# THE EFFECT OF BUDGET CONTROL ON FINANCIAL PERFORMANCE AMONG STATE-OWNED ENTERPRISES: TOWARDS ENHANCING A BUDGET MANAGEMENT CONTROL POLICY

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## ABSTRACT

*Rwanda's SOEs are underperforming. 60% are losing since 2016. The Rwandan government owns 49%, 95%, and 49% of KTRWANDA NETWORKS, MARAPHONE RWANDA, and AFRICA OLLEH SER-VICES LTD, which have lost money over the past five years. The study investigated Rwandan SOEs' financial performance and budget control. This study defines budget control as planning, control, implementation, and review. Financial performance includes liquidity, profitability, and solvency. The study examined seven goals. The descriptive study uses qualitative and quantitative methodologies. Correlational research examined the relationship between budget control and financial performance. This survey polled 106 employees of seven SOEs. The questionnaire was the study's major data collection tool. Secondary data: financial report. Frequency, percentage, mean, and inferential statistics Regression and correlation analyzed data. Budget planning was high, averaging 3.75. Budget implementation is high overall, averaging 3.78. The budget review is high, averaging 3.67. Companies had high liquidity, averaging 3.66. Profitability has been moderate during the past five years, averaging 2.96. Solvency was high, averaging 3.59. Budget control and financial performance have a 0.384 association and a P-value of 0.000. Multiple regressions demonstrated budget control contributes 22% to financial performance. Budgeting control issues include unexpected market, cash flow constraints, over-spending against intended, Rigid Decision-Making, Lack of Trained and Skilled Labor, No Budget Lines or Budget Control, Limited Cash, Unbudgeted activity, Budget violations, Insufficient funds to cover budgeted costs, Government priorities, commodity price fluctuations, and cash inflation cause unplanned activity. Lack of contemporary technology, high expenses, and low income, lack of a core system to oversee all finance modules and Accuracy and timeliness of monthly management reports, lack of employee ownership of finance performance, a recovery that may take longer than projected, risks connected with global inflation, cost of importation, poor marketing, and reliance on public tenders. Good investment analysis of badly managed subsidiaries. Management should enhance company profitability from moderate to high. Management should increase budget control's 22% impact on financial performance. Management should investigate why their budget planning is not improving financial performance, as expected.*

*Keywords: Budget Control, Financial performance, State Owned Enterprises, Rwanda*

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## INTRODUCTION

Today's businesses are more competitive and dynamic in their pursuit of financial success. A company's finances determine its survival. Non-profits may have going concern concerns. Managing revenues and expenses and monetizing production elements impact a company's financial performance. This illustrates that corporate management can profit by utilizing all their resources and evaluating the association between sales and costs (OECD, 2014).

Profit, value contributed, income, fees, budgets, costs, stock market indicators (like stock prices), and autonomy affect financial performance (Krulicky & Horak, 2021). Business executives, stockholders, and other stakeholders support an organization's financial success since it influences its existence, well-being, and survival. Management can increase performance by implementing effective practices that generate income and control costs, mindful of variables and processes. However, it entails a business setting a budget and frequently comparing actual expenditures to it to determine if changes are needed. Course (Maisharoh, 2020).

CEOs can be proactive in producing revenue and the money needed to sustain it, as a company's financial performance depends on both the amount and extent of revenue. We neglect costs. Companies may boost asset turnover by generating higher returns as profit margins erode. Managers maximize asset turnover to generate revenue. Management must keep the organization financially stable to grow and survive. Management must grow income and cut costs to make money (Vovchenko et al., 2019).

Strategic management is essential for long-term business success. Strategic management requires a reliable management accounting system. Organizational management accounting methods determine its quality. Thus, management methods help companies allocate resources to achieve their strategic goals. Marginal costing and budgeting help (Raval & Joshi, 2022). Budgeting lets you evaluate goals, report performance, and compare to goals. Financial planning requires budget control. Budgeting forecasts income and expenses. Budgetary control helps organizations

secure their budgets. Public and commercial sectors employ implementation and assessment management (Raghunandan et al., 2012).

