Evaluation and Optimization of Strategic Budget Management Based on Financial Risk Prevention

Liang Yanyu^{1,2}, Dindo Inso¹

¹Lyceum of the Philippines University, Philippines Manila, 1002 ²Guangdong Technology College, Zhaoqing, Guangdong Province, 526100, China

Abstract: This study explores the complex links between corporate financial performance and financial risk management methods. It examines the demographics of respondents, the most commonly used budget management methods, the difficulties associated with managing financial risk, and the impact of financial risk on organizational performance. The results of the survey show that key financial risk indicators such as foreign exchange risk, commodity price changes, and operational efficiency are significantly linked to financial performance. These findings have real-world applications for organizations seeking to improve their financial stability and achieve their long-term financial goals.

Keywords: Financial Risk Management, Budget Management Practices, Financial Performance, Risk Mitigation Strategies

1. Introduction

China's emergence as a global economic powerhouse has been nothing short of remarkable. Over the past few decades, the world has witnessed an unprecedented transformation of this nation, from an agrarian society to a formidable economic giant (Chen & Wang, 2022). China's rapid economic growth, urbanization, and expanding global footprint have brought along a multitude of financial challenges and opportunities that merit in-depth exploration^[1].

To address this pressing issue, the study embarks on a comprehensive exploration of the multifaceted domain of budget management within the ambit of financial risk prevention. We probe into the intricacies of how organizations allocate, monitor, and optimize their budgets, with a particular focus on their alignment with overarching strategic goals. Moreover, the researcher scrutinizes the very nature of the financial risks organizations encounter, unraveling their far-reaching ramifications on financial performance^[2].

2. Research review

The synthesized literature underscores several key trends and developments in budget management practices within contemporary business environments. Notably, the adoption of rolling forecasts, empowered by technological advancements like AI and machine learning, has emerged as a pivotal approach, enabling organizations to proactively respond to the dynamic nature of today's markets. The integration of behavioral aspects in budgeting acknowledges cognitive biases and psychological factors that influence the effectiveness of these practices^[3].

In summary, the synthesized literature offers a solid foundation for the present study, emphasizing the importance of integrating effective budget management practices within the framework of financial risk prevention to enhance financial performance. These insights can guide the study's focus on optimizing budget management in Hunan, China, to achieve similar positive outcomes in the face of financial risks.

3. Strategic Budget Management Analysis Based on Financial Risk

3.1 Profile of the Respondents

The participants in the study were 115 managers, entrepreneurs and experts, all based in Hunan, China. This purposeful sampling technique is intentionally employed to ensure that participants have

the specific knowledge and experience required for the research objectives. By targeting this group, the study aims to tap into their expertise and insights as they have a significant involvement in financial decision-making processes and risk management strategies within organizations. This approach ensures that the data collected in this study can provide valuable perspectives and information for budget management and financial risk prevention research in Hunan region.

3.2 Prevalent Budget Management Practices Utilized by Organizations Within the Framework of Financial Risk Prevention

Table 1: Prevalent Budget Management Practices Utilized by Organizations Within the Framework of Financial Risk Prevention

Statements	Mean	Interpretation
1. I regularly review and update our organization's budgets to align with	3.26	Strongly Agree
changing economic conditions and market dynamics.		
2. There is a clear allocation of financial resources for risk mitigation	3.21	Agree
activities, such as purchasing insurance or hedging against currency		
fluctuations.		
3. Our budgeting process involves scenario analysis to assess the	3.22	Agree
impact of various financial risks on our financial performance.		
4. Our budget management practices are continuously improved based	3.27	Strongly Agree
on lessons learned from previous encounters with financial risks.		
Composite Mean	3.24	Agree

From Table 1, The composite mean score of 3.24 reflects an overall agreement with these budget management practices in the context of financial risk prevention. These findings align with related studies presented, emphasizing the importance of adaptive budgeting, scenario analysis, data utilization, and continuous improvement as integral components of effective financial risk management. These practices collectively contribute to a holistic and proactive approach to financial risk prevention, ensuring organizational financial stability and resilience.

3.3 Financial Risks Challenges Encountered by the Organizations

Table 2: Financial Risks Challenges Encountered by the Organizations

Statements	Mean	Interpretation
1.Our organization faces challenges related to currency exchange	3.13	Agree
rate fluctuations that impact our financial stability and profitability.		
2. We encounter difficulties in managing and mitigating credit risk	3.16	Agree
when extending credit to customers or partners.		
3.Credit rating downgrades or credit default events involving our	3.47	Strongly Agree
counterparties pose significant financial risks.		
4. We struggle with managing and mitigating counterparty risk when	3.20	Agree
entering into financial contracts or agreements.		
Composite Mean	3.24	Agree

From Table 2, The composite mean score of 3.24 reflects an overall agreement among respondents regarding these financial risk challenges. These findings align with related studies conducted between 2018 and 2020, which emphasize the multifaceted nature of financial risks and the importance of proactive risk management strategies. Organizations must navigate these challenges adeptly to maintain financial stability and ensure long-term profitability.

