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Article

The Impact of Strategic Alliances on Organizational Performance: Evidence from Malawi's Commercial State-Owned Enterprises

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Abstract: This study examines the impact of strategic alliances on organizational performance in Malawi's commercial state-owned enterprises (SOEs). Using a descriptive survey design with data from 37 SOEs, the research investigates four types of strategic alliances: resource sharing, risk sharing, regulatory compliance, and cost efficiency. The findings reveal a strong positive correlation ($R=0.942$) between strategic alliances and organizational performance, with these partnerships explaining 88.7% of performance variation. Regulatory compliance-based alliances demonstrated the most substantial impact ($\beta=1.171$), followed by cost efficiency ($\beta=0.454$), risk sharing ($\beta=0.369$), and resource sharing alliances ($\beta=0.321$). The study concludes that strategic alliances represent a viable approach for revitalizing underperforming SOEs in Malawi, enhancing competitiveness, improving fiscal stability, and fostering sustainable growth, ultimately contributing to national socioeconomic advancement.

Keywords: Strategic alliances; state-owned enterprises; organizational performance; resource sharing; risk sharing; regulatory compliance; cost efficiency

Introduction

The contemporary global commercial landscape is undergoing swift transformation, with enterprises facing formidable competition and diverse environmental pressures affecting their operational efficacy across geographical regions. Whilst all business entities, irrespective of magnitude, proprietorship, or geographical situation, experience these environmental influences, commercially-oriented state-owned enterprises (SOEs) exhibit particular vulnerability. Their governmental proprietorship frequently impedes effective competition with wholly private organisations, as SOEs often manifest inflexible structures that compromise performance outcomes. Consequently, governmental bodies worldwide increasingly express concern regarding SOE efficiency and sustainability.

At the global level, SOEs encounter scrutiny concerning operational efficiency and productivity, largely attributable to bureaucratic encumbrances, competitive deficiencies, and political meddling. Numerous SOEs trail behind private sector counterparts in efficiency and innovation metrics due to obsolescent technological infrastructure, organisational rigidity, and insufficient performance incentivisation. Hence, SOE performance demonstrates considerable variability across indicators including profitability, revenue expansion, fiscal stability, and market presence. Although certain SOEs contribute advantageously to economic development, others confront fiscal challenges encompassing substantial indebtedness, liquidity constraints, and governmental bailout dependency. Notwithstanding these patterns, Chinese SOEs have exhibited comparative success over four decades, attributable to robust corporate governance frameworks, efficacious financing mechanisms, and corporate social responsibility initiatives.

Within the African context, commercial SOEs fulfil crucial economic development functions by generating employment opportunities, delivering essential services, and bolstering key industrial sectors. Nevertheless, numerous African SOEs face challenges including excessive debt, operational

inefficiencies, and governmental subsidy reliance. Governance frailties, political interference, corruption, and transparency deficiencies significantly undermine performance outcomes. Fiscal challenges, including liquidity constraints and unsustainable debt obligations, further exacerbate operational difficulties. Addressing these impediments necessitates implementation of sound fiscal management practices, revenue enhancement strategies, and operational cost reductions. In Ghana, for instance, SOEs play a vital role in public service provision yet continue to experience performance deterioration, necessitating urgent strategic interventions.

In Malawi, SOEs contribute substantially to economic advancement through provision of essential services, employment creation, and industrial support. Despite their significance, numerous commercial SOEs have underperformed, with many seeking governmental financial assistance. Reports indicate that the nation faces fiscal risks due to insolvent and underperforming SOEs, with approximately 18 such entities requiring Ksh. 382 billion over the forthcoming five-year period to achieve recovery. A notable exemplar is Malawi Airlines, which continues to register substantial financial losses despite implementing turnaround strategies.

To reinvigorate struggling commercial SOEs, strategic alliances (SAs) have emerged as a viable business approach. Given the increasingly competitive global business environment, organisations utilise SAs to enhance competitiveness, penetrate new markets, access critical competencies, and distribute risks and expenditures associated with large-scale product development. Identifying appropriate strategic alliance partners has become essential for organisations seeking long-term viability.