Budget control helps managers plan and use resources rationally to meet financial goals (Isaac et al., 2015). Budget management improves public higher education institutions' performance. Many managers focus on daily tasks without financial control. Budgeting allows for resource allocation to the most productive areas of the company (Knardal & Bjørnenak, 2020).

The research is based on three theories: Budget Control Theory, Goal Setting Theory, and Management Control Theory.

The conceptual framework contains two variables: the independent variable which is Budget control and the financial performance which is the financial performance.
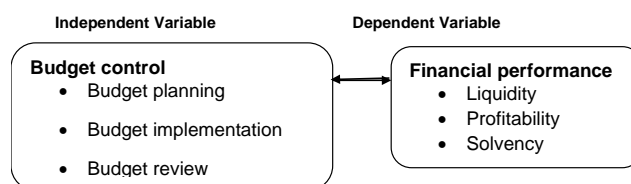


*Figure 1: Conceptual framework*

## Hypotheses

Ho: There is no significant effect of budget control on the financial performance of State-Owned Enterprises in Rwanda.

$H_1$: There is a significant effect of budget control on the financial performance of State-Owned Enterprises in Rwanda.

## OBJECTIVES OF THE STUDY

This study assessed five objectives:

1. To establish the effect of budget planning on the financial performance of state-owned enterprises in Rwanda.
2. To determine the effect of budget implementation on the financial performance of state-owned enterprises in Rwanda.

3. To evaluate the effect of budget review on the financial performance of state-owned enterprises in Rwanda.
4. To determine if there is a significant relationship between budgetary control and financial performance in terms of liquidity, profitability, and solvency.
5. To identify the challenges experienced by the respondents in budgeting control.

## METHODOLOGY

*Research Design.* This descriptive study is quantitative and qualitative. It describes budgetary control in state-owned enterprise management and financial performance utilizing quantitative and qualitative data. Budgetary control was an independent variable and financial performance was a dependent variable in this correlation research.

*Method of Research.* The researcher collected primary data using questionnaires. Primary data collection relies on questionnaires. Closed, open, and mixed questionnaires are used (Kabir S.M.S, 2016). Closed questions restrict answers. Closed items require respondents to choose from a list. Excel and SPSS can examine their quantitative data. Open-ended questions let respondents speak freely. Open-ended inquiries require free-form responses. Free-form items require qualitative analysis such as classification, coding, and finding patterns and themes (Linnebrrg & Korsgaard, 2019).

*Population, sample size, and sampling technique.* Populations require specific data. The populace must share at least one of her interests. Seven of his SOEs in transportation, real estate and construction, agro-processing, digitization, manufacturing, and Rwanda's sovereign wealth fund, Agaciro Development Fund, were studied. Using focused sampling, the researcher selected seven SOEs, one for each sector. (Asiamsah N, 2017) The target sample is a zero-probability sample based on population characteristics and research objectives.

*Research Instrument.* Questionnaires were used by the researchers to collect the necessary data. Managers of selected SOEs were given a questionnaire. The questionnaire was divided into three parts: respondent demographics, budget control, and financial performance.

*Likert Scale.* To qualify responses on a rating scale, use a 5-point scale Likert scaling to measure the frequency of occurrence of differences recognition was used. Each statement has 5 responses, ranked according to frequency, from 5 meaning "strongly agree/very good" to 1 meaning "disagree/very bad". Respondents rated each perceived item by ticking one of five possible responses or responses. The score was therefore the sum of the weights of the checked answers. Desk audits were conducted by reviewing existing documents such as financial reports to collect secondary data (Oyebode, 2018).

