A Case Study on Governance Challenges and Improvements in University Education Development Foundations

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***Abstract*—Grounded in the Resource-Based View (RBV), this study conceptualizes a four-stage capability chain—resource acquisition, integration, utilization, and feedback—and advances an analytical framework that integrates four core operational capabilities with endowment clustering dynamics. Employing a rigorous multiple-case study design with in-depth on-site visits, semi-structured interviews and participant observation conducted between March 2024 and March 2025, we delineate four distinct organizational archetypes based on their heterogeneous capability configurations. Our analysis reveals that these archetypes demonstrate significant heterogeneity in their capability endowments and confront unique governance bottlenecks. To address these challenges, we develop differentiated governance improvement pathways: for foundations constrained by resource acquisition limitations, we advocate for de-institutionalization reforms and deeper societal integration; for those facing resource integration gaps, we recommend enhanced government coordination and intra-university collaborative mechanisms; for foundations seeking to improve resource utilization, we emphasize professionalizing charitable asset management and project governance; and for those aiming to strengthen resource feedback loops, we propose independent third-party evaluations and systematic data monitoring systems. This study not only extends the theoretical application of the resource-based view by constructing a four-stage capability chain framework for university foundation governance but also provides actionable differentiated governance pathways for higher education foundations in developing countries and other similar institutional contexts worldwide.**

***Keywords*—higher education, university foundations, Resource-Based View (RBV)**

I. Introduction

Against the backdrop of chronic government funding insufficiency for higher education in China, philanthropic capital has emerged as a critical supplementary financing source. University development foundations, as the core institutional vehicles for higher education philanthropy, are central to mobilizing resources and driving the high-quality development of educational charity.

While China's policy support has fueled rapid growth in university foundations, this expansion has exposed deep-seated governance challenges that lack systematic theoretical analysis. Existing research has predominantly employed international comparison and normative critical methods, with few theoretically grounded qualitative studies based on primary field data.

This study addresses this gap by applying the Resource-Based View (RBV) to analyze seven representative Chinese university foundations. Using a multiple-case study design with in-depth fieldwork, we identify four distinct foundation archetypes and their unique governance bottlenecks. We then propose differentiated improvement strategies, contributing both empirically and theoretically to the literature on university foundation governance. Specifically, we extend RBV's application to non-profit governance through a four-stage capability chain framework, provide actionable insights for university administrators, foundation practitioners and policy makers, and offer directly transferable differentiated governance pathways for university foundations worldwide.

II. Literature Review

A. China-U.S. Comparative Research on University Foundations

Lessons derived from the information disclosure practices of the Indiana University Foundation in the United States include: raising institutional awareness to strengthen the intrinsic motivation for information disclosure; leveraging the economic guidance role of financial and tax authorities in information disclosure regulation; increasing the transparency of financial information, particularly regarding the effectiveness of endowment utilization; continuously improving the standardization of information disclosure procedures; and enhancing overall organizational transparency [1]. A comparative analysis between China and the United States reveals that Chinese university foundations adopt relatively monotonous investment methods, primarily

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limited to third-party entrusted investment products in financial markets. In contrast, top U.S. university endowments employ flexible and diversified investment strategies that generate substantially higher returns. The study concludes that leading Chinese university foundations must reform their existing management systems and enhance their professional investment and operational capabilities [2].

The core functions of U.S. public university foundations include: meeting donors' needs for tax exemptions and privacy protection; enhancing the flexibility of fundraising, endowment management, and investment operations for public universities; and assisting universities in mobilizing additional external resources. Recent governance challenges include misalignment in the relationship with their host universities, the tension between information disclosure and donor privacy protection, and emerging ethical concerns. U.S. public universities have continuously adapted their governance models, forming a dependent "symbiotic" relationship with their affiliated foundations, which has enabled these foundations to remain critical players in the diversified fundraising efforts of U.S. public higher education [3]. By comparing the differences between educational foundations at top public and private universities in China and the United States in terms of asset size, organizational structure, fundraising mechanisms, investment strategies, and investment returns, Su and Zhao [4] draw the following policy implications: expanding social donation channels and optimizing fundraising programs; streamlining the organizational structure of university foundations; and enhancing the professional competence of decision-making personnel to ensure the high-performance operation of endowment funds.

B. Research on Issues and Improvements in University Foundations

The fundraising, expenditure, investment, and operational management mechanisms of foundations at China's top-tier universities face four major challenges: modest and highly volatile fundraising volumes with a pronounced "head effect" and limited channels; rigid expenditure structures, excessively low administrative costs that hinder professional operations, and few projects directly supporting "world-class university" initiatives; investment decision-making characterized by "prioritizing short-term over long-term returns, domestic over international markets, and intangible over tangible assets"; and weak institutional management capacity with insufficient professional competence. To address these issues, the authors recommend broadening fundraising channels, leveraging the flexibility of social resources, optimizing investment portfolios, prioritizing the recruitment of professional management talent, and strengthening information disclosure mechanisms [5].