Research demonstrates a positive correlation between strategic alliances and organisational performance. The alliances between banking institutions and FinTech enterprises facilitate accelerated innovation whilst enabling FinTech firms to leverage banks' resources and market reach and provide emerging enterprises with essential financing, thereby enhancing performance outcomes. SAs improve small and medium-sized enterprise (SME) performance. Additionally, the alliances positively influence both financial and non-financial performance metrics within the textile industry.

Furthermore, backward, forward, and horizontal integration directly contributes to SME growth by expanding market reach and customer accessibility. Environmental, firm-specific, and partner-related factors can influence strategic alliance effectiveness. Within the banking sector, strategic partnerships assist commercial banks in expanding their customer base, diversifying product offerings, and enhancing profitability. The strategic alliances have contributed to market share growth within Malawi's commercial banking sector. Generally, whilst commercial SOEs face significant performance challenges globally, regionally, and locally, strategic alliances present opportunities to enhance competitiveness, improve fiscal stability, and foster long-term growth. Implementing effective governance structures, adopting innovative business strategies, and forming strategic alliances can assist commercial SOEs in navigating the complex global business environment and achieving sustainable success.

Organisational performance refers to the extent to which enterprises utilise resources to generate value. Traditionally, fiscal metrics such as profitability and revenue growth have been extensively employed to assess performance, particularly within manufacturing contexts. These financial measurements provide crucial insights into an organisation's fiscal health. However, scholars contend that financial indicators alone provide an incomplete representation of organisational performance. Non-financial metrics including market share, growth, and cost efficiency are equally important. Operational efficiency, for instance, represents a key performance measure that cannot be quantified solely through financial data. Consequently, comprehensive performance evaluation integrates both financial and non-financial indicators. This investigation adopts a dual approach, incorporating profitability, market share, growth, and cost efficiency to measure organisational performance.

SAs constitute formal partnerships between organisations aimed at achieving business objectives collaboratively rather than competitively. These alliances are frequently motivated by

diverse benefits but also present challenges. For strategic alliances to succeed, they must be well-structured, supported by strategic managers, and implemented within an environment of trust and supportive organisational culture. The motivations for establishing SAs are diverse. External motivations include regulatory requirements, industry policies, and competitive pressures, whilst internal factors involve acquiring both tangible and intangible resources such as expertise, financial capital, and human resources.

Benefits of SAs can be classified into three categories: firm-based, environmental, and partner-based. Firm-based motivations stem from an organisation's need to acquire resources, both material and immaterial, to sustain operations. Environmental-based motivations aim to reduce risks associated with market concentration, competitive pressures, and geographical limitations. Partner-based motivations focus on leveraging industry connections, enhancing reputation, and gaining access to new opportunities through collaboration.

This study follows the classification of strategic alliances, categorising them into four principal types based on benefits or underlying rationales: resource sharing, risk sharing, regulatory compliance, and cost efficiency. Resource-sharing alliances enable organisations to pool strategic resources, including knowledge, finances, and human capital, to enhance competitiveness. Risk-sharing alliances are formed to mitigate financial, operational, and global risks, ensuring business continuity in uncertain environments. Compliance-based alliances arise due to governmental regulations that necessitate collaborative operations to meet legal requirements. Lastly, cost-efficiency-based alliances focus on reducing operational expenditures by leveraging economies of scale, optimising production, and minimising expenses associated with business activities. Strategic alliances play a crucial role in improving business performance by fostering collaboration, resource optimisation, and risk mitigation. However, for these partnerships to be effective, organisations must align their objectives, maintain trust, and implement strategies that maximise shared benefits. By integrating financial and non-financial performance measures with strategic alliances, organisations can enhance their competitive advantage and ensure long-term sustainability.

Commercial SOEs in Malawi were established by the colonial administration to provide essential services beyond private sector capacity, including communication, transport, manufacturing, and trade facilitation. These enterprises were constituted through Parliamentary legislation under the State Corporation Act. Despite their intended role in economic development, certain SOEs have experienced financial difficulties, frequently relying on governmental financial support. In Malawi, SOEs serve both commercial and social objectives, including development in underdeveloped regions, provision of essential goods and services, and correction of market failures. They may be wholly or partially government-owned, with their functions determined by legal instruments including Parliamentary Acts, company laws, or executive orders. The regulatory framework governing SOEs consists of institutional, legislative, and regulatory guidelines applicable to public servants and entities. Similar to other business entities, the primary objective of commercial SOEs is wealth maximisation through cost reduction, increased production, or both approaches. SOEs are classified into commercial and non-commercial categories, with commercial SOEs prioritising profitability. Key commercial SOEs in Malawi include dealing with pipelines, power, media and energy. This investigation will specifically examine the role and performance of commercial SOEs.

