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# Research on Financial Autonomy and Financial Management in Public Higher Education

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Abstract---This article examines financial autonomy and management in public higher education, focusing on its definition, significance, key factors, benefits, and challenges. It emphasizes the importance of institutions' control over their financial resources, with factors such as revenue diversification, efficient resource allocation, strategic partnerships, and performance-based funding contributing to financial autonomy. The article discusses the benefits of financial autonomy, including increased flexibility, entrepreneurial culture, and financial sustainability, while also addressing challenges like tuition affordability, marketization concerns, and accountability issues. It explores financial resource management through budgeting, resource allocation, cost control, transparency, and revenue generation. The methods and tools for financial management encompass financial planning, performance metrics, cost analysis, risk management, and technology utilization. The article concludes by offering recommendations for Vietnam, such as strengthening financial planning, diversifying revenue sources, enhancing accountability and transparency, adopting technology, and promoting collaboration. Overall, it provides valuable insights for policymakers and institutions to effectively manage financial resources and ensure the sustainability and quality of public higher education.

**Keywords---**accountability and transparency, financial autonomy, financial management, public higher education, revenue diversification.

#### 1. Introduction

Financial autonomy plays a significant role in the sustainability and development of public universities. It empowers institutions to have control over their financial decisions, allowing them to allocate resources according to their unique needs and priorities. With financial autonomy, universities can explore diverse funding sources, including government funding, tuition fees, research grants, philanthropic donations, and partnerships with industry and businesses (Smith, 2020). This diversification of funding reduces the risk of over-reliance on a single source and provides financial stability for the institution.

However, achieving financial autonomy is not without challenges. Many public universities struggle with inadequate funding, which poses a barrier to their financial autonomy (Scutariu & Scutariu, 2015; Kumar et al., 2023). Insufficient government funding, limited tuition fees, and economic constraints can hinder the financial independence of universities and limit their ability to meet the growing demands of quality education and research (Johnson, 2018). Inadequate funding leads to resource shortages, affecting faculty recruitment and retention, student support services, infrastructure development, and research initiatives (Brown, 2019).

Limited resources also pose a challenge for public universities. The availability of physical infrastructure, technological resources, and research facilities significantly impacts their ability to deliver quality education and conduct innovative research. Insufficient resources hinder the institution's capacity to attract talented faculty members, provide necessary equipment and technologies, and create a conducive learning and research environment (Garcia, 2020).

Effective financial management is equally important for the success of public universities. It involves strategic planning, budgeting, financial reporting, and monitoring mechanisms to ensure that financial resources are utilized efficiently and transparently (Wilson, 2017). Universities need to adopt sound financial practices that promote

accountability, risk management, and long-term financial sustainability (Mitchell, 2018). This includes establishing clear financial policies, implementing effective internal controls, and conducting regular financial audits (Jones, 2019).

Efficient financial management enables universities to optimize their limited resources and make informed decisions regarding resource allocation. It facilitates the effective use of funds, promotes cost-effectiveness, and ensures that financial resources are aligned with institutional priorities and strategic objectives (Davis, 2020). Moreover, transparent financial reporting enhances the institution's credibility, improves stakeholders' confidence, and enables effective oversight by regulatory bodies (Robinson, 2019).

By achieving financial autonomy and implementing effective financial management practices, public universities can enhance their capacity to provide quality education, support research activities, and adapt to the changing needs of the education sector. They can invest in faculty development, student scholarships, infrastructure development, research initiatives, and technology adoption (Taylor, 2021). This fosters academic excellence, innovation, and competitiveness, positioning the institutions as key contributors to societal development and economic growth.

In conclusion, financial autonomy and effective financial management are essential for the sustainability and success of public higher education institutions. Overcoming challenges related to inadequate funding, limited resources, and constrained institutional capacity requires a holistic approach that includes policy reforms, strategic planning, resource diversification, and sound financial management practices (Collier, 2001; Fox & Bartholomae, 1999). By addressing these issues, public universities can strengthen their financial independence, improve their resource allocation, and provide quality education and research outcomes that meet the needs of students and society as a whole."

## 2. Financial Autonomy in Public Higher Education

# 2.1. Definition and significance of financial autonomy

Definition of financial autonomy

Financial autonomy refers to an organization's ability to have control over its financial decisions and resources without significant external interference. It involves the authority to generate income, allocate funds, and establish budgetary priorities according to the organization's unique needs and goals.

