, and physical demand; Third, establish an effective guarantee, operation and supervision mechanism, uniformly regulate the implementation of institutional guarantee, the effective operation of procedures and the control of process nodes in the decision-making mechanism, authorization approval and review supervision mechanism, take objective, unified and standardized judgment criteria and judgment basis as the core essence and value orientation choice,

and implement them in all areas, links and nodes of state-owned asset management, To eliminate problems and phenomena such as the regular implementation of specific provisions, the limited remediation of institutional loopholes and the artificial limitations of decision-making mechanisms, to build a supervision mechanism that pursues the fulfillment of duties and the distinction of responsibilities, and to take the active operation mechanism and the passive acceptance of supervision as the two parallel main lines of the guarantee mechanism, thereby achieving comprehensive governance effectiveness.

### **3.2 Establish control and enforcement paths based on patterned mechanisms**

From the perspectives of system implementation, policy enforcement and management practice, the basic path of control and execution is “system authorization - approval management - node control - information orientation - guarantee mechanism - reflection mechanism”. First, a system authorization based on system norms should be established, incorporating all management, implementation, guarantee, reflection and confirmation behaviors within the scope of authorization. And establish corresponding authorization norms and operational procedures to strictly control the boundaries of power and prevent arbitrary expansion of power; Second, implement institutional mechanisms for approval management, establish a comprehensive and full-process approval management based on authorization, including pre-resource allocation and project initiation argumentation, process stock management and demand approval, post-value revaluation and revitalization utilization, where any act, process, information must obtain authorization approval, strictly control the boundaries of responsibilities, and prevent confusion of responsibilities; Third, strictly control node behavior, incorporate all organizational and individual behaviors of systems (authorizing parties), information points (information flow and process nodes), and terminals (authorized parties) into the review and supervision of authorized approval matters, establish behavior correction and reflection mechanisms, strictly control behavior boundaries, and eliminate behavior rent-seeking; 4. Lead to asset management information orientation, establish a guided lead based on the review mechanism, incorporate all process information flows such as behavior information (authorization approval and execution behavior), asset stock information (number of time points and increase or decrease), value information (value management of assets) into the scope of information management as a whole, strictly control information boundaries, and prevent information distortion; 5 Build a multi-in-one guarantee mechanism of argumentation, review, execution and supervision of institutional norms, procedural processes, authorization and approval, information management information, etc., to enhance the accuracy of asset stock through argumentation, to supervise the standardization of operational behavior through review, to ensure the implementation of authorization and approval through execution, to supervise and correct errors and deviations, to strictly control the operation path and prevent behavioral fraud; 6 Reconstruct the reflection (feedback) mechanism, systematize feedback on the operation coordination, process control and performance results of institutional authorization, approval management, node control, information orientation and guarantee mechanism, thereby reducing system loss, preventing path selection failure, maximizing the modularization, systematization and intelligence of management models and paths, strictly controlling module virtualization and eliminating reflection distortion.

### **3.3 Reconfigure the techniques and means of resource allocation and stock management**

Based on the reality of resource allocation and stock management in the context of large-scale expansion, information technology and terminal models, technology, means and models have become an objective and realistic need for handling massive amounts of information and managing large-scale assets, on the one hand, considering the limitations of human management, and on the other hand, considering the reality of informatization<sup>[12]</sup>. In this sense, It is necessary to fundamentally address problems at the system level (platform), decision-making level (execution mechanism), terminal level (operation process), and autonomous choice level (reflection and reconstruction), and establish execution, control and evaluation mechanisms based on blockchain as the basic model and form. Reconfigure the blockchain-based system platform with information flow and its information nodes as the carrier, functions and nodes as the autonomous choice path, and terminals as the operation and execution nodes.

First, address the holographic system problem. From the existing block-based and modular systems in a fragmented form, there are irreconcilable technical and human divisions in the system, information, decision-making and execution, which cannot solve the root problems of information transmission, decision-making process, execution diagnosis and effect



evaluation. The management authorities need to make a holographic reconstruction and configuration at the strategic level. Build an explicit large system platform (at the management level) based on systematic thinking and blockchain technology, with terminal control and information flow transmission as nodes, decision-making mechanism and process informatization as paths, and information technology and intelligent means as support, and place the asset management platform within the large system platform. Establish the transmission paths of asset management front end (decision-making end), parallel end (value management, accounting processing and control supervision) and back end information (user, demand feedback and evaluation), construct information nodes and execution paths, and smooth the paths of process control, authorization approval, process management and evaluation reflection.