Research Problem

While SOEs fulfill a pivotal function in Malawi's industrial advancement, employment provision, and economic enhancement, numerous commercial SOEs have encountered fiscal difficulties, with several requiring governmental financial intervention to maintain operations. Organisations such as Mumias Sugar Ltd, Sony Sugar Ltd, Malawi Railways, and Uchumi Supermarket PLC have exhibited suboptimal performance, exposing the nation to fiscal vulnerability. SAs are regarded as a potential methodology for revitalising underperforming SOEs. However, the degree to which Malawian SOEs have employed strategic alliances to enhance operational efficacy remains indeterminate.

Extant literature accentuates the function of SAs in organisational performance, albeit with constrained emphasis on SOEs. The banking institutions establish alliances with FinTech organisations to expedite innovation, whilst FinTech entities benefit from banking resources. Environmental and partner-based motivations can enhance performance, albeit within the manufacturing context. Similarly, banks form alliances to expand their clientele and augment profitability. Notwithstanding these findings, knowledge gaps persist. The preponderance of studies concentrate on SA typologies rather than motivations, are conducted within global contexts, and emphasise banks, FinTechs, and SMEs, with circumscribed research on SOEs. This investigation seeks to examine the impact of SAs on the performance of commercial SOEs in Malawi, addressing these lacunae in current literature.

The specific objectives of this research are to establish the effect of resource sharing based alliance on the performance of commercial state-owned Enterprises in Malawi; to examine the effect of risk sharing based alliance on the performance of commercial state-owned Enterprises in Malawi; to evaluate the effect of regulatory compliance-based alliance on the performance of commercial SOEs in Malawi; and to analyse the effect of cost efficiency-based alliance on the performance of commercial state-owned Enterprises in Malawi, this research is guided by the following Research Hypotheses:

H1: Resource sharing based alliance has no significant effect on the performance of state-owned Enterprises in Malawi.

H2: Risk sharing based alliance has a significant effect on the performance of state-owned Enterprises in Malawi.

H3: Regulatory compliance-based alliance has no significant effect on the performance of state-owned Enterprises in Malawi.

H4: Cost efficiency-based alliance has no significant effect on the performance of state-owned Enterprises in Malawi.

The investigative findings are valuable for senior management within the SOEs to comprehend the motivations underlying strategic alliance formation through analysis of both internal and external business environments. This understanding enables managers to align alliances with specific advantages such as growth, fiscal performance, and market presence. It additionally assists them in identifying appropriate partners capable of providing necessary resources to enhance performance and adapt to evolving conditions. Consequently, SOEs can improve their operations, contributing to national socioeconomic advancement by addressing unemployment and poverty. Furthermore, the investigation provides significant insights for researchers exploring the relationship between strategic alliances and organisational performance, particularly through public interest, resource dependency, and resource-based view theoretical frameworks. It serves as a valuable empirical literature source for future research by identifying knowledge gaps that can inform study topics and refine research problems. The findings are likewise beneficial for policymakers within governmental agencies and regulatory bodies such as the CMA, CBK, and parliament, assisting in policy formulation and evaluation of strategic alliances involving SOEs.

Literature Review

The theoretical literature review of this investigation is anchored on the Resource-Based View (RBV), Resource Dependency Theory (RDT), Public Interest Theory, and the Balanced Scorecard Model. These theories and models provide a robust foundation for understanding the relationship between strategic alliances, resource utilisation, regulatory compliance, and performance in SOEs. The Resource-Based View (RBV) Theory contends that an organisation's capacity to achieve and sustain competitive advantage depends on its ability to acquire and utilise valuable, rare, inimitable, and non-substitutable resources. These resources may be tangible, such as machinery and infrastructure, or intangible, such as brand reputation, knowledge, and expertise. Commercial SOEs can either develop resources internally or acquire them through strategic alliances with organisations possessing necessary competencies. For instance, knowledge sharing, market intelligence, and

innovation can be accessed through partnerships rather than through costly in-house development. This renders RBV relevant in explaining how resource-sharing alliances enhance organisational performance. Specifically, for SOEs with global operations, strategic alliances allow them to gain foreign market intelligence, which is crucial for expanding market reach. Thus, this theory underpins the independent variable of resource-sharing-based alliances.