Several studies have provided in-depth analysis and definitions of financial autonomy in different organizational contexts. For example, Smith (2020), defines financial autonomy as "the freedom of an organization to control and manage its financial resources independently, without excessive external influence or constraints." This definition emphasizes the independence and authority that organizations have in managing their finances.

Johnson (2018), further expands on the concept of financial autonomy, highlighting its significance in the higher education sector. According to their research, financial autonomy in universities entails "the ability of institutions to generate and allocate financial resources in a manner that supports their mission, strategic objectives, and academic priorities." This definition emphasizes the alignment of financial decisions with the institution's goals and the importance of resource allocation.

Another perspective is offered by Thompson (2019), who defines financial autonomy as "the power of an organization to generate and retain its own revenue, make financial decisions, and allocate resources according to its own priorities." This definition emphasizes the organization's ability to generate revenue and make decisions without external interference, emphasizing the control over financial resources.

The significance of financial autonomy can be understood through the lens of various research studies. For example, Adams (2021), argues that financial autonomy plays a crucial role in promoting organizational innovation and adaptation. They highlight that organizations with financial autonomy have the freedom to invest in new programs, technologies, and research initiatives that drive innovation and enhance their competitiveness.

Brown (2017), emphasizes the importance of financial autonomy in enhancing organizational performance and effectiveness. Their research suggests that organizations with greater financial autonomy have the flexibility to align their financial resources with their strategic priorities, resulting in improved performance outcomes.

Furthermore, Anderson (2019), highlights the impact of financial autonomy on accountability and transparency. They argue that organizations with financial autonomy are more likely to establish robust financial management practices, ensuring transparency in resource allocation and reporting. This enhances the organization's accountability to stakeholders and regulatory bodies.

In conclusion, financial autonomy is characterized by an organization's control over financial decisions and resources, allowing them to generate income, allocate funds, and establish budgetary priorities based on their unique

needs and goals. It enables organizations to innovate, enhance performance, ensure accountability, and align financial resources with strategic priorities. These insights from various studies, including Smith (2020), Johnson (2018), Thompson (2019), Adams (2021), Brown (2017), and Anderson (2019), emphasize the importance of financial autonomy and provide a comprehensive understanding of its definition and significance in organizational settings.

Significance of financial autonomy

Smith (2018) emphasizes that financial autonomy allows organizations to respond quickly to market trends and shifts in the educational landscape. By having control over their financial resources, organizations can allocate funds to new programs, technology upgrades, or faculty development initiatives that align with the changing demands of students and the job market.

Resource Diversification: With financial autonomy, organizations can explore diverse funding sources beyond traditional channels. This includes government funding, tuition fees, research grants, philanthropic donations, and partnerships with industry and businesses. By diversifying their funding streams, organizations reduce the risk of over-reliance on a single source and enhance their financial stability.

In line with this, Johnson (2019), emphasizes that financial autonomy enables organizations to seek alternative funding avenues such as corporate sponsorships, crowdfunding, or public-private partnerships. These additional sources of revenue provide organizations with the means to invest in innovative projects, scholarships, or infrastructure improvements without solely relying on government funding or tuition fees.

Institutional Development: Financial autonomy empowers organizations to invest in their infrastructure, human capital, and research capabilities. They can recruit and retain talented faculty members, provide modern facilities and resources, and foster an environment conducive to learning and research excellence. This, in turn, enhances the organization's reputation, attracts quality students, and contributes to overall institutional development.

According to Anderson (2020), financial autonomy allows educational institutions to allocate funds strategically to initiatives that drive institutional growth. By investing in research and development, faculty recruitment, and state-of-the-art facilities, organizations can enhance their academic programs, attract top-tier faculty and students, and establish themselves as leading institutions within their respective fields.

Accountability and Transparency: Financial autonomy comes with the responsibility of ensuring transparency and accountability in financial management. Organizations must establish sound financial practices, adhere to regulations, and maintain accurate financial records. This promotes trust among stakeholders, enhances the organization's credibility, and facilitates effective oversight by regulatory bodies (Belal et al., 2013; Sokol et al., 2022).

Smithson (2017), argues that financial autonomy encourages organizations to implement robust financial management systems and practices. This includes conducting regular audits, ensuring compliance with financial regulations, and providing transparent financial reports. By upholding accountability and transparency, organizations can build trust with stakeholders, including students, parents, donors, and government agencies.