3.4 Effect of Financial Risks on the Financial Performance of Organizations

3.4.1 Foreign Exchange Risks

From Table 3, The survey results implies that organizations are highly conscious of the impact of exchange rate risk on their financial stability, competitiveness, and decision-making processes. These findings align with contemporary research and best practices, highlighting the importance of proactive risk management strategies and the incorporation of exchange rate risk considerations into broader financial planning and decision-making frameworks. Organizations appear to be well-prepared to navigate the complexities posed by exchange rate fluctuations in the global business environment.

Table 3: Effect of Financial Risks on the Financial Performance of Organizations in terms of Foreign Exchange Risks

Statements	Mean	Interpretation
1. Fluctuations in foreign exchange rates have a noticeable impact on our organization's profitability and bottom line.	3.24	Agree
2.Exchange rate risk significantly affects our ability to compete in international markets and pricing strategies.	3.27	Strongly Agree
3 Exchange rate movements have influenced our decision-making regarding overseas investments and expansion.	3.23	Agree
4. We consider foreign exchange risk as a critical factor when setting financial targets and long-term financial planning.	3.25	Agree
Composite Mean	3.23	Agree

3.4.2 Commodity Price Swings

Table 4: Effect of Financial Risks on the Financial Performance of Organizations in terms of Commodity Price Swings

Statements	Mean	Interpretation
1. Fluctuations in commodity prices have a significant impact on our	3.20	Agree
organization's financial performance, affecting both costs and		
revenues.		
2. We have experienced financial gains or losses directly tied to	3.32	Strongly Agree
fluctuations in commodity prices in the past.		
3. We closely monitor and analyze the impact of commodity price	3.17	Agree
swings on our financial performance indicators.		
4. Budgeting and forecasting processes are adjusted to account for	3.19	Agree
potential shifts in commodity prices.		
Composite Mean	3.26	Strongly Agree

From Table 4, The survey showed the significance of commodity price fluctuations within the context of financial risk management and budgeting practices. These responses, ranked from highest to lowest mean, provide valuable insights into how organizations perceive and respond to commodity price risk.

3.4.3 Operational Efficiency

Table 5: Effect of Financial Risks on the Financial Performance of Organizations in terms of Operational Efficiency

Statements	Mean	Interpretation
1.We recognize that inefficient cash flow management can result in	3.23	Agree
increased borrowing costs and negatively affect our financial		
performance.		
2. Delays in payments or collections due to financial risks can disrupt	3.27	Strongly Agree
our operational processes and lead to increased costs.		
3. We have experienced instances where financial risks led to supply	3.24	Agree
chain disruptions, affecting production and overall operational		
efficiency.		
4.Operational risk stemming from financial challenges is a key	3.19	Agree
consideration in our risk management strategies.		·
Composite Mean	3.22	Agree

From Table 5, The survey results showed on the importance of financial risk management in maintaining operational efficiency within organizations, with statements ranked from highest to lowest mean.

The composite mean of 3.22 confirms the overall agreement among respondents regarding the relationship between financial risks, operational efficiency, and financial performance. It underscores the importance of integrating financial risk management considerations into operational decision-making and budgeting processes to ensure operational continuity and overall financial stability. In conclusion, the survey results suggest that organizations recognize the significant impact of

financial risks on their operational efficiency and financial performance. These findings align with contemporary research and industry best practices, highlighting the need for proactive financial risk management strategies that consider their operational implications. Organizations appear well-prepared to address financial risks to sustain operational efficiency and, consequently, enhance their overall financial performance.