Donations to Chinese university education foundations are highly concentrated in top-tier institutions, reflecting a significant "Matthew Effect"; meanwhile, small-value donations have witnessed explosive growth in recent years. There is also a strong correlation between the amount of social donations received by university foundations and their geographical location. Key challenges identified include: the shrinking donation space for non-top-tier university foundations; the underdevelopment of diversified and differentiated fundraising channels; the largely untapped potential of alumni and student giving; and the lack of standardized and orderly industry governance. Drawing on the Long Tail Theory, Wang and Zhang [6] propose a comprehensive action framework for social donation strategies, including refining donation action plans, expanding the discourse space for educational philanthropy, implementing targeted donor segmentation strategies, and promoting the full integration of university education management and social donation systems.

The development path for diversified higher education fundraising encompasses three interconnected levels: at the government level, focusing on policy support and regulatory guidance, including improving the tax incentive system, optimizing university donation matching policies, deepening administrative streamlining and power delegation in relevant fields, and granting greater operational autonomy to university foundations; at the industry level, emphasizing synergistic division of labor and cooperation, including leveraging the role of industry hub organizations, guiding grant-making foundations to support higher education, and harnessing the leading role of prominent social foundations; at the university level, prioritizing the capacity building of university foundations, including promoting the professionalization of fundraising, diversifying fundraising channels, and standardizing the preservation and appreciation of endowment assets [7].

C. Research on Specific Types of University Foundations

Educational foundations affiliated with China's normal universities are characterized by late establishment, small endowment scales, and low investment returns. In their development, these foundations face a triple challenge: fundraising difficulties, inadequate endowment preservation and appreciation capacity, and systemic incentive deficits. Their internal management systems can be optimized through measures such as refining organizational structures, detailing fundraising project plans, hiring professional investment teams, and establishing performance-based incentive mechanisms. Simultaneously, external environmental improvements—including restructuring the tax incentive system, building dedicated investment platforms for normal university endowments, and fostering a broader culture of educational philanthropy—can provide both internal and external drivers for their sustainable development [8].

Grounded in the core tenets of multi-actor theory and educational ecosystem theory, Shen [9] identifies five critical dimensions of research university foundation fundraising models: fundraising objectives, organizational structure, fundraising processes, institutional norms, and resource endowments. Based on operational modes and interrelationships among these dimensions, he categorizes fundraising models into four distinct types:

Centralized Model: University-level leadership with strong agglomeration effects but significant imbalances across schools and departments;

Decentralized Model: Fundraising delegated to individual schools and departments, featuring broad donor outreach but limited economies of scale;

Multi-stakeholder Integrated Model: University-level coordination with school-level participation, delivering substantial synergistic effects but facing challenges in goal alignment;

Hybrid Model: Shared university-school collaboration with flexible decision-making and management, but higher inter-organizational coordination costs [9].

D. Research on Specific Areas of University Foundations

Factors influencing risk formation in university foundations include the existing institutional framework, external institutional environment, inherent objective risks, and the availability of professional talent. Endowment fund investment risks primarily consist of systemic endogenous risks and exogenous risks. Based on a case analysis of a specific university foundation, the author proposes targeted risk mitigation strategies: establishing comprehensive institutional rules and regulations, clarifying decision-making frameworks and operational processes, diversifying investment portfolios, and conducting regular professional risk assessments [10].

Innovative designs for university foundation operational models cover two core dimensions: fundraising and investment. Innovative fundraising models include: maintaining long-term focus on alumni relations and strengthening alumni engagement; adopting market-oriented operational approaches to enhance brand influence and expand outreach beyond university boundaries; implementing a donor-centric fundraising philosophy to shift from passive to proactive resource mobilization; and innovating fundraising methods through the introduction of crowdfunding platforms. Innovative investment models include: hiring professional investment personnel or entrusting qualified fund management companies to achieve scientific asset management; improving investment decision-making mechanisms to reasonably mitigate risks; formulating sound long-term investment strategies and diversifying asset allocations to spread risks; and establishing long-term operational objectives to achieve sustainable endowment appreciation [11].

An empirical study of 407 non-publicly solicited university foundations in China in 2014 found that donation income is positively correlated with transparency index, charitable expenditures, and revenue-to-expenditure ratio, while negatively correlated with foundation age and investment returns. The authors recommend that non-publicly solicited university foundations should strengthen information disclosure and expand communication and publicity channels; maintain a balanced revenue-expenditure growth model to guide sustainable fundraising planning; and innovate governance mechanisms while implementing supporting policy safeguards [12].

In summary, existing research has predominantly relied on international comparison and normative analysis, with limited theoretically grounded qualitative studies based on primary field data. This study addresses this gap by applying the RBV framework to a multiple-case analysis of seven Chinese university foundations.

III. Resource-Based Theory and Analysis of Its Applicability

A. Resource-Based View

The Resource-Based View (RBV) emphasizes that possessing high-value, scarce resources and the ability to utilize these resources efficiently constitutes the key source of an organization's competitive advantage. It posits that resources are the core foundation for organizational survival and development—subsequent scholarship has extended its application beyond for-profit firms to include non-profit organizations and public institutions. RBV further argues that competitive heterogeneity among organizations arises from fundamental differences in their resource endowments, which are characterized by four critical attributes: value, rarity, inimitability, and non-substitutability [13].