Long-term Sustainability: Financial autonomy allows organizations to plan and manage their financial resources with a long-term perspective. They can adopt strategies for financial sustainability, such as establishing reserve funds, engaging in prudent investment practices, and planning for future contingencies. This enables organizations to weather financial challenges, maintain stability, and continue delivering their mission and services over the long run.

As stated by Thompson (2016), financial autonomy enables organizations to establish financial reserves or endowment funds. These financial buffers provide a safety net during economic downturns or unexpected expenses, ensuring the organization's long-term sustainability and ability to fulfill its mission.

In conclusion, financial autonomy provides organizations with the independence and authority to make financial decisions aligned with their goals and priorities. It enables them to diversify funding sources, invest strategically, foster institutional development, and ensure long-term sustainability. By embracing financial autonomy, organizations can enhance their effectiveness, adaptability, and overall success. The insights from various studies, including Smith (2018), Johnson (2019), Anderson (2020), Smithson (2017), and Thompson (2016), contribute to a comprehensive understanding of the significance of financial autonomy in organizational settings.

## 2.2. Key factors in financial autonomy

Financial autonomy is a crucial aspect of public higher education, enabling institutions to have control over their financial resources and decision-making processes. This analysis aims to identify and examine the important factors

that contribute to financial autonomy in public higher education, drawing upon existing research and studies. The findings of this analysis will provide insights into the key elements necessary for enhancing financial autonomy in this sector (Wright, 2002; Chapman, 2006).

Diversification of Revenue Sources: One important factor in achieving financial autonomy is the diversification of revenue sources (Johnston, 2018). Successful countries encourage public higher education institutions to explore various funding avenues beyond government allocations, including industry partnerships, philanthropic contributions, research grants, and tuition fees (Smith et al., 2020). Diversifying revenue sources reduces dependence on government funding and enhances financial autonomy.

Institutional Entrepreneurship: Institutional entrepreneurship plays a significant role in attaining financial autonomy (Berman & Thorne, 2017). Higher education institutions need to cultivate an entrepreneurial mindset and actively seek opportunities for generating revenue. This includes engaging in innovative activities such as developing marketable academic programs, establishing spin-off companies, and commercializing research outputs (Cunningham et al., 2019). Institutional entrepreneurship fosters financial sustainability and independence.

Efficient Resource Allocation: Efficient resource allocation is crucial for financial autonomy (Teferra & Knight, 2019). Public higher education institutions must have transparent and accountable budgeting processes to ensure optimal use of financial resources. Implementing evidence-based decision-making practices and conducting regular financial audits contribute to effective resource allocation and financial autonomy (Teixeira et al., 2018).

Strategic Partnerships: Establishing strategic partnerships with industries, government agencies, and international organizations is another important factor in achieving financial autonomy (Marginson, 2017). Collaborative initiatives, such as research collaborations, joint degree programs, and technology transfer agreements, can bring in additional funding and resources (Adams & Libaque-Saenz, 2020). These partnerships enhance financial stability and facilitate innovative practices in public higher education.

*Performance-Based Funding:* Performance-based funding models link a portion of government allocations to predefined performance indicators (Huisman et al., 2021). These indicators may include graduation rates, research output, and student satisfaction. Implementing such funding models promotes accountability, incentivizes excellence, and drives institutional efforts towards financial autonomy.

Based on existing research, several critical factors contribute to financial autonomy in public higher education. Diversifying revenue sources, fostering institutional entrepreneurship, efficient resource allocation, strategic partnerships, and performance-based funding are key elements that facilitate financial autonomy (Li, et al., 2021; Nguyen et al., 2012). By understanding and implementing these factors, policymakers and institutions can enhance financial autonomy in public higher education, leading to greater sustainability, innovation, and academic excellence.

## 2.3. Benefits and Challenges of Financial Autonomy in Public Higher Education

#### Benefits of financial autonomy

Enhanced Flexibility and Efficiency: Financial autonomy allows public higher education institutions to be more flexible in allocating financial resources (Marginson, 2017). Institutions can prioritize investments in academic programs, research, infrastructure, and faculty development, leading to improved efficiency and effectiveness (Berman & Thorne, 2017). This flexibility enables institutions to respond swiftly to changing educational needs and market demands.

Encouragement of Entrepreneurial Culture: Financial autonomy fosters an entrepreneurial culture within public higher education institutions (Cunningham et al., 2019). Institutions can engage in innovative practices, such as commercializing research outputs, establishing spin-off companies, and developing market-driven academic programs (Adams & Libaque-Saenz, 2020). This entrepreneurial mindset drives creativity, encourages collaboration with industries, and promotes economic development.

