

Financial management of Harvard university: A common size analysis and implications for Indonesian higher education institutions

Atin Chusniyah *  <https://orcid.org/0009-0006-3750-129X>

Muhammad Munadi  <https://orcid.org/0000-0003-4649-3560>

Department of Islamic Education Management, Universitas Islam Negeri Raden Mas Said Surakarta

ABSTRACT

This study aims to (1) determine Harvard University's financial management strategy using the common size analysis approach in Harvard University's balance sheet report for the fiscal year 2020-2022; and (2) examine its implications for Indonesian higher education institutions. The analysis is described from 3 perspectives: the perspective of assets, liabilities, and net assets. The research design uses a descriptive quantitative approach. The primary data source is the Annual Financial Report for Years 2020-2022. The analysis technique used is the analysis of common size. The results of this study indicate that from an asset perspective, attention is paid to managing liquidity, investment, and fixed assets. The importance of debt management, deferred income management, and long-term debt monitoring is highlighted from a liability perspective. From a net asset perspective, the strategy includes allocating operational resources, an endowment fund, and project management of profit-sharing agreements. This analysis provides valuable insights for Indonesian higher education institutions in developing financial management strategies. The limitation of this research is the limited focus on the analysis of balance sheet reports from the perspective of assets, liabilities, and net assets of Harvard University. This study does not consider external factors or other variables that may affect the University's financial management strategy more comprehensively.

This is an open-access article under the [CC-BY-NC 4.0 license](https://creativecommons.org/licenses/by-nc/4.0/).



ARTICLE INFO

Keywords:

Balance sheet report;
common size analysis;
financial management;
Indonesian higher
education institution

Article History:

Received: 14 November 2023

Revised: 10 January 2024

Accepted: 15 February 2024


Published: 29 February 2024


How to Cite in APA Style:

Chusniyah, A. & Munadi, M. (2023). Financial management of Harvard university: A common size analysis and implications for Indonesian higher education institutions. *Journal of Educational Management and Instruction*, 3(2), 95-105.

Introduction

Financial management plays a vital role in maintaining the stability and sustainability of educational institutions. In the university context, good higher education management is result-oriented, leading to efficiency and financial stability (Bileviciute et al., 2019). Management teams with good accounting and finance experience can significantly impact an institution's performance (Al-Matari, 2022). Therefore, higher education management must provide accountable financial information to ensure adequate funding (Almagtomea et al., 2019). It shows the importance for higher education institutions to produce quality financial reports.

* Corresponding author: Atin Chusniyah  atinchusniyah@gmail.com

 <https://doi.org/10.22515/jemin.v3i2.7802>

Financial reports are a vital instrument for designing and evaluating the financial management of higher education institutions. It is because the financial statements provide an overview of the institution's financial condition. Meanwhile, financial reports written consistently and with quality can provide signals about the performance and prospects of an institution (Choi et al., 2019; Davern et al., 2019). A balance sheet is one component of financial statements that can be used to analyze financial management. In the financial performance analysis on the balance sheet, common size analysis plays a role in evaluating institutions' health and growth levels (Nufus et al., 2020).

However, the financial condition of higher education institutions can change quickly, especially in uncertain times such as the Covid-19 pandemic. During the Covid-19 pandemic, higher education institutions reformulated their financial management. It is because the Covid-19 pandemic caused major changes in the global economy that affected the income and expenditure of higher education institutions. Covid-19 has contributed to market volatility, making it a challenge for risk management activities in financial markets (Albulescu, 2021). The dependence of higher education institutions' income on student funding has been undermined by the Covid-19 crisis (Parker, 2020). It had a major impact on the financial crisis (Mora Cortez & Johnston, 2020), including the crisis experienced by Harvard University.

Harvard University, one of the richest universities in the world according to Nonprofit Colleges Online (2021), uses financial reports to evaluate performance and manage their finances well. According to US News, Harvard University also leads the category of universities with the largest endowment fund (S Wood, 2022). It shows that Harvard University can manage its institutional finances effectively and efficiently. However, based on the Annual Financial Report (Harvard University, 2020, 2021), at the start of the covid-19 pandemic, Harvard University showed a deficit of \$ 10 million in 2020. However, Harvard University turned things around with a surplus of \$ 283 million in 2021. As opinion Lagi (2020) states that even though the Covid-19 pandemic caused a crisis, it also opened up opportunities to strengthen institutional systems and relationships to rise and be more resilient than before.