*Data Gathering Procedure.* The researchers got a letter of recommendation from the Faculty of Business Administration. The researcher submitted a letter to her SOE administrator for permission to collect the data. The questionnaire was self-completed. This means that respondents answered the question individually. Researchers used the Google form, where a link to a survey was sent to respondents. A completed questionnaire was submitted, and the researchers received the data in the dataset. This method has the advantage of being the least expensive and having the highest response rate (Kabir S.M.S, 2016).

Statistical treatment of Data. SPSS was used to process, code, and analyze the data after it was downloaded from the dataset. Because of its popularity, SPSS is used in both academia and business, and it is the most widely used package of its kind (Ayyanar & Nagaiah, 2016). To determine the level of budgetary control and the performance of state-owned enterprises, respondents were profiled using frequencies and percentages, as well as mean distributions. The weighted average was interpreted using Likert scales ranging from 1 to 5.

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**RESULTS AND DISCUSSION**

### 1. Profile of Respondents

The following criteria were used to select respondents for this current survey: full-time company employees; all participants must have at least one year of experience and be a part of the budget control process and policy implementation team.

**Table 1**
*Age of the Respondents*

| Age | F | % |
|---|---|---|
| 25 years old and below | 5 | 5 |
| 26 – 34 years old | 37 | 35 |
| 35 – 44 years old | 39 | 37 |
| 45 – 54 years old | 24 | 23 |
| 55 years and above | 1 | .9 |
| **Total** | **106** | **100.0** |

Age-based respondent descriptors are included in Table 1. 37% were between 35 and 44, 35% were between 26 and 34, and 23% were between 45 and 54. The majority of employees are 26–54 years old.

**Table 1**
*Gender of the Respondents*

| Sex | F | % |
|---|---|---|
| Male | 66 | 62 |
| Female | 40 | 38 |
| **Total** | **106** | **100.0** |

Table 2 displays responder sex descriptors. 62% of respondents were male and 38% were female. Male responders predominated.

**Table 2**
*Education of the respondents*

| Education Level | f | % |
|---|---|---|
| High school graduate | 9 | 9 |
| College level | 2 | 2 |
| College Graduate | 65 | 61 |
| Master's Degree Graduate | 30 | 28 |
| **Total** | **106** | **100.0** |

Table 3 shows respondent education level frequency and percentage distribution. 61% have

a college degree and 28% have a master's. Many respondents have college degrees.

**Table 4**
*Company Employment*

| Company | f | % |
|---|---|---|
| RITCO LTD | 21 | 20 |
| AgDF | 18 | 17 |
| BSC | 10 | 9 |
| KINAZI CASSAVA PLANT | 12 | 11 |
| PRIME ECONOMIC ZONE (PEZ) | 12 | 11 |
| RPC LTD | 9 | 9 |
| GASABO 3D (G3D) | 24 | 23 |
| **Total** | **106** | **100.0** |

Table 4 shows company respondent frequency and proportion. The responders are from seven companies: RITCO LTD (20%), AgDF (17.0%), BSC (9%), KINAZI CASSAVA PLANT and PRIME ECONOMIC ZONE (PEZ) (11%), RPC LTD (9%), and GASABO 3D (G3D) (23%).

**Table 3**
*Department*

| Department | f | % |
|---|---|---|
| Finance | 34 | 32 |
| Human resources, administration & Procurement | 27 | 25 |
| Risk &Audit | 8 | 8 |
| Marketing & Sales | 8 | 8 |
| CEO | 6 | 6 |
| Corporate Services | 1 | 1 |
| Investment department | 6 | 6 |
| Legal Department | 1 | 1 |
| Operations | 3 | 3 |
| Production | 6 | 6 |
| Technical department | 6 | 6 |
| **Total** | **106** | **100.00** |

Table 5 shows departmental response rates. Respondents work in several departments. Finance (32%), HR, admin, and procurement (25%).

**2. Level of Budget Control in SOEs in Rwanda**

The level of Budget control was assessed using Budget planning, budget implementation, and Budget review.