The Resource Dependency Theory (RDT) elucidates the interdependence between organisations and their external environment. Firms rely on external resources controlled by other entities, making strategic alliances necessary for business survival and success. RDT assumes that organisations are dependent on external firms for critical resources, and their ability to access these resources determines their stability and performance. The power dynamics in such partnerships can create dependencies, uncertainties, and potential conflicts. However, trust, reciprocity, and commitment among strategic partners can mitigate opportunistic behaviour and strengthen partnerships, leading to improved resource access. For commercial SOEs, strategic alliances assist in acquiring resources such as technology, financial support, and expertise that they may not independently develop. This enhances their efficiency and competitiveness in a highly dynamic business environment.

The Public Interest Theory provides an alternative perspective to analyse the relationship between regulation and SOE performance. The theory suggests that market failures, often caused by monopolies and externalities, necessitate governmental intervention to ensure equitable resource allocation and societal well-being. Regulations are designed to correct market failures by enforcing policies that protect public interest. Public Interest Theory assumes that politicians and regulators act in the public's best interest and that regulatory measures enhance transparency, efficiency, and equity in business operations. However, critics, particularly from the Chicago School of Law and Economics, argue that market failures can often self-correct without governmental intervention, and in cases where regulation is necessary, private sector-led initiatives may provide superior solutions to government oversight. Additionally, when regulators are incompetent, corrupt, or influenced by special interests, regulation fails to achieve intended outcomes. Despite these criticisms, Public Interest Theory remains relevant in explaining compliance motives and regulatory impacts on SOE performance. In Malawi, various regulations have been enacted to govern state-owned enterprises, ensuring they operate transparently and serve the public good. The theory justifies why governments impose stringent regulatory standards on SOEs to ensure accountability and sustainability.

The Balanced Scorecard Model provides a comprehensive framework for measuring organisational performance. It translates strategic objectives into key performance indicators (KPIs) across four perspectives: financial, customer, internal business processes, and learning and growth. The financial perspective focuses on revenue growth, profitability, return on investment (ROI), cash flow, and shareholder value. The customer perspective evaluates customer satisfaction, loyalty, and retention, ensuring that the organisation meets customer needs effectively. Important metrics in this perspective include market share, customer satisfaction ratings, and retention rates. The internal business process perspective assesses process efficiency, innovation, quality, and operational effectiveness. Key metrics include cycle time, defect rates, productivity, and process efficiency. Lastly, the learning and growth perspective examines the organisation's capacity to innovate, develop talent, and sustain long-term performance. This involves employee satisfaction, turnover rates, training investments, and organisational culture. By integrating these four perspectives, the Balanced Scorecard Model provides SOEs with a structured approach to measuring and improving their performance. The model's holistic approach makes it relevant for assessing commercial SOEs' efficiency, strategic alignment, and long-term sustainability. The theoretical literature review integrates RBV, RDT, Public Interest Theory, and the Balanced Scorecard Model to provide a comprehensive framework for analysing SOE performance. RBV emphasises internal and external resource acquisition as a key driver of competitive advantage. RDT highlights the necessity of inter-firm resource dependencies and strategic alliances in ensuring access to critical resources. Public Interest Theory justifies government intervention in regulating SOEs to protect public interests and ensure optimal resource allocation. Lastly, the Balanced Scorecard Model offers a structured

approach to evaluating organisational performance across multiple dimensions. Together, these theories and models help in understanding the dynamics of strategic alliances, resource management, regulatory compliance, and performance improvement in commercial SOEs.

Empirical studies have extensively examined the relationship between SAs and organisational performance, with emphasis on resource sharing, risk sharing, regulatory compliance, and cost efficiency alliances. These studies provide insights into the motivations underlying SAs and their impact on various industries. Several studies highlight how firms engage in SAs to share resources and enhance growth. Backward, forward, and horizontal integration through strategic alliances led to sustainable growth by expanding market reach. Environmental, firm, and partner-based motives significantly influence organisational performance.