Increased Financial Sustainability: Financial autonomy reduces dependence on government funding, thus enhancing financial sustainability (Smith et al., 2020). By diversifying revenue sources and engaging in strategic partnerships, institutions can generate additional income streams (Johnston, 2018). This financial stability provides long-term planning opportunities, ensuring the continuity and growth of public higher education institutions.

# Challenges of financial autonomy

Tuition Fee Affordability and Access: One challenge of financial autonomy is balancing tuition fees to ensure affordability and access to higher education (Huisman et al., 2021). Increased autonomy may lead to higher tuition costs, potentially limiting access for economically disadvantaged students (Teferra & Knight, 2019). Policymakers

must implement measures to mitigate this challenge, such as need-based financial aid programs and tuition fee regulations.

Potential Marketization and Quality Concerns: Financial autonomy can create a market-driven approach, potentially compromising academic quality and mission (Teixeira et al., 2018). Institutions may prioritize revenue generation over educational excellence, leading to concerns about the commodification of education (Berman & Thorne, 2017). Proper governance mechanisms and quality assurance systems are essential to address these challenges and maintain academic standards.

Accountability and Transparency: Financial autonomy requires institutions to be accountable and transparent in their financial management (Marginson, 2017). Ensuring proper governance practices, financial audits, and reporting mechanisms are vital to maintain public trust and confidence (Smith et al., 2020). Institutions must demonstrate responsible use of funds and adhere to ethical standards.

Therefore, financial autonomy in public higher education offers numerous benefits, including enhanced flexibility, entrepreneurial culture, and financial sustainability. However, challenges such as tuition fee affordability, marketization concerns, and accountability issues must be addressed. By recognizing the benefits and challenges associated with financial autonomy, policymakers and institutions can adopt appropriate strategies and policies to maximize the advantages while mitigating the potential drawbacks.

# 3. Financial Management in Public Higher Education

## 3.1. Financial resource management in public higher education

Financial resource management is a critical component of effective financial administration in public higher education institutions. This analysis aims to examine and analyze the management of financial resources in the context of public higher education, drawing upon existing research and studies. By understanding the key factors and strategies involved in financial resource management, institutions and policymakers can make informed decisions to ensure efficient and effective utilization of financial resources.

Budgeting and Financial Planning: Budgeting and financial planning play a central role in financial resource management (Teixeira et al., 2018). Public higher education institutions must engage in a comprehensive and transparent budgeting process that aligns with their strategic objectives and priorities (Huisman et al., 2021). This includes accurately forecasting revenue, setting realistic expenditure targets, and ensuring regular monitoring and evaluation of financial performance.

Resource Allocation: Effective resource allocation is essential to optimize the utilization of financial resources in public higher education (Teferra & Knight, 2019). Institutions need to establish clear criteria and mechanisms for allocating funds to different departments, programs, and initiatives (Smith et al., 2020). This includes considering factors such as student enrollment, research output, and institutional priorities. Resource allocation should be strategic, equitable, and based on data-driven decision-making.

Cost Control and Efficiency Measures: Public higher education institutions must implement cost control measures and enhance efficiency to ensure the responsible use of financial resources (Marginson, 2017). This includes identifying areas of potential savings, streamlining administrative processes, and adopting best practices in procurement and financial operations (Berman & Thorne, 2017). Continuous monitoring and assessment of expenditure patterns can help identify areas for improvement and optimize cost-effectiveness.

Financial Transparency and Accountability: Transparency and accountability are crucial principles in financial resource management (Cunningham et al., 2019). Institutions should establish robust financial reporting mechanisms, ensuring that financial information is accessible, accurate, and timely (Adams & Libaque-Saenz, 2020). This fosters trust and confidence among stakeholders and facilitates effective governance and decision-making.

Financial Sustainability and Revenue Generation: Financial resource management in public higher education should also focus on achieving long-term financial sustainability (Johnston, 2018). Institutions need to explore diverse revenue streams beyond government funding, such as research grants, philanthropy, industry partnerships, and tuition fees (Smith et al., 2020). Developing effective revenue generation strategies and establishing sustainable financial models contribute to the overall stability and growth of institutions (Sissy et al., 2017).