**2.1. Assessment of the level of Budgeting planning**

**Table 4**
*Level of Budget planning*

| Assertions | Mean | Std Dev. | Interpretation |
|---|---|---|---|
| The company has an operating committee | 3.47 | 0.95 | High level |
| In the preparation of the Budget, all managements levels are involved | 3.97 | 0.95 | High level |
| In the preparation of the budget, individuals on all levels of the organization are recognized as members of the team, whose views and judgment are valued by top management | 3.69 | 1.02 | High level |
| During budget planning result targets are clear | 3.88 | 0.88 | High level |
| **Average** | **3.75** | **0.95** | **High level** |

Findings from Table 6 show that the company has good operating budget committees with a mean of 3.47, the involvement of the management in the preparation of a budget was at a high level with a mean of 3.97, the individual's views and judgment are valued by top management at a high level with the mean of 3.69. During budget planning, result targets are clear at a high level with a mean of 3.88. In general, the level of budget planning was high with a mean of 3.75.

Budget planning serves as the foundation for budget implementation. As a result, there is a strong correlation between budget planning and a company's ability to achieve its goals, including financial performance. According to the findings of

this study, the SECs have incorporated the requirements into their budget planning process.

**Table 5**
*The type of budget used by the companies*

| Types of budgets used | F | % |
|---|---|---|
| Fixed budgeting | 58 | 55 |
| Flexible budgeting | 34 | 32 |
| Incremental budgeting or zero-based budgeting | 14 | 13 |
| **Total** | **106** | **100.0** |

According to Table 7, 55% of the companies used fixed budgeting, 32% used flexible budgeting, and 13% used incremental budgeting or zero-based budgeting. The fact that the majority of people use fixed budgeting is a challenge, and it is not good. It does not allow for any changes in spending due to changes in projected conditions and activity. Fixed budgets are created well in advance. This budget is useless because conditions are constantly changing and cannot be expected to remain stable.

**2.2. Assessment of the Level of Budget Implementation**

**Table 6**
*Level of Budget Implementation*

| Assertions | Mean | Std.Dev. | Interpretation |
|---|---|---|---|
| The company harmonizes the budgets of various departments | 3.95 | 0.735 | High level |
| The Finance Office works closely with Senior Management and departmental heads | 3.76 | 1.074 | High level |
| The budgetary process communicates to staff what is expected of them as it allows for a consensus of ideas, strategies, and direction | 3.83 | 0.798 | High level |
| Within the company, there is some level of interdependence between departments and activities considered in the budget | 3.84 | 0.719 | High level |
| The company frequently publishes information on actual revenues and expenditures during the accounting year | 3.53 | 1.025 | High level |
| **Average** | **3.78** | **0.87** | **High level** |

Table 8 shows that companies have a high level of budget alignment across departments, with a mean of 3.95. With a mean of 3.76, the finance office collaborates closely with Senior Management and department heads. With a mean of 3.83, the budgetary process communicates to staff what is expected of them at a high level. With a mean of 3.84, the level of interdependence between departments and activities considered in

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the budget was high. The company publishes information on actual revenues and expenditures at a high level regularly, with a mean of 3.53. With a mean of 3.78, the level of budget implementation is generally high.

## 2.3. Assessment of the level of budget review

To assess the level of budget review, the researcher assessed how many times the budget is reviewed as it is presented in Table 9.