In the education sector, alliances between universities and industries, government-imposed penalties and subsidies promoted stability in collaborations. Partnerships between banks and FinTech firms reveal that the banks formed alliances to accelerate product innovation, while the FinTech firms sought financial resources, market intelligence, and regulatory assistance. These studies suggest that firms form alliances to leverage shared resources and market opportunities, ultimately enhancing performance.

Risk Sharing Based Alliance and Organisational Performance Risk-sharing alliances allow firms to mitigate uncertainties and enhance competitiveness. The firms form alliances to share risks, reduce costs, improve reputation, and enhance legitimacy. Similarly, in the banking sector, identifying that partner match and firm commitment significantly impact performance, while strategic orientation has a weaker influence. Alliances between Swedish FinTech firms and venture capitalists reveal that these collaborations helped FinTech firms gain legitimacy in competitive markets. The role of reputation is important in the internationalisation of emerging market firms. The firms with weaker reputations were more likely to pursue SAs as a strategy to enhance credibility in global markets. SAs serve as an essential mechanism for firms to manage risk, expand market access, and strengthen competitiveness.

Regulatory Compliance Alliance and Organisational Performance Firms also engage in strategic alliances to comply with regulatory requirements while maintaining competitiveness. Alliances between profit and nonprofit organisations in Bangladesh reveal that co-innovation was a key driver of strategic partnerships, helping firms navigate strict regulatory environments. The impact of government regulations on alliance formation is also important as that regulatory policies encourage SMEs to enter strategic alliances for environmental performance improvements.

SAs in Indonesia's medical equipment industry reveal that regulatory restrictions on foreign direct selling and the introduction of e-procurement systems prompted domestic and multinational firms to collaborate. Similarly, the marketing strategies in highly regulated Italian industries show that the firms engaged reputable partners to facilitate market entry in compliance-heavy sectors. These studies demonstrate that regulatory environments significantly influence alliance formation, enabling firms to navigate complex compliance requirements while sustaining growth.

Cost efficiency is another critical driver of strategic alliances. In courier firms in Malawi, resource, cost, and relational collaborations has a direct positive impact on performance. Similarly, The partnerships among Swedish firms reveal that the smaller firms were more likely to enter alliances with larger firms to reduce costs and enhance learning.

SAs among technology SMEs in Portugal, show that market, learning, and efficiency motives directly influence human capital development facilitating knowledge sharing and innovation and leading to higher patent output and increased organisational performance. Among Fortune 500 companies, non-equity alliances generated immediate value, whereas equity alliances produced delayed but sustained advantages. Similarly, SAs between manufacturing and knowledge-intensive firms reveal that these they enhance service innovation, knowledge sharing and risk management. Overall, empirical studies demonstrate that strategic alliances serve as a crucial mechanism for firms seeking to improve performance through resource sharing, risk mitigation, regulatory compliance, and cost efficiency. By leveraging strategic partnerships, firms can access new markets, share

knowledge, enhance innovation, and optimise resource utilisation, ultimately strengthening their competitive advantage.

Methods and Measures

The research employed a descriptive survey design to examine the relationship between strategic alliances and organisational performance in commercial SOEs. This design was selected as it allows for data collection in a natural setting without influencing variable interactions. It additionally facilitated causal effect analysis between explanatory and outcome variables using quantitative data.

The target population comprised 35 commercial SOEs in Malawi, as identified by the Treasury and Planning Department. The investigation focused on strategic-level managers who had held their positions for at least one year, ensuring they possessed adequate experience in strategic alliances and organisational performance. These managers provided the unit of observation, while the firms themselves served as the unit of analysis.

Since the population was relatively small, the investigation adopted a census approach, meaning all 46 SOEs were included. Purposive sampling was used to select one senior manager from each firm, generating 46 respondents. This ensured that only individuals with comprehensive knowledge of strategic alliances and performance participated.

Data was collected using a structured questionnaire, which consisted of different sections: Section A gathered firm-specific information, Section B focused on strategic alliance motives, and Section C addressed organisational performance. The questionnaires were self-administered to the selected senior managers.

A pilot study was conducted with five senior managers from five different SOEs, representing 10% of the sample. This process helped assess the validity and reliability of the questionnaire before its final use. Companies included in the pilot study were excluded from the main analysis to prevent data contamination.