Harvard University's financial reports are published directly on its official website. The report can be used as a role model by higher education institutions in managing their finances. However, to read the financial report data need to do a comparative analysis to understand the financial strategy taken each year. Common size analysis can be used to analyze Harvard University balance sheet reports. How to read a common size analysis of balance sheets can be done by dividing it into three perspectives, namely the perspective of assets, liabilities, and net assets. Harvard University's strategy for managing finances can be read through the results of a common size analysis of balance sheets.

This study aims to: (1) determine the financial management strategy of Harvard University using common size analysis approach on Harvard University balance sheet reports for the 2020-2022 fiscal year; and (2) examine its implications for Indonesian higher education institutions. This research is urgently considering the importance of financial management in higher education institutions. In an increasingly competitive era, universities must manage their financial resources wisely to remain relevant and sustainable. This research is expected to contribute significantly to the field of education management, especially in the financial management of higher education institutions. The results of this research can be the basis for developing better financial management strategies in Indonesian higher education institutions.

Method

Research design uses a descriptive quantitative approach, which involves collecting and analyzing numerical data to explain and measure performance. In addition, it is also to simplify and present data so that it is easy to understand. The main data source used is the Annual Financial Report (Harvard University, 2020, 2021, 2022) published on the

official website of Harvard University, namely <https://finance.harvard.edu/annual-report>. In addition, secondary data such as previous years' financial reports, university policy documents related to financial management, and related literature will also be used to support the analysis.

The analysis technique used is common size analysis, which will help to measure the University's financial performance by comparing the specific amount of each item in the financial statements with the total amount in the same financial report. This research was conducted by collecting and analyzing data from Harvard University's financial reports for the 2020-2022 fiscal year. Data is processed using Ms. Excel to generate common-size financial statements. The data is then analyzed to identify the structure of Harvard University's balance sheet in terms of assets, liabilities, and net assets perspectives, as well as gain insight into the financial management implemented by the University in the 2020-2022 fiscal year period.

While the implications of Harvard University's financial management strategy for higher education in Indonesia are analyzed using a descriptive approach, these implications are discussed based on the results of the common size analysis.

Results

Analysis of the Harvard University balance sheet report for 2020-2022 using common size can be seen in Table 1.

Asset perspective balance sheet

If viewed from an asset perspective, a comparative chart is obtained from the 2020-2022 Harvard University balance sheet report using common size analysis as shown in Figure 1.

The common size analysis of the Harvard University asset perspective balance sheet reports for fiscal years 2020, 2021, and 2022 provides important information about the composition of assets and changes in the relative proportions of each asset item to total assets. This analysis can assist in formulating the financial management strategy adopted by the University.

The data in Figure 1 shows the composition of Harvard University's assets, including cash and cash equivalents, accounts receivable, fixed assets, and investment portfolios. The proportion of cash and cash equivalents to total assets gradually increases from 0.29% in 2020 to 0.30% in 2021 and then to 0.39% in 2022. It shows a yearly increase in the cash and cash equivalents available to universities.

Table 1. Analysis common size Harvard University balance sheets for fiscal years 2020 and 2022 (in thousands of dollars)

	Fiscal Year 2020		Fiscal Year 2021		Fiscal Year 2022	
ASSETS						
Cash and cash equivalents	\$ 176.615	0,29%	\$ 224.042	0,30%	\$ 283.227	0,39%
Receivables, net	\$ 262.731	0,43%	\$ 322.482	0,43%	\$ 339.792	0,47%
Prepayments and deferred charges	\$ 304.920	0,50%	\$ 315.172	0,42%	\$ 317.448	0,44%
Operating leases – right of use assets	\$ 754.699	1,23%	\$ 689.962	0,92%	\$ 677.147	0,93%
Notes receivables, net	\$ 372.234	0,61%	\$ 377.596	0,51%	\$ 380.812	0,52%
Pledges receivables, net	\$ 2.403.175	3,91%	\$ 2.335.958	3,13%	\$ 2.592.434	3,56%