Second, address the issue of information transmission and control. Judging from the current state of information transmission and control in the asset management system, information mainly includes decision-making (authorization) information, process (path) information, node (intersection) information, execution (operation) information, control (supervision) information and evaluation (reflection) information, which is inherently complex and disordered. In practice, there are still problems of being out of the system platform and excessive human control. It is necessary to rely on systems, terminals and nodes to systematize and informatize the reconstruction of strategic functional architecture, responsibility position authorization, process node control, terminal execution authorization, etc., and carry out nodeization and process transformation from the cover of strategic management, authorization management, execution management and process control. To achieve information transmission, control, processing and processing, improve the efficiency of information transmission and the effect of information control, and minimize human intervention factors.

Third, address the node and terminal problem. From the practical perspective of the operation of the asset management system, the isolation of the existing asset management system itself and the lack of a substantive demand value management and information processing systematized management mechanism and process for the asset management nodes and terminals, that is, the existing nodes are static and passive. Nodes and terminals based on blockchain technology should be used as ledgers and carriers for information processing and storage, and need to be systematically constructed from the two levels of responsibility authorization and decision approval. On the one hand, the responsibility for resource allocation and stock management should be implanted into node management and terminals. To achieve the unification of demand management and stock management, and to integrate the assessment and decision-making mechanisms for stock identification and value management into node management and terminals to achieve the unification of value revaluation and stock resource utilization.

### **3.4 Reconfigure the performance management and value assessment execution mechanism for asset allocation**

The direct and explicit problems in state-owned asset management are the failure of asset allocation, execution mechanism, value assessment and operation process due to the incompleteness of the system at the management authority level and the functional multi-system segmentation. That is, there are systemic coordination obstacles among demand, stock and value in practice, and the allocation mechanism and value recognition fail<sup>[13]</sup>. There are inherent problems of poor communication channels and information asymmetry among the management authorities, asset management functional institutions and end-users, which cause institutional disruptions to the efficient allocation of resources and the efficient management of stock, and require the establishment of performance management and value assessment implementation mechanisms at the practical level.

On the one hand, it is necessary to reconstruct the execution mechanism of asset allocation performance management, to achieve a fundamental transformation in asset management practice from scale management to performance management, from extensive management to fine management, and from quantity management to value management, and to elevate simple value management to a balance of value and use value. Reconfigure the performance management execution mechanism of “categorization identification - stock management - value control - revitalization utilization - efficiency evaluation” : First, reconfigure categorization identification, that is, establish the identification of asset and its demand categories based on functional categorization and value categorization to distinguish between value and non-value; Reconfiguring stock

management means building a stock management control mechanism based on demand stock, supply stock and value stock, distinguishing between available stock and unavailable stock; Third, reconfigure value control, build a scientific and precise assessment and evaluation mechanism based on value and use value control for value-based available stock, and establish a coordination mechanism between user demand and actual asset allocation demand (supply); Fourth, reconfigure and revitalize utilization, completely reverse the asset allocation based on purchase in the field of asset allocation, establish an asset reuse assessment mechanism that is coordinated in purchase, allocation and upgraded utilization, and realize the revitalization execution mechanism based on the assessment of the value of available stock; 5 Reconstruct performance evaluation, conduct system-level operational evaluation (system operation) and practice-level execution evaluation (practice) on value-based available stock, supply mechanism at the demand level, scientific level of value assessment, and realization mechanism of revitalization and reuse, and reevaluate and reconstruct the performance level of resource allocation and execution efficiency, thereby achieving the effect of performance management.