3.5 Essential Factors that Shape Budget Management and Financial Risk Prevention

This study presents the essential factors that shape budget management and financial risk prevention

3.5.1 Budget Allocation

Table 6: Essential Factors that Shape Budget Management and Financial Risk Prevention in Terms of Budget Allocation

Statements	Mean	Interpretation
1. We allocate a specific portion of our budget to address financial	3.18	Agree
risks, such as currency exchange rate fluctuations or credit risk.		
2. Our organization considers potential financial risks when	3.39	Strongly Agree
determining the budget allocation for different departments and		
projects.		
3. We have experienced instances where budget allocation	3.41	Strongly Agree
adjustments were necessary due to unexpected financial risks.		
4. Budget allocation decisions take into account the organization's	3.42	Strongly Agree
risk tolerance and the potential impact of financial risks on financial		
outcomes.		
5. Budget allocation for risk management is an integral part of our	3.22	Agree
financial planning process and contributes to overall financial		
performance.		
Composite Mean	3.33	Strongly Agree

From Table 6, The composite mean reinforces the overall strong agreement among respondents regarding the influence of financial risks on budget allocation decisions. Organizations appear to be highly proactive in considering and adjusting budget allocation in response to financial risks, recognizing the crucial role of budget allocation in achieving financial performance goals. These results highlight the profound impact of financial risks on budget allocation decisions within organizations. These findings align with contemporary research and industry best practices, emphasizing the importance of dynamic budget allocation strategies that actively consider financial risks. Organizations are strongly inclined to allocate resources specifically for risk management and view such allocation as integral to their financial planning processes and long-term financial stability.

3.5.2 Budgeting Methodologies

Table 7: Essential Factors that Shape Budget Management and Financial Risk Prevention in Terms of Budgeting Methodologies

Statements	Mean	Interpretation
1. Our organization's choice of budgeting methodology is influenced	3.23	Agree
by its ability to address and manage potential financial risks		
effectively.		
2. The choice of budgeting methodology takes into account the	3.20	Agree
organization's risk tolerance and its implications for managing		
financial risks.		
3. Budgeting methodologies are evaluated for their ability to provide	3.27	Strongly Agree
flexibility in response to changing financial risk scenarios.		
4. We actively review and adapt budgeting methodologies to align	3.22	Agree
with evolving financial risk management strategies.		
Composite Mean	3.23	Agree

From Table 7, the composite mean of 3.23 reinforces the overall agreement among respondents regarding the significance of considering financial risks when choosing budgeting methodologies. Organizations appear to actively evaluate and adapt their budgeting methodologies in response to

changing financial risk scenarios, reflecting a proactive approach to financial risk management through budgeting. This survey results highlight the growing importance of aligning budgeting methodologies with financial risk management strategies within organizations. These findings align with contemporary research, emphasizing the need for flexibility and adaptability in budgeting methodologies to effectively address evolving financial risks. Organizations actively consider financial risk factors and recognize the critical role that budgeting methodologies play in achieving financial stability and long-term objectives.

3.5.3 Risk Mitigation Strategies

Table 8: Essential Factors that Shape Budget Management and Financial Risk Prevention in Terms of Risk Mitigation Strategies

Statements	Mean	Interpretation
1. Our organization actively implements risk mitigation strategies to	3.30	Strongly Agree
address financial risks that may impact our financial performance.		
2. The effectiveness of our risk mitigation strategies directly	3.22	Agree
influences our ability to achieve financial goals and objectives.		
3.Our organization considers the costs and benefits of risk	3.22	Agree
mitigation strategies when making financial decisions.		
4.We believe that proactive risk mitigation is essential for	3.22	Agree
maintaining financial stability and optimizing financial		
performance.		
Composite Mean	3.24	Agree

From Table 8, The composite mean of 3.24 reaffirms the overall agreement among respondents regarding the critical role of risk mitigation strategies in managing financial risks. Organizations actively integrate risk mitigation measures into their financial planning, recognizing their positive impact on financial stability and sustainable performance. In conclusion, the survey results underscore the strong consensus among respondents on the importance of proactive risk mitigation strategies in managing financial risks within organizations. These findings align with contemporary research, emphasizing the integral role of risk mitigation in achieving stable and sustainable financial performance. Organizations actively implement, review, and adapt risk mitigation efforts to address changing financial risk landscapes, highlighting the dynamic nature of financial risk management.

3.5.4 Organizational Attributes.

Table 9: Essential Factors that Shape Budget Management and Financial Risk Prevention in Terms of Organizational Attributes

Statements	Mean	Interpretation
1. Our organization's size and scale significantly influence our capacity	3.24	Agree
to manage and mitigate financial risks effectively.		
2. The industry in which our organization operates plays a crucial role in	3.23	Agree
determining the types and levels of financial risks we encounter.		
3. The corporate culture within our organization places importance on	3.33	Strongly
proactive financial risk management as a driver of financial		Agree
performance.		
4. The technological capabilities and tools available to our organization	3.25	Agree
play a role in our ability to monitor and respond to financial risks.		
Composite Mean	3.25	Agree

From Table 9, Furthermore, with the composite mean of 3.25 confirms the overall agreement among respondents that various organizational attributes influence financial risk management. Organizations place importance on a risk-aware culture and recognize the need to align their attributes with risk management practices for financial stability and performance optimization. This results illustrate the significance of organizational attributes, including culture, international presence, and industry, in shaping financial risk management practices. Respondents strongly agree on the importance of fostering a risk-aware culture and aligning organizational attributes with financial risk management to ensure financial stability and enhance performance. These findings are in line with contemporary research emphasizing the multifaceted nature of financial risk management in organizations.