Fixed assets, net	\$ 8.432.255	13,72 %	\$ 8.463.008	11,33 %	\$ 8.442.840	11,60%
Interests in trusts held by others	\$ 427.359	0,70%	\$ 515.757	0,69%	\$ 432.896	0,59%
Securities pledged to counterparties, at fair value	\$ 214.010	0,35%	\$ 290.388	0,39%	\$ 179.514	0,25%
Investment portfolio, at fair value	\$ 48.111.441	78,28 %	\$ 61.141.750	81,88 %	\$ 59.135.219	81,25%
TOTAL ASSETS	\$ 61.462.439	100,0 0%	\$ 74.676.115	100,0 0%	\$ 72.781.329	100,00%
LIABILITIES						
Accounts payable	\$ 321.666	2,85%	\$ 488.896	4,33%	\$ 486.707	4,22%
Deferred revenue and other liabilities	\$ 1.580.178	13,99 %	\$ 1.716.026	15,18 %	\$ 1.679.364	14,56%
Operating lease liability	\$ 767.599	6,80%	\$ 702.872	6,22%	\$ 689.342	5,98%
	Fiscal Year 2020		Fiscal Year 2021		Fiscal Year 2022	
Other liabilities related to investment portfolios	\$ 878.018	7,78%	\$ 756.237	6,69%	\$ 718.031	6,22%
Liabilities due under separate interest agreements	\$ 819.584	7,26%	\$ 1.019.357	9,02%	\$ 886.017	7,68%
Bonds and notes payable	\$ 5.664.679	50,16 %	\$ 5.503.199	48,70 %	\$ 6.117.203	53,03%
Accrued retirement obligations	\$ 1.216.251	10,77 %	\$ 1.078.647	9,54%	\$ 928.514	8,05%
Government loan advances	\$ 44.748	0,40%	\$ 35.807	0,32%	\$ 29.457	0,26%
TOTAL LIABILITIES	\$ 11.292.723	100,0 0%	\$ 11.301.041	100,0 0%	\$ 11.534.635	100,00%
NET ASSETS						
General Operating Account	\$ 7.667.143	15,28 %	\$ 9.435.991	14,89 %	\$ 9.668.474	15,79%
Endowment	\$ 41.894.380	83,51 %	\$ 53.165.753	83,89 %	\$ 50.877.680	83,07%
Split interest agreements	\$ 598.193	1,19%	\$ 773.330	1,22%	\$ 700.540	1,14%
TOTAL NET ASSETS	\$ 50.169.716	100,0 0%	\$ 63.375.074	100,0 0%	\$ 61.246.694	100,00%

Source: Harvard University Balance Sheet 2020-2022 (Processed Data)

The proportion of net trade receivables to total assets was relatively stable throughout the period, slightly increasing from 0.43% in 2020 to 0.47% in 2022. It shows that the University has a consistent credit policy towards parties who owe debts to them. Meanwhile, the proportion of net fixed assets to total assets shows a fairly stable trend, slightly decreasing from 13.72% in 2020 to 11.60% in 2022. The financial management

strategy can include long-term investment evaluation and planning to maintain and improve the University’s physical infrastructure. Furthermore, the proportion of the investment portfolio at fair value to total assets shows significance, namely 78.28% in 2020, increasing to 81.88% in 2021, and then slightly decreasing to 81.25% in 2022.