**Table 7**

*How often is your budget reviewed*

| Company | How often is the budget reviewed | | | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Annually | | Biannually | | Quarterly | | None | | | |
| | F | % | F | % | F | % | F | % | F | % |
| RITCO LTD | 0 | 0 | 21 | 100 | 0 | 0 | 0 | 0 | 21 | 100 |
| AgDF | 0 | 0 | 18 | 100 | 0 | 0 | 0 | 0 | 18 | 100 |
| BSC | 0 | 0 | 10 | 100 | 0 | 0 | 0 | 0 | 10 | 100 |
| KINAZI CASSAVA PLANT | 0 | 0 | 12 | 100 | 3 | 3 | 0 | 3 | 12 | 100 |
| PRIME ECONOMIC ZONE (PEZ) | 0 | 0 | 12 | 100 | 0 | 0 | 0 | 0 | 12 | 100 |
| RPC LTD | 0 | 0 | 9 | 100 | 0 | 0 | 0 | 0 | 9 | 100 |
| GASABO 3D (G3D) | 0 | 0 | 24 | 100 | 0 | 0 | 0 | 0 | 24 | 100 |
| Total | 0 | 0 | 106 | 100 | 0 | 0 | 0 | 0 | 106 | 100 |

The finding from Table 9 shows that the budget is reviewed twice a year for all the assessed companies. The implication of this is that biannual budget systems ems used for all companies.

According to Caldwell M (2021), the total budget should be assessed at least once a year. Preparing this type of budget review allows the management to prioritize spending so that they can reach long-term financial goals. As the budgets of all companies are reviewed twice, we can conclude that the companies are on the good trucks.

**Table 8**

*Level of budget review*

| Assertions | Mean | Std. Dev | Interpretation |
|---|---|---|---|
| The company has budget policies that help in monitoring budget spending limits | 3.40 | 0.801 | Moderate |
| The company periodically prepares reports for budget performance evaluation | 3.72 | 0.765 | High level |
| At end of the budget cycle, the company compares actual and budgeted performance and Tabulates variances | 3.90 | 0.839 | High level |
| The company takes corrective action to address adverse variances reported | 3.64 | 0.720 | High level |
| **Average** | **3.67** | **0.78** | **High level** |

Table 10 revealed that budget policies that aid in the monitoring of budget spending limits are used at a moderate level, with a mean of 3.40. Companies prepare reports regularly for budget performance evaluation at a high level, with a

mean of 3.72. The company compares actual and budgeted performance at the end of the budget cycle and tabulates variances at a high level with a mean of 3.90. Corrective actions are taken by the companies to address adverse variances reported at a high level with a mean of 3.64. The overall level of budget review is high, with a mean of 3.67.

Based on the results, the companies have attempted to implement conditions that contribute to better budget revue performance, such as setting budget policies that aid in monitoring, periodically preparing reports (twice annually), comparing actual and budgeted performance, and taking corrective action to address adverse variances reported. This is beneficial because, prior to budget preparation, institutions are generally required to review the previous year's performance and conduct consultations at all levels of management. These activities should result in financial performance.

## 3. Level of financial performance of SOEs in Rwanda

To assess the level of financial performance, the researcher used three indicators: liquidity, profitability, and solvency.

### 3.1. Assessments of the level of Liquidity

We used five assertions to assess liquidity. Table 4.11 summarizes the findings.

**Table 9**

*Level of liquidity*

| Assertions | Mean | Std. Dev | Interpretation |
|---|---|---|---|
| The companies' current assets are more than the current liabilities in the last five years | 3.71 | 0.91 | High level |
| The companies were able to meet their everyday cash obligation in the last five years | 3.67 | 0.88 | High level |
| The cash flow of the company met the company's financial obligations in the last five years | 3.69 | 0.82 | High level |
| The current Ratios and quick ratios were sufficient in the last five years | 3.55 | 0.82 | High level |
| The companies are financially healthy and worthy of their investment | 3.68 | 0.87 | High level |
| **Average** | **3.66** | **0.86** | **High level** |

Table 11 shows that the companies' current assets have exceeded current liabilities at a high level in the last five years, averaging 3.71. With a mean of 3.69, organizations met their daily

financial responsibilities well in the past five years. With a mean of 3.55, current and quick ratios were high over the past five years. With a mean of 3.68, companies were financially strong and worth investing in over the past five years. Companies had high liquidity, averaging 3.66.