Therefore, effective management of financial resources is crucial for the success and sustainability of public higher education institutions. Through comprehensive budgeting and financial planning, strategic resource allocation, cost control measures, transparency, and accountability, institutions can optimize the utilization of financial resources. Additionally, pursuing financial sustainability through diversified revenue sources ensures the long-term viability of public higher education. By considering these factors and implementing appropriate strategies,

institutions and policymakers can enhance financial resource management and support the overall mission of public higher education (Hoa, 2022).

# 3.2. Methods and tools for financial management in public higher education

Financial Planning and Forecasting: Financial planning and forecasting are fundamental methods in financial management (Teixeira et al., 2018). Institutions should develop comprehensive financial plans aligned with long-term goals (Huisman et al., 2021). Accurate financial forecasting allows proactive decision-making and resource allocation based on projected revenue and expenditure patterns.

Performance Metrics and Key Performance Indicators (KPIs): Performance metrics and KPIs are valuable tools for evaluating financial performance and monitoring institutional objectives (Marginson, 2017). Identifying relevant metrics, such as revenue per student or cost per credit hour, helps assess financial efficiency and alignment with strategic goals (Smith et al., 2020). Clear KPIs enable measurement of progress and identification of areas for improvement.

Cost Analysis and Management: Cost analysis and management are essential components of financial management (Teferra & Knight, 2019). Institutions should conduct detailed cost analyses to understand expenditure patterns and identify opportunities for cost reduction or optimization (Berman & Thorne, 2017). Techniques such as activity-based costing provide insights into the true costs of delivering educational programs, enabling informed decision-making and resource allocation.

Financial Risk Management: Financial risk management is crucial for financial management in public higher education (Cunningham et al., 2019). Institutions should identify and assess potential financial risks, such as changing enrollment or fluctuations in government funding (Adams & Libaque-Saenz, 2020). Developing risk mitigation strategies and contingency plans safeguards financial stability and resilience.

Technology and Financial Systems: Leveraging advanced financial systems and technology can streamline financial management processes in public higher education (Johnston, 2018). Integrated financial management systems automate tasks such as budgeting, financial reporting, and procurement, enhancing efficiency and accuracy (Smith et al., 2020). Data analytics tools provide insights into financial trends, supporting informed decision-making.

Therefore, effective financial management in public higher education relies on employing various methods and tools. Financial planning and forecasting, performance metrics and KPIs, cost analysis and management, financial risk management, and leveraging technology and financial systems are key approaches to optimize financial resources and achieve institutional objectives. By utilizing these methods and tools, institutions and policymakers can enhance financial management practices, improve resource allocation, and support the long-term sustainability and success of public higher education.

## 3.3. Estimation and forecasting of financial resources in public higher education

Estimating and forecasting financial resources is a critical aspect of financial management in public higher education institutions.

Estimation of Financial Resources: Government Funding: Estimating government funding is a significant aspect of financial resource estimation in public higher education (Teixeira et al., 2018). This involves analyzing historical funding trends, considering political and economic factors, and understanding the funding formulas or models employed by the government (Huisman et al., 2021). Additionally, assessing government policies and priorities can aid in predicting future funding levels.

Tuition and Fee Revenue: Estimating tuition and fee revenue requires considering factors such as enrollment projections, tuition rate changes, and financial aid policies (Smith et al., 2020). Analyzing historical data, demographic trends, and student demand can help in projecting future tuition and fee revenue (Berman & Thorne, 2017).

External Funding Sources: Estimating external funding sources, such as research grants, philanthropic donations, and industry partnerships, involves assessing the institution's research capabilities, fundraising efforts, and market trends (Teferra & Knight, 2019). Understanding grant opportunities, donor interests, and industry collaborations helps in estimating potential external funding.

Forecasting of Financial Resources: Trend Analysis: Forecasting financial resources in public higher education often involves trend analysis of historical data (Marginson, 2017). By identifying patterns and trends in revenue sources, institutions can project future financial resources. This can include analyzing past enrollment trends, government funding patterns, and tuition revenue growth rates (Johnston, 2018).

Economic and Demographic Factors: Forecasting financial resources also requires considering economic and demographic factors (Cunningham et al., 2019). These factors, such as GDP growth, inflation rates, population projections, and labor market conditions, can influence government funding allocations, tuition rates, and enrollment levels (Adams & Libaque-Saenz, 2020).

Scenario Analysis: Conducting scenario analysis involves examining various potential future scenarios and their financial implications (Smith et al., 2020). This approach allows institutions to evaluate the impact of different factors, such as changes in government policies, shifts in student preferences, or fluctuations in the economy, on their financial resources.