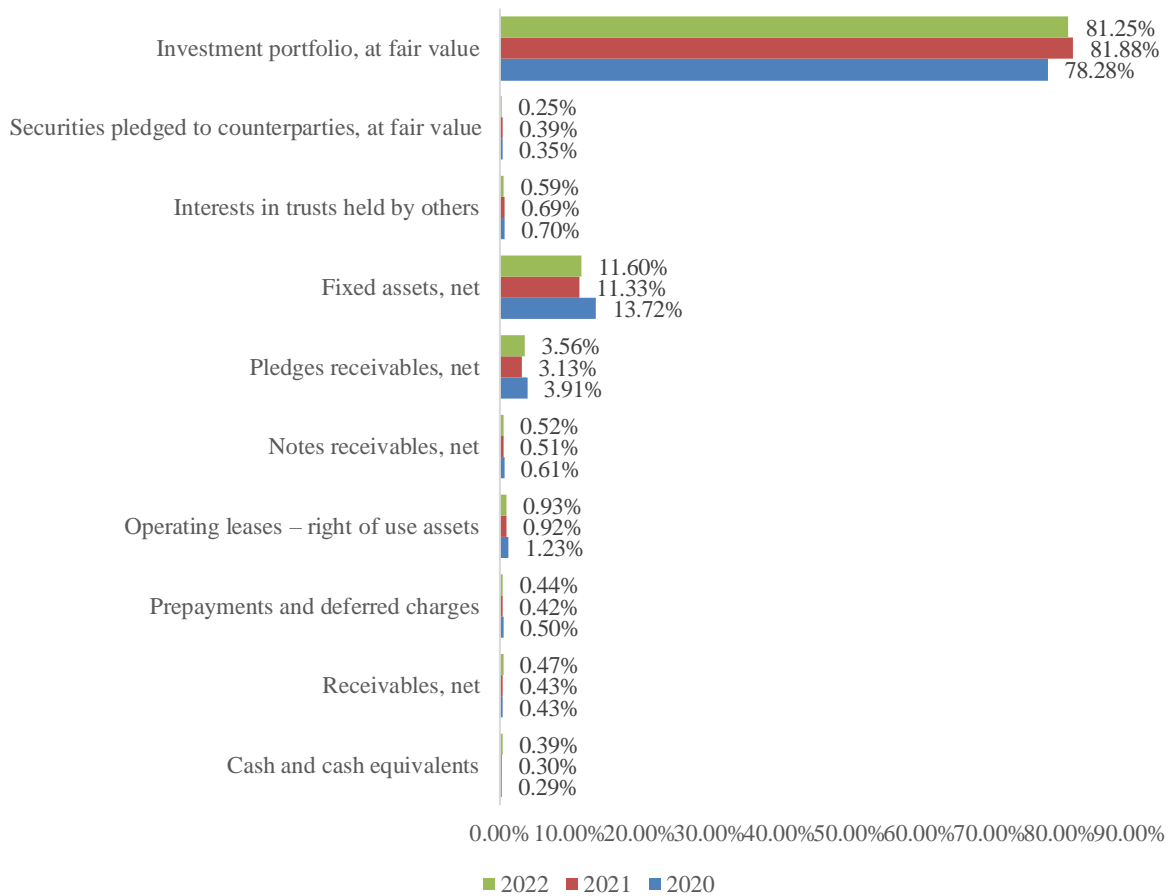


Figure 1. Analysis common size balance report asset perspective

Liability perspective balance sheet

If viewed from a liability perspective, a comparative chart is obtained from the 2020-2022 Harvard University balance sheet report using common size analysis as shown in Figure 2.

A common size analysis of the Harvard University liability perspective balance sheet reports for fiscal years 2020, 2021, and 2022 provides insight into the structure and relative proportions of the different types of liabilities. This analysis can assist in formulating the financial management strategy adopted by the University.

Figure 2 shows the composition of Harvard University’s liabilities, including trade payables, deferred income, and other liabilities, bonds payable, and notes payable. The proportion of trade payables to total liabilities increased from 2.85% in 2020 to 4.33% in 2021 and slightly decreased to 4.22% in 2022.

The proportion of deferred income and other liabilities to total liabilities tends to increase throughout the period, from 13.99% in 2020 to 14.56% in 2022. Meanwhile, the proportion of bonds payable and notes payable to total liabilities was relatively stable, slightly increasing from 50.16% in 2020 to 53.03% in 2022.