Later extensions of RBV into resource management and orchestration theory provide a systematic framework for analyzing how organizations acquire, integrate, and deploy resources to create value [14].

In summary, RBV identifies the Value, Rarity, Inimitability, and Non-substitutability (VRIN) of resources as the core criteria for determining the sustainable competitive advantage of enterprises and non-profit organizations alike. Differences in resource endowments directly determine variations in organizational competitiveness, while resource management and resource orchestration enable a spiral process of capability development and iteration through the "acquisition–integration–utilization" governance mechanism. This theoretical foundation provides a robust analytical lens for examining the operational dynamics and governance challenges of university foundations.

B. Applicability of the Resource-Based View to University Foundation Analysis

The RBV shifts analytical focus from an organization's external environment to its internal resource endowments, and subsequent theoretical developments have extended its scope beyond for-profit firms to a broad range of organizational contexts. This study applies the RBV—originally developed for business enterprises—to university foundations, a type of charitable organization, which is fully consistent with the theoretical evolution of the RBV. Four key arguments support this theoretical application.

First, university foundations share core operational similarities with enterprises in resource management, with their four capabilities forming a complete iterative process. Second, RBV argues that competitive advantage derives from heterogeneous VRIN resources and the ability to deploy them efficiently. Third, the RBV emphasizes that organizational development must be grounded in an institution's own resource endowments. This perspective provides a theoretical foundation for understanding the diversified development patterns and heterogeneous governance challenges of Chinese university foundations. For example, elite university foundations benefit from superior social credibility and extensive global alumni networks. By leveraging their university's brand reputation, accumulated social capital, and alumni connections, these foundations can more easily secure large-scale donations and attract professional talent to manage their substantial endowment assets. In contrast, foundations affiliated with non-elite institutions, constrained by limited resource endowments, face greater barriers to rapid growth. Fourth, the RBV has been widely applied across multiple domains of higher education research, providing solid empirical precedents for this study. In the field of teaching team construction, Ma and Jia [15] apply the RBV to analyze the resource capacity structure of open education teaching teams and propose corresponding optimization strategies. Regarding disciplinary development, Liu [16] demonstrates that Hong Kong`s Areas of Excellence Scheme has built competitive advantages by leveraging heterogeneous organizational, physical, financial and human resources in line with RBV logic. For industry-university collaboration, Pan [17] adopts the RBV to design resource integration and collaborative governance pathways for vocational industry colleges to foster sustainable competitive advantages. These widespread applications confirm the suitability of the RBV for analyzing governance issues in higher education organizations such as university foundations.

IV. Methodology

This study adopts a multiple-case study design to explore how university foundations with heterogeneous resource endowments form differentiated governance models and face distinct development bottlenecks, a complex social phenomenon that cannot be fully addressed by purely quantitative methods. Using purposive sampling, we selected seven representative Chinese university foundations spanning eastern/central-western regions, various institutional hierarchies and disciplinary types. Between March 2024 and March 2025, we collected primary data through on-site visits, semi-structured interviews and participant observation, supplemented by annual reports and official documents.

V. Analytical Framework: Four Core Capabilities and Endowment Clustering

Grounded in the Resource-Based View (RBV) and subsequent developments in resource management and resource orchestration theory, and in response to widespread societal concerns regarding post-donation fund flows, this study incorporates a critical "feedback" capability to construct an analytical framework centered on "four core capabilities and endowment clustering." The four capabilities—acquisition, integration, utilization, and feedback—are derived from established resource management and orchestration theories, encompassing the full resource lifecycle while adding the essential function of donor feedback that is unique to charitable organizations.

Resource acquisition capability refers to a university foundation's ability to identify, attract, and secure necessary resources from the external environment, including financial capital, information, preferential policies, and social networks. This capability encompasses resource identification and assimilation, reflecting the foundation's strategies and performance in expanding fundraising channels, maintaining donor relationships, and mobilizing external resources.

Resource integration capability refers to a foundation's ability to coordinate and align diverse resources. This capability includes resource allocation and organizational coordination, reflecting the effectiveness of the foundation's organizational structure design, information dissemination systems, and cross-departmental collaboration, and demonstrating how institutional arrangements shape resource integration efficiency.

Resource utilization capability is primarily manifested in a foundation's execution and innovation capabilities. Specifically, after integrating resources and developing corresponding capabilities, the foundation deploys them into specific charitable activities or projects, or transforms them into innovative charitable products and services to achieve resource value creation. This capability encompasses resource investment and value realization, reflecting how effectively the foundation converts resources into charitable project outcomes and demonstrating the impact of project management capabilities, innovation mechanisms, and partnerships on resource utilization effectiveness.

Resource feedback capability refers to a foundation's learning and adaptive capabilities. This involves monitoring and evaluating resource utilization effectiveness, communicating results to internal and external stakeholders, and facilitating timely adjustments and improvements to resource management strategies. This capability focuses on performance evaluation and continuous improvement mechanisms, reflecting how foundations track, assess, and report on resource use outcomes.