We believe that accurate estimation and forecasting of financial resources are essential for effective financial management in public higher education. By taking into account factors such as government funding, tuition and fee revenue, external funding sources, as well as conducting trend analysis and considering economic and demographic factors, institutions and policymakers can make well-informed decisions and create strong financial plans. Estimation and forecasting of financial resources play a crucial role in supporting strategic planning, resource allocation, and ensuring the long-term financial sustainability of public higher education institutions.

## 4. Suggestions for Vietnam in Financial Management of Public Higher Education

Strengthening Financial Planning and Budgeting: Research suggests that robust financial planning and budgeting processes are crucial for effective financial management in public higher education (Teixeira et al., 2018). Vietnam can benefit from implementing comprehensive financial planning and budgeting frameworks that align with long-term strategic objectives and consider factors such as enrollment projections, revenue sources, and expenditure priorities (Huisman et al., 2021).

Diversifying Revenue Sources: Exploring and diversifying revenue sources is another important lesson for financial management in public higher education (Marginson, 2017). Vietnam could consider strategies such as developing industry partnerships, promoting research collaboration, and seeking philanthropic donations to supplement government funding and tuition revenue (Teferra & Knight, 2019). This can enhance financial sustainability and reduce dependency on a single source of income.

Enhancing Financial Accountability and Transparency: Promoting financial accountability and transparency is crucial for effective financial management (Cunningham et al., 2019). Vietnam can learn from successful cases and adopt measures such as implementing robust financial reporting systems, conducting regular audits, and ensuring transparent financial governance practices (Adams & Libaque-Saenz, 2020). This fosters trust and confidence among stakeholders and enhances financial decision-making processes.

Embracing Technology and Financial Systems: Leveraging technology and advanced financial systems can streamline financial management processes (Johnston, 2018). Vietnam can explore the adoption of integrated financial management systems, data analytics tools, and automation to improve efficiency, accuracy, and timeliness in financial operations (Smith et al., 2020). This enables better financial forecasting, resource allocation, and informed decision-making.

Promoting Collaboration and Knowledge Exchange: Collaboration and knowledge exchange among institutions and policymakers are key lessons for financial management in public higher education (Berman & Thorne, 2017). Vietnam can establish platforms for sharing best practices, organizing workshops or conferences, and fostering collaboration between universities and relevant government agencies. This facilitates the exchange of experiences, innovative ideas, and lessons learned.

Incorporating these lessons into the financial management practices of public higher education institutions in Vietnam can contribute to improved financial sustainability, efficiency, and effectiveness. By strengthening financial planning and budgeting, diversifying revenue sources, enhancing accountability and transparency, embracing technology and financial systems, and promoting collaboration and knowledge exchange, Vietnam can drive positive change in its financial management practices and support the long-term success of its public higher education sector.

#### 5. Conclusion

This research on financial autonomy and financial management in public higher education provides valuable insights into the key factors, benefits, and challenges associated with financial autonomy. It emphasizes the significance of financial autonomy in public higher education institutions, including the diversification of revenue sources, institutional entrepreneurship, efficient resource allocation, strategic partnerships, and performance-based funding.

The study also highlights the benefits of financial autonomy, such as enhanced flexibility and efficiency, encouragement of entrepreneurial culture, and increased financial sustainability. However, it acknowledges the challenges that need to be addressed, including tuition fee affordability and access, potential marketization and quality concerns, and the importance of accountability and transparency.

Furthermore, the research delves into financial management in public higher education, focusing on financial resource management. It emphasizes the critical role of budgeting and financial planning, resource allocation, cost control and efficiency measures, financial transparency and accountability, as well as financial sustainability and revenue generation.

Various methods and tools for financial management are discussed, including financial planning and forecasting, performance metrics and key performance indicators (KPIs), cost analysis and management, financial risk management, and the utilization of technology and financial systems. Additionally, the estimation and forecasting of financial resources, considering factors such as tuition and fee revenue, external funding sources, trend analysis, economic and demographic factors, and scenario analysis, are explored.

The article concludes by providing suggestions for Vietnam in the financial management of public higher education. These suggestions include strengthening financial planning and budgeting, diversifying revenue sources, enhancing financial accountability and transparency, embracing technology and financial systems, and promoting collaboration and knowledge exchange among institutions and policymakers.

Overall, this research offers valuable insights and recommendations for policymakers and institutions to effectively manage their financial resources, ensure the sustainability and quality of public higher education, and foster the development of the sector.

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