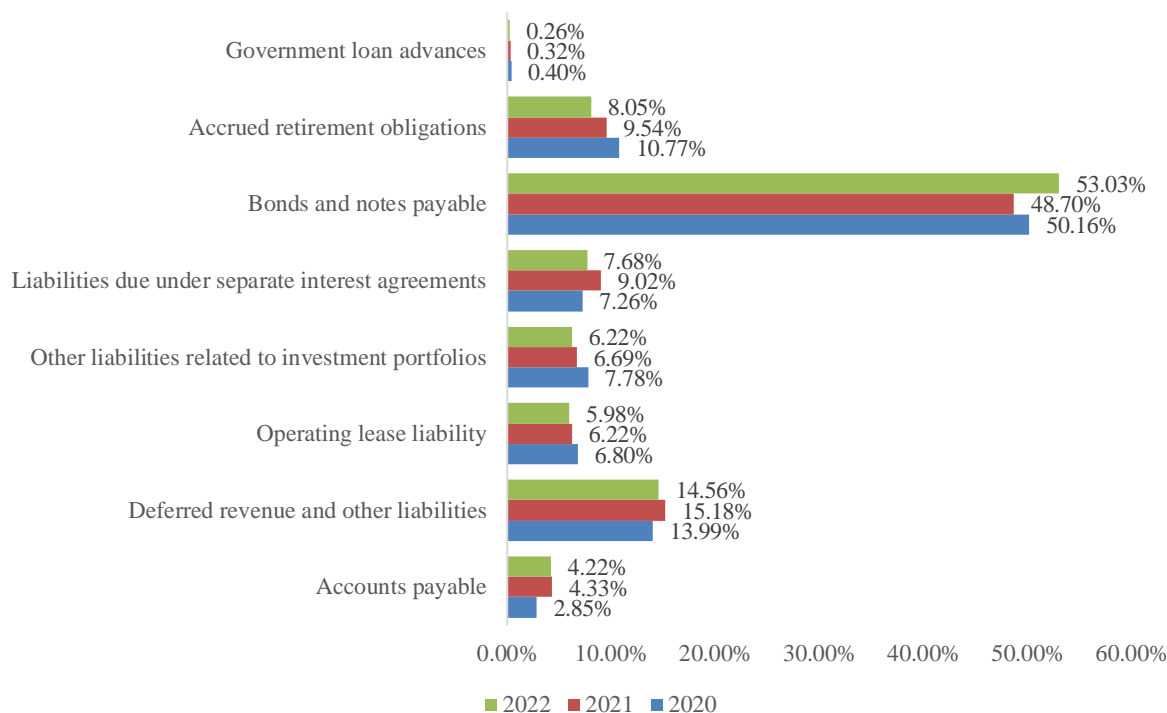


Figure 2. Analysis Common Size Balance Report Liability Perspective

Net assets perspective balance sheet

If viewed from a net asset perspective, a comparative chart is obtained from the 2020-2022 Harvard University balance sheet report using common size analysis as shown in Figure 3.

A common size analysis of the Harvard University net asset perspective balance sheet reports for fiscal years 2020, 2021, and 2022 provides information about the relative proportions of the components of net assets and how they change from year to year. It can provide insight into formulating a financial management strategy taken by the University.

The data in Figure 3 shows the composition of Harvard University's net assets, including general operational accounts, endowments, and profit-sharing agreements. The proportion of general operating accounts to total net assets was stable during this period, ranging between 15.28% and 15.79%. It indicates that there are sufficient resources to support university operations. A financial management strategy can include carefully managing and controlling operating expenses.

The proportion of endowment funds to total net assets was also relatively stable, ranging between 83.51% and 83.89%. Endowments comprise a significant portion of the University's net assets and demonstrate a long-term commitment to growth and financial stability. A financial management strategy can involve evaluating and managing investment portfolios to maximize returns and maintain endowment stability. Meanwhile, the proportion of production-sharing agreements is relatively small, ranging between 1.19% and 1.22%. Even if the proportion is small, profit-sharing agreements may reflect the University's participation in income-generating activities or projects. A financial management strategy may involve evaluating the potential of a production-sharing agreement project and managing the associated revenue.

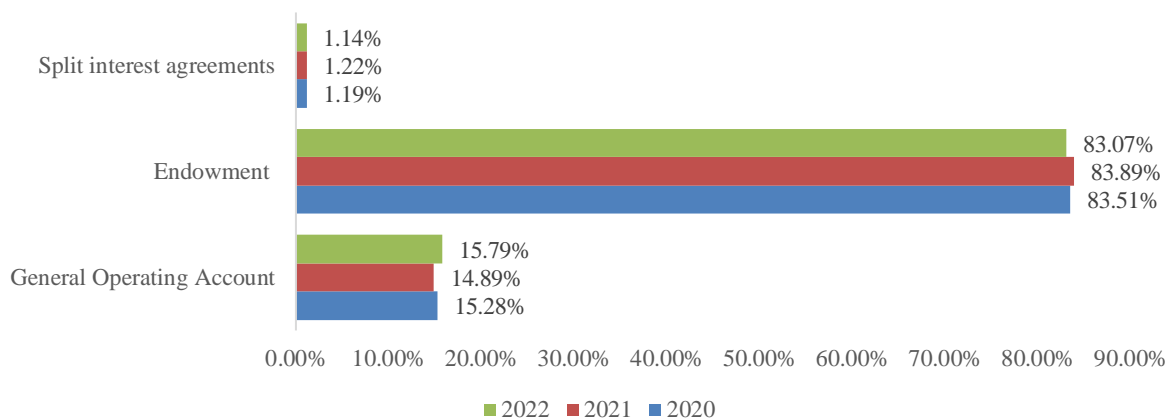


Figure 3. Analysis common size balance report net asset perspective

Discussion

Harvard university's financial management strategy based on the common size analysis approach

Based on asset perspective analysis, Harvard University's assets changed. Several asset items experienced an absolute increase from year to year, such as cash and cash equivalents, net trade receivables, and collateralized receivables, indicating good growth and business activity. Meanwhile, net fixed assets were relatively stable during this period, indicating a focus on maintaining and managing existing physical assets. Then the proportion of the investment portfolio at fair value shows little volatility but remains the main component of the University's total assets.