In the context of this study, the resource management process refers to the complete workflow of university foundations in managing philanthropic resources—the comprehensive cycle comprising the four capabilities of "acquisition, integration, utilization, and feedback". Endowment clustering refers to the empirical finding that the four capabilities of Chinese university foundations are currently primarily determined by the resource endowments of their affiliated universities. University foundations can be categorized into distinct types based on these endowment characteristics. Importantly, however, foundations have the potential to transform themselves into independent, professional social charitable organizations through capability restructuring and strategic resource management, thereby partially breaking free from university endowment constraints and driving endogenous development.

This study employs this analytical framework, supplemented by empirical data from our research sample, to systematically analyze the capability profiles and performance of different university foundations throughout the resource management process. It aims to identify the strengths and weaknesses of foundations at each stage of the resource lifecycle, reveal the key factors influencing their sustainable development, and provide theoretical support for proposing targeted governance improvement strategies. As illustrated in Fig. 1, this framework depicts how university endowments shape the four-stage resource management capability chain, drive endowment clustering and foundation typology differentiation, and ultimately facilitate the transformation of decoupling from the university and integrating into society through a closed-loop feedback mechanism.

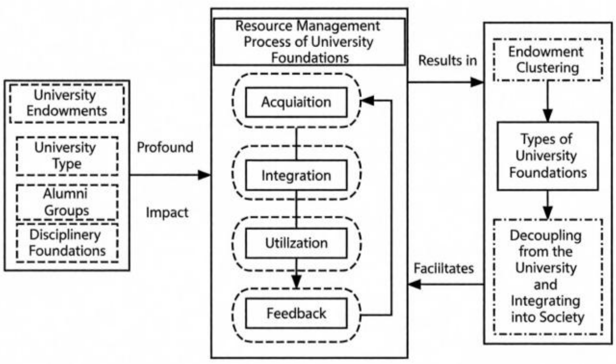

Fig. 1. Analytical framework for assessing resource management capabilities of university foundations.

VI. Research Sample and Classification of University Foundations

A. Research Sample

This study employs a multiple-case study design with seven Chinese university foundations as research samples: MX University (a "Double First-Class" university directly under the Ministry of Education), HS University (a leading local comprehensive university), CS University (a finance and economics university directly under the Ministry of Education), ZX University (a long-established local university specializing in law and political science), LC University (a local science and engineering university), ZY University (a local science and engineering university), and ZS University (an emerging local university specializing in law and political science). Among these, ZX University and LC University are in central and western China, while the remaining five are situated in eastern China. Between March 2024 and March 2025, extensive primary data were collected through qualitative research methods including on-site visits and participant observation.

These seven university foundations exhibit significant heterogeneity across multiple dimensions: geographically, they cover both eastern coastal regions and central/western inland regions; in terms of academic standing, they include Double First-Class universities, leading local universities, and emerging local universities; institutionally, they encompass comprehensive, law and political science, finance and economics, and science and engineering universities. With respect to regulatory governance, all university foundations in China are registered and supervised by provincial civil affairs departments in their respective jurisdictions, with education departments serving as their professional regulatory authorities providing industry guidance. This diverse sample distribution comprehensively reflects the development landscape of university foundations with different institutional backgrounds, providing a solid empirical foundation for this study.

B. Typology of University Foundations

This study categorizes university foundations into four distinct types based on differences in their resource endowments and capability configurations: resource-endowment driven, technology-enabled, industry-collaborative, and condition-constrained.

Endowment-Driven (MX University, HS University): Relying on their institutions' well-established brand reputation, extensive alumni networks, and deep historical heritage, these foundations build their core competitiveness by attracting large-scale donations and generating robust investment returns. They also possess strong capabilities for independent resource expansion and sustainable development.

Technology-Enabled (CS University): Moderate acquisition, strong integration and utilization, effective feedback. It pioneered alumni-backed private equity investments, establishing specialized investment committees to achieve industry-leading returns.

Industry-Collaborative (ZY University, LC University): Moderate acquisition and integration, strong utilization, weak feedback. They deploy enterprise-donated equipment and funds through customized talent programs, but lack independent third-party evaluation mechanisms.

Condition-Constrained (ZX University, ZS University): Weak acquisition, moderate integration and utilization, weak feedback. Constrained by disciplinary characteristics and administrative mindsets, they face severe fundraising difficulties and adopt extremely risk-averse investment strategies.

This classification approach facilitates systematic analysis of the differences among various types of university foundations, enables precise identification of their specific governance challenges, and provides a solid foundation for proposing targeted improvement strategies.

C. Four-Dimensional Capability Classification Criteria

Building on the theoretical framework developed earlier and drawing on empirical observations from our field research, this study proposes a capability-based classification framework for university foundations, as presented in Table I.