On the other hand, reconfigure the value assessment execution mechanism. The core issue of asset management in higher education institutions is asset allocation and stock management based on value assessment, that is, unifying value, use value and demand allocation to achieve coordination and consistency among management authorities, value management, asset management, users and regulators. The ultimate goal of asset allocation and stock management is to establish a value management execution mechanism based on value revaluation, integrating asset disposal, revitalization and reuse, value assessment and high-quality asset allocation, and implementing the execution mechanism along the operational path of “value management - value revaluation - value management performance evaluation” : First, at the value management level, achieve consistency in the management authority’s asset total value target, value financial management, use value management, and user value demand management, holistically integrate the management authority’s asset value management strategic framework, authorization mechanism, and operating procedures into the existing operating system, and implement systematic and scientific real-time monitoring and early warning of value dynamics based on scientific standards and mechanisms. To achieve effective value management; Second, at the level of value revaluation, as mentioned earlier, value revaluation involves core elements such as asset disposal, value assessment, revitalization and reutilization, and allocation requirements. It is an intrinsic driver of multi-level selection and execution mechanisms, all of which are indispensable. In this sense, asset value revaluation is a systematic project involving executors, reference frame standards, operational paths, confirmation mechanisms, and feedback mechanisms. That is, who does it, how does it do it, and what is the result and effect of the execution; Third is value management performance evaluation, the management and revaluation of asset value is the utilization of asset value, all control objectives of asset management are centered around this ultimate value, and its performance and results directly affect the effectiveness of the system and the efficiency of allocation, Feedback and evaluation are needed from four dimensions: allocation balance, value precision, utilization effectiveness, and effect visibility, in order to optimize the system operation and performance evaluation mechanism and achieve the purpose of control-based asset management.

#### **4.Closing Remarks**

The management of state-owned assets of institutions of higher learning is a systematic project, which is holistic, systematic and scientific. Due to the combined influence and constraints of traditional thinking patterns, management systems, operation paths and implementation mechanisms, there are real practical predicaments and contradictions in management practice. It is necessary to rebuild and reconstruct in aspects such as internal control, functional positioning, allocation efficiency, execution mechanism, and evaluation system, establish an operation platform and path supported by big data and blockchain technology, and reconstruct the management model and execution mechanism of resource allocation and stock control. Take the integration of asset management system reconstruction, information control, terminal management, value assessment and performance evaluation as an important support for improving the efficiency of state-owned asset management, enhance the informatization, scientification and precision of asset management, and improve the governance system and governance capacity in the field of state-owned asset management.

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## Reference

- [1] General Office of the Central Committee of the Communist Party of China, & General Office of the State Council. (2017, January 12). Guiding opinions on innovating the way government allocates resources. *People's Daily*, p. 001.
- [2] Huang, L. (2022). Thoughts on improving the evaluation system of state-owned assets of administrative institutions. *China Appraisal*, 266(5), 32–36.
- [3] Li, B. C., & Tang, Z. D. (2011). Research on the performance evaluation index system of fiscal funds. *Business Accounting*, 461(17), 5–7.
- [4] Liu, Y., Li, J., & Zheng, X. (2021). Implications of the regulations on the administration of state-owned assets of administrative and public institutions for the management of state-owned assets in colleges and universities. *Laboratory Research and Exploration*, 40(11), 281–285.
- [5] Ministry of Education of the People's Republic of China. (2019). Opinions on the full implementation of budget performance management. *Bulletin of the Ministry of Education of the People's Republic of China*, (12), 11–14.
- [6] Ministry of Finance of the People's Republic of China. (2021). Notice on issuing the measures for the disposal of state-owned assets of central administrative institutions and public institutions. *Announcement of the Ministry of Finance of the People's Republic of China*, (11), 19+1–16.
- [7] People's Government of Shaanxi Province. (2016). Opinions on reforming and improving the state-owned assets management system. *Yan'an Municipal Government Bulletin*, 119(5), 6–8+31.
- [8] State Council of the People's Republic of China. (2018). Opinions on the full implementation of budget performance management. *Bulletin of the State Council of the People's Republic of China*, 1640(29), 5–9.
- [9] The Central Committee of the Communist Party of China. (2014). Decision on some major issues concerning comprehensively deepening reform. *Beijing Review*, 57(7), 1–24.
- [10] Zhai, Y. M. (2022). Research on state-owned asset management of administrative institutions from the perspective of internal control. *Investment & Cooperation*, (11), 160–162.
- [11] Zhang, G. D. (2023). Asset management terminal automation based on blockchain operations system. *Journal of Digital Technology and Applications*, 9(1), 204–206.
- [12] Zhu, H. R. (2022). Internal control of state-owned asset management in higher education institutions. *Today's Fortune (China Intellectual Property)*, 377(2), 118–120.
- [13] Guidance on revitalizing state-owned assets of administrative and public institutions. (2022). *State-owned Assets Management*, 381(12), 4–6.