It shows that financial management strategy can focus on managing liquidity and optimal utilization of cash resources. Aligned with research [Shygun et al. \(2020\)](#) show that selling unproductive assets and converting them into financial resources that can be used for other more productive activities will positively impact the financial burden on institutions and the effectiveness of asset use.

According to [Seiferling & Tareq \(2023\)](#), the investment portfolio's performance strongly correlates with fiscal transparency, impacting high returns. Harvard University has taken a similar approach in terms of financial transparency so that the yield at the end of the year has increased. Furthermore, the proportion of the investment portfolio at fair value to total assets shows significance, and then slightly decrease. It shows the importance of managing the investment portfolio in the University's financial management strategy. Harvard University might take steps to diversify its portfolio, manage risk, and maximize return on investment. Investment planning in terms of long-term is important to present a strategic framework that governs proper revenue streams, efficient allocation of resources, and optimal cost efficiency ([Atkinson et al., 2021](#)).

Based on liability perspective analysis, it shows an increase in debt that universities must pay to third parties. A financial management strategy can involve prudent debt management to ensure the availability of sufficient funds and minimize financial risks. Effective and efficient debt settlement is an important part of financial risk management. The right debt settlement strategy can help reduce the risk of default, increase liquidity, and minimize potential losses ([Liang et al., 2020](#)).

The proportion of deferred income and other liabilities to total liabilities tends to increase throughout the period. It may reflect the University's policy of accepting prepayments or long-term commitments from other parties. A financial management strategy may involve evaluating revenue collection policies and managing long-term liabilities. Meanwhile, the proportion of bonds payable and notes payable to total

liabilities was relatively stable. It shows the importance of managing long-term debt and monitoring financial market conditions to meet payment obligations related to the debt.

Liabilities change may reflect a strategic decision in debt collection or restructuring the University made. The proportion of operating lease liabilities was relatively stable throughout the period, indicating a commitment to long-term lease contracts and proper management of lease liabilities. Meanwhile, the proportion of liabilities related to the investment portfolio has decreased yearly, indicating the potential for risk reduction and diversification of investments made by the University. A company's asset and liability valuation strategy is very important in financial management. A clear understanding of the criteria for determining the existence of assets and liabilities is important in making financial decisions (Cade et al., 2019).

Based on net assets perspective analysis, Harvard University's net assets changed. The proportion of general operational accounts was relatively stable during this period, while the proportion of endowments decreased from 2020 to 2022. This decrease may reflect strategic decisions in allocating and using funds to support university priorities and initiatives. Meanwhile, the proportion of profit-sharing agreements was relatively stable over the period, indicating consistency in university participation in income-generating activities. Thus, strategic asset allocation becomes an important tool in the financial management of endowments, enabling managers to optimize the returns and risks of the investment portfolio by considering the short and long-term goals of the fund (Jacobs & Kobor, 2021).

Implications of Harvard university's financial management strategy based on common siza analysis for indonesian higher education institutions

Based on asset perspective, the financial management strategies that can be adapted included: (1) Indonesian higher education institutions need to improve liquidity management and cash utilization to support growth and operational needs; (2) Indonesian higher education institutions need to strengthen credit policies and accounts receivable management to minimize credit risk; (3) Indonesian higher education institutions need to evaluate and plan for long-term investments to maintain and increase fixed assets; (4) Indonesian higher education institutions need to diversify the investment portfolio to manage risk and maximize return on investment; and (5) Indonesian higher education institutions need to monitor changes in the proportion of assets and identify long-term trends to make better financial decisions in the future.

Meanwhile, if viewed from a liability perspective perspective, the financial management strategies that can be adapted included: (1) Indonesian higher education institutions need to carefully evaluate and manage accounts payable, including considering refinancing or restructuring if necessary; (2) Indonesian higher education institutions need to manage deferred income and other liabilities prudently, including evaluating revenue collection policies and managing long-term liabilities; (3) Indonesian higher education institutions need to conduct careful monitoring and management of bonds payable and notes payable, including managing interest rate risk and ensuring the availability of sufficient funds for payment of these obligations; (4) Indonesian higher education institutions need to pay attention to operating lease obligations and maintain commitments to long-term lease contracts; and (5) Indonesian higher education institutions need to continuously evaluate and manage risks related to the University's investment portfolio.

From a net asset perspective , the financial management strategies that can be adapted included: (1) Indonesian higher education institutions need to pay attention to the balance between general operational accounts and endowment funds in allocating resources to support long-term operations and growth long; (2) Indonesian higher education institutions need to evaluate and wisely manage the investment portfolio to maintain the stability and growth of the endowment fund; and (3) Indonesian higher

education institutions need to monitor and manage project production sharing agreements carefully, including potential evaluation and related revenue management.