TABLE I. STANDARDS FOR CLASSIFYING THE CAPABILITIES OF UNIVERSITY ENDOWMENTS

Capability Type	High-Level Standard	Medium-Level Standard	Low-Level Standard
Acquisition	Multi-channel and proactive acquisition of resources from policies, alumni and off-campus sources	Intermediate level	Single acquisition channel and passive response
Integration	Cross-departmental and cross-regional resource collaboration mechanism with strong resource recombination and integration capabilities	Intermediate level	Fragmented resources and lack of collaboration mechanism
Utilization	Technology-enabled, conversion of resource stock into competitive advantages, continuous innovation of charitable projects and investment	Intermediate level	Lack of technical capabilities required for foundation operation, low efficiency of resource utilization
Feedback	Data-driven, multi-dimensional effect evaluation system and real-time response	Intermediate level	Lack of data integration and evaluation mechanism

D. Capability Profiles of University Foundation Archetypes

1) Endowment-driven archetype (MX, HS universities)

This archetype exhibits a capability profile characterized by strong resource acquisition, robust resource integration, moderate resource utilization, and effective resource feedback.

Taking the MX University Foundation as an example: as one of China's leading comprehensive universities, MX University possesses abundant institutional resources. Leveraging its century-long history and multidisciplinary strengths, its foundation has achieved exceptional fundraising performance. As of 2024, the MX University Foundation had accumulated approximately RMB 500 million in total assets. The foundation maintains a highly professionalized human capital structure with a large full-time staff, providing robust human resource support for donation mobilization and management.

In terms of resource acquisition capability, the MX University Foundation has established multifaceted resource identification and mobilization channels by leveraging three core advantages: the reputation of a national "Double First-Class" university, a large alumni base with significant wealth accumulation, and a long-standing tradition of overseas donations dating back to the pre-1949 era. In terms of resource integration capability, it has implemented a cross-departmental resource coordination mechanism that facilitates the seamless integration, conversion, and circulation of diverse resources. Regarding resource utilization capability, the foundation has generally achieved precise allocation of donated funds, supporting academic development, faculty research, and disadvantaged students.

through multiple charitable projects, and has improved resource conversion efficiency through digital empowerment. However, a notable weakness lies in charitable asset investment: the foundation has not fully leveraged the professional financial expertise of its alumni, resulting in relatively low returns on endowment investments. As one interviewed senior administrator stated:

"We essentially lack any financial technology capabilities. The vast majority of our charitable assets are invested in large-denomination time deposits and low-risk wealth management products, and we have not leveraged our alumni's professional financial expertise to improve investment returns."

Feedback capabilities are manifested in the establishment of an end-to-end tracking mechanism, enabling dynamic adjustments based on real-time data.

2) Technology-enabled archetype

The CS University Foundation serves as a typical representative of the technology-enabled archetype, exhibiting a capability profile characterized by moderate resource acquisition, strong resource integration, strong resource utilization, and effective resource feedback. In terms of fundraising capability, the foundation leverages its industry advantages to attract corporate donations and taps into alumni affinity to drive alumni giving. However, due to limitations associated with its status as a specialized finance and economics institution rather than a comprehensive university, as well as the relatively limited scope and scale of its alumni network, its overall fundraising capacity remains moderate. At the time of this study in 2025, the foundation had accumulated RMB 323 million in net assets, consistent with its "moderate fundraising" profile.

In terms of resource integration capability, relevant departments within the university coordinate effectively to jointly complete tasks such as fundraising, project planning, and investment management, while relying on an intelligent donation management platform to achieve precise resource allocation. Its most distinctive feature, however, lies in its exceptional resource utilization capability.

The CS University Foundation has conducted pioneering exploration in charitable asset investment—an area that remains the greatest challenge for university foundations nationwide. By fully leveraging its university's academic expertise and industry advantages in finance and economics, it has achieved remarkable results, fully embodying the "high utilization" characteristic of this archetype. As one interviewed senior manager stated:

"Since 2015, we have established an Investment Advisory and Risk Control Committee leveraging our alumni network, and have expanded our investment portfolio to include private equity investments focusing primarily on unlisted companies founded by alumni."

Finally, regarding resource feedback capabilities, we deploy a real-time monitoring system to track the flow of donated funds and provide timely updates to donors. We place strong emphasis on donor satisfaction surveys to collect prompt feedback, thereby establishing data-driven closed-loop management and fostering a continuous giving cycle.

3) Industry-collaborative archetype

Both ZY University and LC University are local science and engineering institutions. Foundations affiliated with such universities exhibit a capability profile characterized by moderate resource acquisition, moderate resource integration, strong resource utilization, and weak resource feedback.

In terms of resource acquisition capability, constrained by institutional scale and underdeveloped alumni networks, both universities rank in the lower-middle tier nationally. Taking LC University as an example, its foundation had a net asset balance of RMB 11.71 million as of the end of 2022. These foundations have established a cyclical resource governance model: first building industry partnerships, then integrating resources, subsequently realizing resource value conversion, and finally using the proceeds for feedback. Although an "integrated resource pool" has been established, interdisciplinary collaboration remains insufficient, and the coordination mechanism between vocational and higher education has not been fully developed.

In terms of resource integration capability, ZY University, leveraging the Yangtze River Delta manufacturing cluster, has developed a governance model where the foundation empowers university-enterprise industry-education integration, establishing collaborative networks for specialized and industrial clusters in partnership with multiple enterprises. Meanwhile, LC University has deeply integrated with the region's leading equipment manufacturing industry, securing donations of idle equipment and funds from enterprises to provide targeted support for traditional signature disciplines such as intelligent equipment.