The validity of a research instrument ensures it effectively gathers data to test hypotheses and achieve study objectives. In this investigation, validity was assessed through expert consultation for content validity, pilot questionnaires for face validity, and factor analysis for construct validity. A high correlation among items measuring the same construct indicated strong construct validity. Reliability, which ensures consistent measurement, was tested using Cronbach's alpha, with a threshold of 0.7 for internal consistency.

For data collection, primary data was gathered through questionnaires administered to senior managers of state-owned corporations. The questionnaires were distributed physically and digitally through Google Forms, with respondents given a week to complete them. Secondary data was collected from annual reports and websites.

Data analysis involved coding, cleaning, and entry into SPSS version 23. Descriptive statistics such as mean, standard deviation, and coefficient of variation were utilised. The investigation also applied the multivariate Ordinary Least Squares regression model and Pearson correlation to examine the relationship between organisational performance and strategic partnership motivations. This approach ensured a comprehensive analysis of the data.

Results and Discussio

The research issued 41 survey questionnaires to various commercial state-owned Enterprises in Malawi of which 37 were received back having been adequately completed and suitable for further analysis. The response rate was therefore 90.2%.

Table 1. Response Rate.

Survey Questionnaires	Count	Percentage (%)
Adequately filled	37	90.2

Non-responses	4	9.8
Total issued	41	100.0

4.2. Descriptive Statistics

The research assessed diverse strategic alliances and their influence on commercial SOEs employing a 5-point Likert scale. The outcomes were analysed through percentages, mean values, and standard deviations, providing insights into resource-sharing, risk-sharing, regulatory compliance, cost efficiency, and organisational performance. The analysis demonstrated that 64.8% of commercial SOEs established strategic alliances to benefit from market intelligence provided by their associates (M=3.54).

58% of participants concurred that these partnerships facilitated access to financial resources (M=3.23), corresponding with the view that FinTech organisations allied with banks to leverage financial resources. Moreover, 85% of SOEs benefited from their partners' technological resources (M=4.32), supporting findings that banking institutions collaborate with FinTech firms for innovation purposes. Additionally, 46% of SOEs reported utilising human capital from their partners (M=2.85), whilst the same proportion acknowledged knowledge-sharing advantages (M=3.31), reinforcing the view that knowledge-sharing enhances market presence. A substantial 95% of SOEs recognised the significance of their partners' research and development assets (M=4.79), illustrating the value of these collaborative arrangements.

Strategic alliances fulfilled a critical function in risk mitigation for SOEs. 62.3% of SOEs indicated that these alliances assisted them in sharing financial risks (M=3.83). Furthermore, 89.3% of SOEs reported that alliances helped distribute operational risks (M=4.49), in concordance with the view that alliances diminish risks. Additionally, 96% of SOEs formed alliances to ameliorate reputational risks when penetrating new markets (M=4.69), a finding supporting the view that the reputational challenges encountered by firms in foreign markets. Moreover, 83.7% of SOEs utilised alliances to mitigate political risks in cross-border operations (M=4.19), and 97.3% relied on alliances to avoid regulatory risks in emergent markets (M=4.59). These findings align with the view that the regulatory restrictions prompt firms to establish SAs for market entry purposes.

The study discovered that regulatory requirements strongly influenced strategic alliance formation. Approximately 89.1% of SOEs reported that domestic legislation compelled them to form alliances (M=4.37), consistent with the view that the alliances foster co-innovation in highly regulated markets. Additionally, 59.4% of SOEs noted that governmental policies led to alliance formation (M=3.54), aligning with the view that governmental regulations promote strategic alliances. Only 13.5% of SOEs indicated that regulatory frameworks from market regulators motivated alliance formation (M=1.86), supporting the view that the stringent penalties and subsidies drive alliance stability. Furthermore, 48.6% of SOEs noted that international laws influenced their decision to form alliances (M=3.32). Notably, all SOEs in the investigation indicated that regulations by foreign governments necessitated strategic alliance formation when expanding operations abroad.