We calculated the three companies' liquidity ratios, such as the current ratio and quick ratio, using their financial statements. The table shows the results:

**Table 10**

*Liquidity Ratios of Prime Economic Zone*

| Ratios | 2021 | 2020 |
|---|---|---|
| Current ratio | 1.17 | 1 |
| Quick ratio | 1.17 | 1 |

Returning to Prime Economic Zone, the current ratio was 1.17 in 2021, up from 1 in 2020. These numbers should be higher than one, indicating a major company issue. 2020's fast ratio was 1; 2021's was 1.17. These numbers demonstrate the company's serious issue.

**Table 11**

*Liquidity ratios of Kinazi Cassava Plant Limited*

| Ratios | 2021 | 2020 |
|---|---|---|
| Current ratio | 2.37 | 2.72 |
| Quick ratio | 1.64 | 2.50 |

Table 13 reveals Kinazi Cassava Plant Limited's 2020 current ratio was 2.72 and 2021's 2.37. The quick ratio was 1.64 in 2021 and 2.5 in 2020.

The liquidity ratio indicates if a debtor can pay off short-term debt with cash on hand or needs to raise more capital. The liquidity ratio influences corporate credibility and credit rating. Bankruptcy results from repeated short-term liability failures. Thus, this ratio affects firm credit ratings and financial stability. That corporation can pay off short-term loans better if its liquidity ratio is high.

Based on the aforementioned, the corporation paid its existing liability using its current assets. Kinazi Cassava Plant Limited did well.

**Table 12**

*Liquidity ratios of RITCO Ltd*

| Ratios | 2021 | 2020 |
|---|---|---|
| Current ratio | 1.67 | 0.12 |
| Quick ratio | 1.24 | 0.06 |

Table 14 shows RITCO Ltd's 2021 current ratio was 1.67, up from 0.12 in 2020. In 2020, the Quick ratio was 0.06; in 2021, 1.24. This data is insufficient for current and quick ratios. present assets couldn't cover the company's present liability. Disturbing data. Liquidity is the key input needed to run a business daily. Businesses require liquidity. Liquidity indicates a company's financial soundness and ability to invest. Liquidity improves financial operations and management. Companies frequently fail owing to a lack of liquidity, not profitability. Management should improve liquidity in these organizations.

## 3.2. Assessment of the level of Profitability

Five assertions were used to assess the profitability of the companies. Table 4.15 summarizes the findings.

**Table13**

*Level of Profitability*

| Assertions | Mean | Std. Dev | Interpretation |
|---|---|---|---|
| Net profit of the Companies was good during last five years | 3.08 | 0.92 | Moderate |
| The operating Profit margin has been sufficient for the last five years | 3.08 | 0.90 | Moderate |
| Net profit Margin has been sufficient during the last five years | 3.07 | 0.91 | Moderate |
| The net profit of the companies was high compared to the assets during the ng last five years | 2.77 | 0.88 | Moderate |
| The profit of the company was high compared to the Equity during the last five years | 2.82 | 0.89 | Moderate |
| **Average** | **2.96** | **0.90** | **Moderate** |

Table 15 shows the company's five-year net profit averaged 3.08. The five-year operational profit margin averaged 3.08. The five-year net profit margin averaged 3.07. Profit per asset was

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moderate over the past five years, averaging 2.77. Over the past five years, the company's profit exceeded equity by 2.82. Profitability has been moderate during the last five years, averaging 2.96.

Financial statement ratios assessed profitability. After taxes, interest, and depreciation, the net profit margin evaluates profitability (Khidmat & Rehman, 2014). Return on Assets compares the firm's earnings to its total asset investment. If the percentage is high, the organization is using its assets well to produce revenue (Khidmat & Rehman, 2014).

Company investors care most about Return on Equity. It calculates firm ROI. Potential investors use this ratio to evaluate the company. Higher percentages suggest that the company is using investors' money well (Khidmat & Rehman, 2014). Table 16 shows these ratios.