Overall, this article highlights the financial strategy adopted by Harvard University in terms of balance sheet reports from the perspective of assets, liabilities, and net assets, using common size analysis as the scalpel. In this case, Harvard manages its assets and investment portfolio by applying appropriate and transparent accounting principles and methods based on its resources. As opinion [Zhu et al. \(2021\)](#) measure the physical quantity and value of assets and utilize sophisticated information technology and survey methods are key factors in ensuring accurate accounting and effective protection of resources.

Those are the ideal financial management strategies that can be adapted from Harvard. However, Harvard University has enormous resources, both in terms of funds and assets. This allows Harvard University to implement more aggressive financial management strategies, such as investing in long-term, high-risk projects. While Indonesian higher education institutions have more limited resources, so they need to be more cautious in implementing financial management strategies. In addition, Harvard University is under looser regulation than Indonesian higher education institutions. These regulations allow Harvard University to have more flexibility in managing its finances. Indonesian higher education institutions must comply with stricter regulations, which may limit their ability to implement Harvard University's financial management strategies. Furthermore, Harvard University has a more competitive culture than Indonesian higher education institutions. This culture encourages Harvard University to always innovate and look for ways to improve its performance. Indonesian higher education institutions have a more conservative culture, so it may be more difficult to implement Harvard University's more aggressive financial management strategies.

Despite some limitations, Harvard University's financial management strategies can still provide benefits to Indonesian higher education institutions. By implementing these strategies, Indonesian higher education institutions can improve the effectiveness and efficiency of their financial management, so that they can better achieve their goals. However, Indonesian higher education institutions need to adapt Harvard's financial management strategies to the prevailing conditions and regulations in Indonesia. before implementing it as a whole, Indonesian higher education institutions can carry out trials first to see its effectiveness. in addition, higher education institutions in Indonesia also need to conduct periodic evaluations to see if the strategies implemented are still effective. By applying these tips, Indonesian higher education institutions can increase the chances of success in implementing Harvard University's financial management strategies.

This article provides insight into the financial management strategy adopted by Harvard University based on an analysis of balance sheets from an asset, liability, and net asset perspective for 2020-2022. From an asset perspective, attention is paid to managing liquidity, investment, and fixed assets. From a liability perspective, the importance of debt management, deferred income management, and long-term debt monitoring is highlighted. From a net asset perspective, the strategy includes allocating operational resources, an endowment fund, and project management of profit-sharing agreements. This analysis provides an understanding of how this financial management strategy can be applied in general and can help us develop better financial strategies in the future.

Conclusion

Overall, this article provides important guidance on financial management strategies that we can apply. In this case, we can pay attention to the importance of liquidity management, investment diversification, and debt control. In addition, this article also highlights the need for accounts receivable management, long-term debt monitoring, and proper resource allocation. By considering this analysis, we can adopt a

better strategy for managing our finances and achieve better financial goals in the future. We need to understand good financial management to manage institutions well.

The limitation of this research is the limited focus on the analysis of balance sheet reports from the perspective of assets, liabilities, and net assets of Harvard University. This study does not consider external factors or other variables that may affect the University's financial management strategy more comprehensively. In addition, this study is based only on the percentage data provided and does not provide detailed information on financial circumstances or other contextual factors that may influence university financial decisions. Suggestions for further research involve a more in-depth and holistic analysis, including more complete data and relevant contextual information. Studies involving a wider range of historical data and comparisons with other universities can provide a better understanding of trends and best practices in educational institution financial management. In addition, future research may consider a more detailed risk analysis, including an evaluation of the potential impact of changes in market or economic conditions on university finances. Studies of the influence of financial management strategies on academic outcomes and institutional growth can also provide valuable insights.