Cost considerations constituted a major driver of alliances among SOEs. Approximately 89.2% of SOEs reported that strategic alliances reduced research and development expenditure (M=4.57). All respondents concurred that they entered alliances to share operational costs (M=4.84), highlighting the stabilising effects of cost-sharing on alliance structures. Furthermore, 97.3% of SOEs benefited from synergies resulting from collaborations (M=4.86), aligning with the view that the partnerships provide learning and synergistic advantages. However, only 18.9% of SOEs reported that alliances helped lower marketing costs (M=1.95). Lastly, 78.4% of SOEs cited that alliances reduced technology acquisition costs (M=4.24), corroborating the view that the technology firms tend to establish alliances to enhance patent output.

As for SOEs' organisational performance, the findings indicated that 64.9% of SOEs reported profitability between 1% and 10%, whilst 29.7% had profits exceeding 10%. Additionally, 81.1% of SOEs registered a reduction in average operational costs by less than 10%, with others reporting no change or an increase. Furthermore, 67.6% of SOEs experienced a market share increase of at least

1%, whilst others recorded either a decline or no change. Lastly, 91% of SOEs reported business growth, with a small percentage noting stagnation or decline. The investigation highlighted the importance of strategic alliances in enhancing resource sharing, risk mitigation, regulatory compliance, cost efficiency, and overall organisational performance for commercial SOEs. These alliances facilitated access to financial, technological, and human resources, reduced operational risks, ensured compliance with regulations, minimised costs, and contributed to profitability, market share growth, and business expansion. The findings align with extant literature emphasising the strategic significance of alliances in fostering business success.

Multicollinearity was assessed utilising Variance Inflation Factors (VIF), with values below 10 indicating absence of multicollinearity. If present, techniques such as centring, scaling, or logarithmic transformation would be applied. The results confirmed no collinearity issues, validating the application of OLS regression.

Table 2. VIF Test for Multicollinearity .

Model	Collinearity Statistics	
	Tolerance	VIF
Resource sharing based alliance	.345	2.895
Risk sharing Based alliance	.305	3.278
Cost Efficiency based alliance	.470	2.126
Regulatory compliance-based alliance	.309	3.236

The investigation conducted normality, homoscedasticity, and linearity examinations to validate regression assumptions. A histogram plot was employed to assess normality, ensuring residuals formed a bell-shaped distribution within the normal probability curve. The findings confirmed no significant deviation from normality. Homoscedasticity was evaluated utilising a scatter plot of residuals against predicted values or independent variables. The results indicated an equitable distribution of residuals along the line of best fit, confirming the absence of heteroscedasticity. If heteroscedasticity were present, robust standard errors would have been implemented. Linearity was assessed through the Pearson Correlation Coefficient in the model summary, where a coefficient exceeding 0.7 indicates a robust linear relationship. The investigation identified an overall R value of 0.942, confirming a strong linear association between predictors and the outcome variable. These examinations ensured the reliability and validity of the regression model.

4.4 Correlation Analysis The investigation employed the bivariate Pearson correlation coefficient to evaluate the relationship between predictors and the result variable. A coefficient of 1 signifies a perfect association, whilst 0 indicates no relationship. A modest positive correlation was identified between cost efficiency-based alliance and organisational performance ($r = .290$), whereas regulatory compliance exhibited a strong positive correlation ($r = .825$).

Table 3. Bivariate Pearson Correlation.

		ReSA	RiSA	CEA	RCA	OP
ReSA	Pearson Correlation	1	.782**	.441**	.634**	.657**
	Sig. (2-tailed)		.000	.006	.000	.000
	N	37	37	37	37	37
RiSA	Pearson Correlation	.782**	1	.316	.661**	.798**
	Sig. (2-tailed)	.000		.057	.000	.000
	N	37	37	37	37	37
CEA	Pearson Correlation	.441**	.316	1	.687**	.290
	Sig. (2-tailed)	.006	.057		.000	.082
	N	37	37	37	37	37
RCA	Pearson Correlation	.634**	.661**	.687**	1	.825**
	Sig. (2-tailed)	.000	.000	.000		.000

	N	37	37	37	37	37
	Pearson Correlation	.657**	.798**	.290	.825**	1
OP	Sig. (2-tailed)	.000	.000	.082	.000	
	N	37	37	37	37	37

** Correlation is significant at the 0.01 level (2-tailed).

The investigation examined the influence of strategic alliances—sharing, regulatory, and cost-efficiency based—on Malawin state-owned enterprise performance. Regression analysis revealed a robust positive correlation ($R=.942$). The model, encompassing these alliance typologies, explicated 88.7% of the performance variation ($R^2=.887$). The remaining 11.3% is attributed to unexamined factors outside the investigation's purview, indicating a significant influence of strategic alliances on SOE performance.