In terms of resource utilization capability, the universities have expanded the coverage of industry-education integration projects through customized talent development models and incorporated philanthropic initiatives into these efforts. Regarding experience with philanthropic financial products and financial technology services, one interviewed manager stated:

"We have collaborated with commercial banks such as China Merchants Bank and Industrial and Commercial Bank of China, which funded third-party companies to develop our WeChat donation system and project management system."

Regarding resource feedback capability, the majority of decision-making power rests with the enterprise partners in the industry-education integration collaborations. The single-entity nature of project acceptance and the lack of independent third-party evaluations have resulted in a relative absence of systematic feedback mechanisms, leaving significant room for improvement in this area. The operational framework established by these foundations highlights the practical vitality of industry-education integration while simultaneously reflecting the foundations' lack of initiative and insufficient independent development capacity.

4) Condition-constrained archetype

ZS University and ZX University are liberal arts and law-focused universities. Constrained by their disciplinary characteristics, limited industry connections, and the resulting small institutional scale and low average wealth of their alumni groups, foundations affiliated with these universities exhibit a capability profile characterized by weak resource acquisition, moderate resource integration, moderate resource utilization, and weak resource feedback.

Taking ZS University as an example, its foundation receives relatively low annual donation income. In terms of resource acquisition capability, due to the university's specialized focus on law and political science and its relatively short history, it lacks deep engagement from high-net-worth donors. This fundamental resource constraint limits the foundation's ability to acquire resources, which in turn undermines its subsequent integration and utilization capabilities. When asked about the reasons for low fundraising volumes, a senior manager summarized:

"As a relatively new liberal arts institution, we face somewhat greater challenges in fundraising."

In terms of resource integration capability, the foundation's organizational structure remains in an early developmental stage, with most functions effectively performed by the university's alumni association. However, the small number of staff assigned to these roles are highly competent, resulting in a "moderate integration" level. As one interviewed manager explained:

"Our foundation's management still largely adopts an administrative mindset. While the nature of foundation work differs from that of traditional administrative departments, our performance evaluation and personnel allocation systems still follow the university's administrative model."

In terms of resource utilization capability, there are notable structural contradictions: charitable asset investments are extremely conservative, and the supply of high-quality charitable projects is insufficient. A senior manager described the situation:

"Our foundation's management still largely adopts an administrative mindset, and our performance evaluation and personnel allocation systems follow the university's administrative model."

"Since we lack professional investment capacity, no one dares to take risks. We prioritize capital

preservation over returns, and most donations are earmarked for specific purposes and must be spent within one year.”

In terms of resource feedback capability, due to insufficient operational funds, the foundation lacks dynamic donation monitoring systems and real-time correction mechanisms, and resource allocation cannot flexibly adjust to changing market conditions.

5) Structure of the discussion section

The following discussion is structured around the four core capabilities rather than foundation types to ensure a balanced and systematic analysis. This approach not only highlights common governance challenges and improvement strategies across different foundation types but also allows for specific analysis of each type’s unique circumstances when necessary, resulting in a more coherent and systematic overall structure.

VII. Governance Challenges in University Foundation Development

A. Resource Acquisition Capability: The Matthew Effect, Institutional Constraints, and Organizational Agency

Resource-endowment-driven university foundations, leveraging their brand influence and extensive alumni networks, generally receive substantial annual donations. In contrast, the other three types of university foundations primarily rely on donations from local small and Medium-Sized Enterprises (SMEs) and small-scale alumni contributions, with annual donation volumes falling far short of those at leading institutions. This reflects the pronounced Matthew Effect currently characterizing China’s university donation market. The underlying causes of this disparity are not simply limited to factors such as a university’s social reputation or academic standing, but are jointly determined by the university’s resource endowments, its ability to adapt to the external environment, its capacity to identify and acquire “hidden resources”, and the fundamental operating logic of the social donation market.

The common dilemma in resource acquisition capability manifests as a fundamental conflict between institutional constraints and organizational agency. University foundations face dual regulatory pressures: policy regulations and industry standards imposed by civil affairs authorities, and operational oversight from education authorities. When university foundations solicit donations from alumni, current civil affairs regulations classify this activity as public fundraising, which requires strict compliance with public fundraising requirements. However, the vast majority of university foundations cannot meet the stringent requirements for public fundraising foundations regarding information disclosure and charitable expenditure ratios, leading them to adopt the status of private fundraising foundations.

Institutional rigidity defines the boundaries of organizational behavior and restricts the space for operational innovation, while organizational agency drives foundations to explore regulatory loopholes, fostering a dynamic two-way interaction between policy and practice. The CS University Foundation once attempted to break through these institutional boundaries by innovating new donation models and organizational structures. However, due to conflicts with regulatory requirements, it faced a legitimacy crisis that limited its innovative practices in resource acquisition and exacerbated its development difficulties. Before the establishment of the ZS University Foundation, the university’s alumni association temporarily fulfilled foundation functions. It also utilized a local public welfare foundation—a social charitable organization in the university’s region—to accept designated donations on its behalf, ensuring that ZS University’s donation activities remained within the regulatory framework. These practices reflect the dilemmas faced by university foundations during the initial stages of resource acquisition and organizational development, as well as their attempts to exercise strategic initiative within institutional constraints.