References

- Albulescu, C. T. (2021). COVID-19 and the United States financial markets' volatility. *Finance Research Letters*, 38, 101699. <https://doi.org/10.1016/j.frl.2020.101699>
- Almagtomea, A., Shaker, A., Al-Fatlawi, Q., & Bekheet, H. (2019). The integration between financial sustainability and accountability in higher education institutions: An exploratory case study. *International Journal of Innovation, Creativity and Change*, 8(2), 202-221. www.ijicc.net
- Al-Matari, E. M. (2022). Do corporate governance and top management team diversity have a financial impact among financial sector? A further analysis. *Cogent Business and Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2141093>
- Atkinson, T. R., Preckel, P. V., & Gotham, D. (2021). Long-term investment planning for the electricity sector in Small Island Developing States: Case study for Jamaica. *Energy*, 228, 120576. <https://doi.org/10.1016/j.energy.2021.120576>
- Bileviciute, E., Draksas, R., Nevera, A., & Vainiūte, M. (2019). Competitiveness in higher education: The case of university management. *Journal of Competitiveness*, 11(4). <https://doi.org/10.7441/joc.2019.04.01>
- Cade, N. L., Koonce, L., Mendoza, K. I., Rees, L., & Tokar, M. B. (2019). Assets and Liabilities: When Do They Exist? *Contemporary Accounting Research*, 36(2), 553–587. <https://doi.org/10.1111/1911-3846.12479>
- Choi, J. H., Choi, S., Myers, L. A., & Ziebart, D. (2019). Financial Statement Comparability and the Informativeness of Stock Prices About Future Earnings. *Contemporary Accounting Research*, 36(1), 389–417. <https://doi.org/10.1111/1911-3846.12442>
- Davern, M., Gyles, N., Hanlon, D., & Pinnuck, M. (2019). Is Financial Reporting Still Useful? Australian Evidence. *Abacus*, 55(1), 237–272. <https://doi.org/10.1111/abac.12152>
- Harvard University. (2020). *Annual Financial Report: Financial Report Fiscal Year 2020*. https://finance.harvard.edu/files/fad/files/fy20_harvard_financial_report.pdf
- Harvard University. (2021). *Annual Financial Report: Financial Report Fiscal Year 2021*. https://finance.harvard.edu/files/fad/files/fy21_harvard_financial_report.pdf
- Harvard University. (2022). *Annual Financial Report: Financial Report Fiscal Year 2022*. https://finance.harvard.edu/files/fad/files/fy22_harvard_financial_report.pdf
- Jacobs, K. E., & Kobor, A. (2021). Strategic Asset Allocation for Endowment Funds. *The Journal of Portfolio Management*, 47(5), 114–127. <https://doi.org/10.3905/jpm.2021.1.227>
- Lagi, R. K. (2020). COVID19–resilient education in the islands. *Higher Education Research and Development*, 39(7). <https://doi.org/10.1080/07294360.2020.1825347>

-
- Liang, L., Chen, S., & Wu, D. D. (2020). A Decision Support Approach to Liquidate a Distressed Debt Network. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, 50(4), 1242–1251. <https://doi.org/10.1109/TSMC.2017.2712623>
- Mora Cortez, R., & Johnston, W. J. (2020). The Coronavirus crisis in B2B settings: Crisis uniqueness and managerial implications based on social exchange theory. *Industrial Marketing Management*, 88. <https://doi.org/10.1016/j.indmarman.2020.05.004>
- Nonprofit Colleges Online. (2021). *50 Richest Universities In The World*. <https://www.nonprofitcollegesonline.com/wealthiest-universities-in-the-world/>
- Nufus, K., Supratikta, H., Muchtar, A., & Sunarsi, D. (2020). Analysis of financial performance: Case study of Pt. X employee cooperative. *Utopia y Praxis Latinoamericana*, 25(Extra10). <https://doi.org/10.5281/zenodo.4155737>
- Parker, L. D. (2020). Australian universities in a pandemic world: transforming a broken business model? *Journal of Accounting and Organizational Change*, 16(4). <https://doi.org/10.1108/JAOC-07-2020-0086>
- Seiferling, M., & Tareq, S. (2023). Hiding the Losses: Fiscal Transparency and the Performance of Government Portfolios of Financial Assets. *Public Finance Review*, 51(4), 488–512. <https://doi.org/10.1177/10911421231170960>
- Shygun, M. M., Ostapiuk, N. A., Zayachkivska, O. V., & Goylo, N. V. (2020). The influence of the classification of non-current assets as holding for sales on the liquidity of the company's balance sheet. *Entrepreneurship and Sustainability Issues*, 8(1), 430–441. [https://doi.org/10.9770/jesi.2020.8.1\(30\)](https://doi.org/10.9770/jesi.2020.8.1(30))
- S Wood. (2022). 10 National Universities with the Biggest Endowments. *US News*. <https://www.usnews.com/education/best-colleges/the-short-list-college/articles/10-universities-with-the-biggest-endowments>
- Zhu, D., Duan, W., Zhang, H., & Du, T. (2021). Natural resource balance sheet compilation: a land resource asset accounting case. *Journal of Chinese Governance*, 6(4), 515–536. <https://doi.org/10.1080/23812346.2021.1891721>