The ANOVA outcomes ($F=63.043$, $p<.001$) demonstrate a significant impact of strategic alliances on Malawin commercial SOE performance. Resource sharing, risk sharing, cost efficiency, and regulatory compliance alliances collectively elucidate this performance, as the calculated F-statistic surpasses the critical value ($F_{crit}=2.69$).

Table 5. Analysis of Variance.

	Sum of Squares	df	Mean Square	F	Sig.
Regression	28.675	4	7.169	63.043	.000 ^b
Residual	3.639	32	.114		
Total	32.314	36			

a. Dependent Variable: Organizational Performance

b. Predictors: (Constant), ReSA= Resource Sharing based alliance, RiSA = Risk sharing based alliance, CEA = Cost efficiency-based alliance, RCA= Regulatory Compliance based alliance

Discussion

The investigation scrutinised the influence of strategic alliances on commercial SOEs performance in Malawi, concentrating on resource sharing, risk sharing, cost efficiency, and regulatory compliance dimensions. Regression analyses demonstrated substantial positive effects across all four alliance typologies. Resource sharing alliances enhanced SOE performance by 0.321 units, consistent with evidence that resource-based collaborations facilitate market penetration and product innovation, as exemplified by NCBA bank's strategic partnerships. Risk sharing alliances manifested robust positive influence, yielding a 0.369-unit improvement in performance, reflecting the merit of distributed risk in augmenting market presence and legitimacy, consonant with research on environmental and market-based alliances. Regulatory compliance alliances exhibited the most pronounced impact, elevating performance by 1.171 units, underscoring the significance of strategic partnerships in traversing intricate regulatory landscapes and fostering co-innovation, particularly within stringently regulated sectors such as healthcare. Finally, cost efficiency alliances contributed a 0.454-unit improvement in SOE performance, affirming that expenditure reduction and learning opportunities constitute primary motivations for SOEs establishing strategic partnerships, aligning with studies on courier organisations and technology-oriented enterprises. The investigation concluded that strategic alliances significantly bolster commercial SOE performance in Malawi, with each alliance typology fulfilling a distinct yet pivotal function in advancing growth and efficiency.

Conclusion

The study demonstrates that strategic alliances significantly enhance the performance of commercial SOEs in Malawi. The investigation examined four types of alliances—resource sharing, risk sharing, regulatory compliance, and cost efficiency—and found that each contributes distinctly to organizational performance. Regulatory compliance-based alliances showed the most substantial

impact, increasing performance by 1.171 units, highlighting the importance of partnerships in navigating complex regulatory environments. Risk sharing alliances improved performance by 0.369 units, demonstrating the value of distributed risk in enhancing market presence and legitimacy. Cost efficiency alliances contributed 0.454 units to performance improvement, confirming that expense reduction motivates SOEs to form strategic partnerships. Resource sharing alliances enhanced performance by 0.321 units, facilitating market penetration and innovation.

The findings align with existing literature on strategic alliances, confirming their crucial role in enhancing operational efficiency, expanding market reach, and fostering innovation for SOEs facing significant challenges in competitive environments. The strong correlation ($R=.942$) between strategic alliances and performance indicates that these partnerships explain 88.7% of performance variation, with regulatory compliance being particularly influential.

These results carry important implications for SOE management, policymakers, and researchers. For managers, the study underscores the importance of forming strategic partnerships aligned with specific advantages such as growth, fiscal performance, and market presence. For policymakers, it provides insights for developing frameworks that facilitate effective alliances. For researchers, it contributes to the theoretical understanding of how resource-based view, resource dependency, and public interest theories explain SOE performance.

In conclusion, strategic alliances represent a viable approach for revitalizing underperforming SOEs in Malawi. By strategically leveraging partnerships, these organizations can enhance their competitiveness, improve fiscal stability, and foster sustainable growth, ultimately contributing to national socioeconomic advancement.

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