B. Resource Integration Capability: The Conflict Between Administrative and Market Logics

The resource integration process of university foundations is fundamentally shaped by a structural conflict between administrative logic and market allocation logic. Administrative logic manifests as hierarchical control by university administrative departments, a compliance-first approach to supervision, and rigid constraints for risk prevention and control. In contrast, market logic follows the flexible operating principles of social charitable organizations, emphasizing efficiency, resource integration, and matching resources to needs. The persistent tension between these two competing logics leads to inefficiency and misalignment in the resource integration efforts of university foundations.

Specifically, Chinese university foundations evolved from university administrative departments and have not yet developed into fully independent, professional charitable organizations. In practice, many universities assign staff from administrative departments—such as the Office of Cooperation and Development—to serve in part-time roles at the foundation, thereby perpetuating the mindset and practices of university administrative management. However, the essential nature of university foundations is that of social charitable organizations. To secure donations from society and compete effectively in the philanthropic market, they must possess specialized marketing knowledge and capabilities. In developed countries, charitable professionals operate under market-oriented compensation systems and draw from a large professional talent pool, with normal mobility of charitable management talent across organizations. Moving forward, Chinese university foundations need to transition orderly from administrative management logic to market-based allocation logic to truly improve their resource integration capabilities.

C. *Resource Utilization Capability: Path Dependence Constraints on Reform Momentum and Efficiency*

University foundations that evolved from university administrative departments exhibit significant path dependence in their work mindsets and operational methods. This traps their resource utilization capabilities in a path dependence dilemma within institutional change, creating entrenched resource operation patterns that make it difficult to implement proactive reforms in areas such as fund allocation, investment management, and charitable project governance. However, new demands for higher education development and changes in the external environment compel these organizations to break free from operational inertia. Institutional rigidity reinforces the stability of path dependence, hindering organizational responses to environmental changes; yet organizational agency, through the identification of new demands, generates momentum for change and attempts to break free from this locked-in state.

The organizational behavior of university foundations is further constrained by accumulated procedural rigidity, asset allocation paradigms, and governance structure inertia, resulting in a systemic decline in resource utilization efficiency. For example, resource-endowment driven university foundations rely heavily on their institutional brand to attract social donations, with resource utilization leaning disproportionately toward "fundraising" rather than "investment"—the latter being an increasingly critical capability for their future development. Meanwhile, condition-constrained university foundations, accustomed to following administrative directives and policies, are further limited by their underdeveloped alumni networks and other resource constraints. Consequently, they fail to fully leverage their limited resource utilization capabilities, struggling with both "fundraising" and "investment" performance.

D. *Resource Feedback Capability: Absence of Standards and Weak Interaction Undermine Donor Confidence and Optimization Motivation*

The absence of standardized feedback mechanisms and weak alumni interaction within university foundations significantly constrain donor confidence and organizational motivation for continuous improvement. First, most university foundations lack strict time limits for reporting on fund utilization outcomes. This uncertainty erodes the foundation of trust between foundations and donors, and dampens donor enthusiasm for repeat giving. Second, there is a general lack of real-time, convenient channels for disclosing information regarding the specific implementation of charitable projects and the flow of donated funds. This is constrained by uneven levels of digital infrastructure development and varying digital literacy across different university foundations. Many foundations provide only limited information on their official websites, and mobile-based charitable fund feedback tools that keep pace with technological developments are relatively scarce. Furthermore, most university foundations fall short in fostering a campus culture of charitable giving and maintaining long-term alumni relationships. This results in the absence of a stable, sustained donor base, thereby reducing both the motivation and direction for optimizing resource allocation strategies. These issues are particularly pronounced in condition-constrained university foundations that face severe resource limitations.

VIII. Governance Improvement Strategies for University Foundations

A. *Resource Acquisition Capability: "Decoupling from the University and Integrating into Society" Under Resource Constraints*

Currently, the resource acquisition capacity of most Chinese university foundations still relies primarily on the inherent endowments of their affiliated universities. Factors such as a strong institutional platform, large alumni base, academic excellence, and long institutional history collectively determine foundation fundraising performance—a finding corroborated by all seven case studies.

Since university endowments are unlikely to change significantly in the short term, university foundations should focus on improving their internal organizational capabilities to establish themselves as truly independent, professional social charitable organizations rather than mere administrative appendages of universities. Our survey reveals that resource-endowment driven and technology-enabled foundations employ full-time professional staff, whereas industry-collaborative and condition-constrained foundations rely entirely on part-time administrative personnel. The administrative operational model, bureaucratic governance structure, and lack of full-time professional staff have multiple negative impacts on resource acquisition capacity: inflexible and overly conservative decision-making mechanisms lead to missed donation opportunities; charitable project design lacks professional guidance, resulting in misalignment with donor needs; and insufficient funding transparency damages organizational credibility and reduces donor willingness for repeat giving.