3.6 Significant Difference of the Factors that Shape Budget Management and Financial Risk Prevention When Grouped According to Their Profile

This part presents the statistical analysis that was done to identify significant differences among the variables that affect financial risk management and budget management when they are grouped according to their profiles. The hypothesis was put to the test to determine whether there is a significant difference between the factors that influence financial risk prevention and budget management when categorized according to their profiles. Through the Analysis of Variance (ANOVA) and Two-Independent Samples t-test. The null hypothesis claimed that, when classified according to the profile, there is no discernible difference in the impact of business environment entrepreneurial spirit to enterprise ability. In this investigation, the null hypothesis (H0) was chosen at a significance level of 0.05.

Table 10: Significant Difference of the Factors that Shape Budget Management and Financial Risk Prevention When Grouped According to Their Age

Budget Management	F-value	p-value	Decision on Ho	Interpretation
Budget Allocation	0.358	0.876	Failed to Reject	Not Significant
Budgeting Methodologies	0.499	0.776	Failed to Reject	Not Significant
Risk Mitigation Strategies	0.291	0.917	Failed to Reject	Not Significant
Organizational Attributes	0.506	0.772	Failed to Reject	Not Significant

From Table 10, The statistical analysis of the survey data regarding budget management practices and their relationship with organizational attributes did not yield statistically significant results, as evidenced by the F-values and p-values. Consequently, the null hypothesis (Ho) was not rejected for all four variables, indicating that there is no significant relationship between budget allocation, budgeting methodologies, risk mitigation strategies, and organizational attributes within the context of this study.

Table 11: Significant Difference of the Factors that Shape Budget Management and Financial Risk Prevention When Grouped According to Their Sex

Education Policies	t-value	p-value	Decision on Ho	Interpretation
Budget Allocation	-0.73	0.467	Failed to Reject	Not Significant
Budgeting Methodologies	0.018	0.986	Failed to Reject	Not Significant
Risk Mitigation Strategies	0.161	0.872	Failed to Reject	Not Significant
Organizational Attributes	0.608	0.544	Failed to Reject	Not Significant

From Table 11, The statistical analysis of the survey data concerning the influence of education policies on various aspects of budget management practices and organizational attributes did not yield statistically significant results, as indicated by the t-values and p-values. In each case, the null hypothesis (Ho) was not rejected, signifying that there is no significant relationship between education policies and the studied variables—budget allocation, budgeting methodologies, risk mitigation strategies, and organizational attributes.

Table 12: Significant Difference of the Factors that Shape Budget Management and Financial Risk Prevention When Grouped According to Their Educational Background

Education Policies	F-value	p-value	Decision on Ho	Interpretation
Budget Allocation	0.460	0.711	Failed to Reject	Not Significant
Budgeting Methodologies	0.405	0.750	Failed to Reject	Not Significant
Risk Mitigation Strategies	0.12	0.948	Failed to Reject	Not Significant
Organizational Attributes	0.332	0.802	Failed to Reject	Not Significant

From Table 12, The F-values and p-values of the statistical study of the association between educational policies and several facets of budget management practices and organizational features revealed non-significant findings. The null hypothesis (Ho) was not disproved in any instance, proving that the analyzed variables—budget allocation, budgeting procedures, risk mitigation strategies, and organizational attributes—are not statistically affected by education programs.

Table 13: Significant Difference of the Factors that Shape Budget Management and Financial Risk Prevention When Grouped According to Their Length of Service

Education Policies	F-value	p-value	Decision on Ho	Interpretation
Budget Allocation	0.666	0.650	Failed to Reject	Not Significant
Budgeting Methodologies	0.322	0.899	Failed to Reject	Not Significant
Risk Mitigation Strategies	0.331	0.893	Failed to Reject	Not Significant
Organizational Attributes	0.3	0.912	Failed to Reject	Not Significant

From Table 13, According to the F-values and p-values, the examination of the association between education policies and several facets of budget management techniques and organizational features produced non-significant results. The null hypothesis (Ho) was not disproved in any instance, proving that the analyzed variables—budget allocation, budgeting procedures, risk mitigation strategies, and organizational attributes—are not statistically affected by education programs.