Going forward, increasing the proportion of full-time professional staff, improving internal human resource quality and decision-making efficiency, and strengthening core professional capabilities will provide a strong foundation for enhancing resource acquisition capacity. Additional improvements to the "decoupling from the university and integrating into society" model include establishing market-oriented compensation systems and performance-based incentive mechanisms to attract professional fundraising talent, and transitioning from a single fundraising model to a diversified, compliance-based approach to increase overall donation revenue.

B. Resource Integration Capability: Government Regulatory Support and Cross-Departmental Collaboration

University foundations must develop strong resource integration capabilities to absorb and integrate heterogeneous, fragmented resources from both on and off campus into their operations, thereby transforming themselves from mere fund management repositories into comprehensive resource hubs. To achieve this transformation, efforts are required not only from the foundations themselves but also from civil affairs and education regulatory authorities. These authorities need to shift their regulatory approach to university foundation fundraising and investment activities, provide guidance on initiatives such as online communication platforms, and create a more flexible and supportive institutional environment to enhance foundations' resource integration capabilities. This will facilitate an orderly transition from administrative management logic to market-based allocation logic—a consensus shared by foundation managers across all four archetypes.

While resource-endowment driven foundations have already established cross-departmental coordination mechanisms to effectively integrate internal and external resources, laying a solid foundation for the efficient utilization and output of heterogeneous resources, there remains a critical need for regulatory authorities to provide clearer definitions and regulations regarding the legal nature of alumni donations. Technology-enabled foundations can establish industry-wide online communication platforms for university foundations under the guidance of civil affairs departments. By sharing their technology-enabled best practices, they can facilitate information aggregation across foundations, shorten communication cycles, and overcome geographical and temporal constraints. Industry-collaborative foundations can leverage their industry connections to build shared university-enterprise platforms, promoting the flexible exchange of equipment and faculty resources. Compared to other types, condition-constrained foundations exhibit less effective interdisciplinary and cross-sectoral collaboration and significantly weaker resource integration capabilities. Therefore, regulatory policies should provide them with targeted support and guidance. Concurrently, they should intensify efforts to learn from and adopt the proven management experiences of other foundation types to elevate their own operational standards.

C. Resource Utilization Capability: Enhancing Charitable Asset and Project Management

The fundamental nature, funding sources, and social responsibilities of university foundations determine that most adopt risk-averse conservative investment principles for charitable funds. With the exception of technology-enabled foundations that have experimented with higher-risk charitable asset investments and financial products, other types of foundations either rely exclusively on low-risk financial instruments such as time deposits and government bonds (as seen in resource-endowment driven foundations) or have never utilized any philanthropic financial products in their asset portfolios (such as industry-collaborative and condition-constrained foundations). Notably, however, industry-collaborative foundations demonstrate strong resource utilization capabilities by efficiently deploying equipment and funds donated by enterprises through their industry connections.

Resource-endowment-driven foundations can build on their existing use of basic financial products by exploring a wider range of wealth management and trust products offered by financial institutions, starting with charitable trusts—a widely adopted industry practice. These universities possess extensive alumni networks, which they can fully leverage in charitable asset investment by engaging alumni with professional investment experience and capabilities to address the foundation's shortcomings in asset management, investment decision-making, and risk control. Condition-constrained foundations can draw on the experience of technology-enabled foundations by proactively collaborating with financial institutions and adopting the charitable financial products best suited to their needs. They can also adopt the mature charitable project management practices of resource-endowment driven foundations, such as using charitable trusts to fund academic achievement awards, scholarships for disadvantaged students with excellent character and academic performance, and teaching excellence awards. Additionally, they can learn from the industry-university collaboration experience of industry-collaborative foundations to explore cooperation opportunities in industry-education integration within the law and political science sectors, thereby improving their own charitable project management and industry-academia-research collaboration capabilities.

D. Resource Feedback Capability: Introducing Third-Party Evaluation and Improving Data Tracking Systems

Resource-endowment-driven foundations, with strong inherent feedback capabilities, should establish regional partnerships to share expertise and support less developed counterparts. Industry-collaborative foundations should build a tripartite accountability framework with universities and enterprises, introduce independent third-party evaluations with quantitative standards, and develop digital systems to match university resources with enterprise talent demands for timely funding adjustments. Condition-constrained foundations should adopt early warning and multi-dimensional assessment systems from resource-endowment driven foundations, and implement real-time metric tracking (e.g., fund utilization progress, donor satisfaction) from technology-enabled foundations. Universities should also foster a campus philanthropy culture through public disclosures and educational activities to enhance overall transparency and credibility.

Conflict of Interest

The authors declare no conflict of interest.

Author Contributions

Feng Tao selected the research samples, identified and contacted interview participants, and collected primary field-work data. He supervised the entire research and manuscript writing process, conducted revisions and polishing of the full text, and designed and drew the analytical framework diagram. Halimire Aierken, under the guidance of Feng Tao, reviewed and organized the literature review, collected secondary materials including official policy documents, sorted out interview transcripts, and participated in manuscript drafting. All authors have read and approved the final version of the manuscript.

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