The findings of this study imply that non-educational firms' organizational characteristics and budget management techniques are not considerably impacted by education policies as they apply to the education sector. Additional investigation could focus on more granular aspects of educational policies or look at other external variables that have a more direct impact on the organizational characteristics and financial management practices of the analyzed firms.

3.7 Significant Relationship Between Financial Risks Challenges Encountered and Its Effect on The Financial Performance of Organization

The statistical analysis performed to establish the link between significant financial risks and challenges faced and their impact on an organization's financial performance is summarized in this section. Pearson's r Correlation Coefficient was used to test the hypothesis. According to the null hypothesis, there is no meaningful connection between the financial risks and problems that an organization faces and how they affect its financial performance. A significance level of 0.05 was used in the study to make judgments about the null hypothesis (H0).

Table 14: Significant Relationship Between Financial Risks Challenges Encountered and Its Effect on The Financial Performance of Organization

Financial Performance	R-value	Degree of Relationship	p-value	Decision on Ho	Interpretation
Foreign Exchange Risks	0.782	Very Strong Relationship	0.000	Reject	Significant
Commodity Price Swings	0.519	Strong Relationship	0.000	Reject	Significant
Operational Efficiency	0.792	Very Strong Relationship	0.000	Reject	Significant

From Table 14, According to the study's findings, there are strong correlations between financial success and a variety of financial risk indicators, such as foreign currency risks, fluctuations in commodity prices, and operational efficiency.

3.8 Significant Relationship Between Budget Management Practices Utilized by Organization Within the Framework of Financial Risk Prevention and Factors That Shape Budget Management and Financial Risk Prevention

In order to establish the relationship between significant budget management practices used by organizations within the context of financial risk prevention and factors that shape budget management and financial risk prevention, statistical analysis was conducted. Pearson's Correlation Coefficient was used to test the hypothesis. According to the null hypothesis, there is no meaningful connection between the budget management strategies used by organizations to reduce financial risk and the variables that affect these strategies. A significance level of 0.05 was used in the study to make judgments about the null hypothesis (H0).

Table 15: Significant Relationship Between Budget Management Practices Utilized by Organization Within the Framework of Financial Risk Prevention and Factors That Shape Budget Management and Financial Risk Prevention

Essential Factors	R-value	Degree of Relationship	p-value	Decision on Ho	Interpretation
Budget Allocation	0.553	Strong Relationship	0.000	Reject	Significant
Budgeting Methodologies	0.854	Very Strong Relationship	0.000	Reject	Significant
Risk Mitigation Strategies	0.825	Very Strong Relationship	0.000	Reject	Significant
Organizational Attributes	0.787	Very Strong Relationship	0.000	Reject	Significant

From Table 15, The results of this study show that there is a strong correlation between budget allocation, budgeting methods, risk mitigation strategies, organizational attributes and financial risk.

Furthermore, these results underscore the importance of integrating essential factors in budget management practices, such as budget allocation, budgeting methodologies, risk mitigation strategies, and organizational attributes, within the framework of financial risk prevention to optimize financial performance. Organizations should consider these factors holistically to create a robust strategy for managing financial risks and achieving their financial objectives.

4. Conclusion and Suggestion

- (1) For organizational leaders and employees, they should receive ongoing training and education on financial risk management. Understanding the nuances of financial risks, including foreign exchange risks and commodity price fluctuations, is crucial for informed decision-making.
- (2) For organization, it develop and implement robust risk mitigation strategies tailored to your organization's specific industry and operational context, actively monitor and manage financial risks to minimize their adverse impact.
- (3) For educational institution, it engage with policymakers and relevant stakeholders to ensure that education policies support sound financial management practices.
- (4) For non-educational organizations, the study indicates that education policies may not significantly impact financial management practices. Therefore, organizations outside the education sector should focus on other internal and external factors when shaping their financial strategies.
- (5) For future researchers, given the nuanced and context-dependent nature of financial risk management and budgeting practices, further research is encouraged. Explore more specific dimensions of risk management, consider additional variables, and conduct larger-scale studies to gain a deeper understanding of the intricacies involved.

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References

- [1] Acharya, V. V., Gromb, D., & Yorulmazer, T. (2020). Imperfect Competition in the Interbank Market for Liquidity as a Rationale for Central Banking. Journal of Money, Credit and Banking, 52(2-3), 441-469.
- [2] Al-Shboul, M., & Moustafa, K. (2018). Foreign exchange rate risk management: New approach. Research in International Business and Finance, 46, 536-547.
- [3] Allen, F., Carletti, E., & Goldstein, I. (2019). The global risk demand for financial stability. Journal of the European Economic Association, 17(6), 1810-1856.