**Table 14**
*Profitability Ratios of Prime Economic Zone*

| Profitability Ratios | 2021 | 2020 |
|---|---|---|
| Gross profit margin | 0.72 | 0.58 |
| Operating profit margin | 0.85 | 0.68 |
| Net profit Margin | 0.50 | 0.44 |
| ROA | 0.06 | 0.09 |
| ROE | 0.21 | 0.14 |

In the Prime Economic Zone, the gross profit margin rose to 0.72 in 2021 from 0.58 in 2020. 2020's operating profit margin was 0.68; 2021's was 0.85. 2020's net profit margin was 0.44; 2021's was 0.50. 2020 ROA was 0.09, 2021 0.06. 2020's ROE was 0.14, 2021's 0.21.

**Table 15**
*Profitability Ratios of Kinazi Cassava Plant Limited*

| Ratios | 2021 | 2020 |
|---|---|---|
| Gross Profit Margin | 0.65 | 0.45 |
| Operating Profit Margin | 0.32 | 0.046 |
| Net Profit Margin | 0.04 | 0.04 |
| ROA | 0.01 | 0.01 |
| ROE | 0.02 | 0.01 |

Table 17 shows Kinazi Cassava Plant Limited in 2021. In 2020, the gross profit margin was 0.45, up from 0.65 in 2010. In 2020, the operational profit margin was 0.046; in 2021, it was 0.32. The net profit margin was 0.04 in 2020 and 0.04 in 2021. ROA was 0.01 in 2020 and 0.01 in 2021. In 2020, ROE was 0.01; in 2021, 0.02.

**Table 16**
*Profitability Ratios of RITCO*

| Ratios | 2021 | 2020 |
|---|---|---|
| Gross profit margin | 0.14 | -0.23 |
| Operating profit margin | 0.04 | -0.04 |
| Net Profit Margin | 0.04 | -0.04 |
| ROA | 0.04 | -0.25 |
| ROE | 0.27 | -4 |

In 2021, the gross profit margin was 0.14, up from -0.23 in 2020 (Table 18). 2021's operating profit margin was 0.04 compared to 2020s -0.04. In 2020, the net profit margin was -0.04. 2021 ROA was 0.04 versus -0.25 in 2020. In 2020, ROE was -4; in 2021, 0.27. Profitability ratios are very low. This shows the company's profitability problem. If this continues, the company will suffer. Management should make major changes.

### 3.3. Assessment of the Level of Solvency

We used five assertions to determine the level of solvency. Table 19 summarizes the findings.

In the last five years, the debt-to-asset ratio has averaged 3.43, according to Table 19. Over the past five years, the debt-to-equity ratio has averaged 3.46. Over the last five years, the Interest Coverage Ratio has climbed rapidly, averaging 3.37. The mean debt repayment capacity was 3.47. With a mean of 4.20, the company's operations should remain high. Solvency was high, averaging 3.59.

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**Table 17**
*Level of solvency*

| Assertions | Mean | Std. Dev | Interpretation |
|---|---|---|---|
| The Companies Debt-to Equity ratios were satisfying in the last five years. | 3.43 | .905 | Moderate |
| The debt -to Equity Ratio has been reducing in the last five years | 3.46 | .830 | Moderate |
| The interest coverage ratio has been increasing in the last five years | 3.37 | .772 | Moderate |
| The companies have a high repayment capacity for debt principal and interest expenses | 3.47 | .853 | Moderate |
| The companies' operations are likely to continue | 4.20 | .786 | Moderate |
| **Average** | **3.59** | **0.83** | **Moderate** |

In the last five years, the debt-to-asset ratio has averaged 3.43, according to Table 19. Over the past five years, the debt-to-equity ratio has averaged 3.46. Over the last five years, the Interest Coverage Ratio has climbed rapidly, averaging 3.37. The mean debt repayment capacity was 3.47. With a mean of 4.20, the company's operations should remain high. Solvency was high, averaging 3.59.

Financial efficiency was measured by capital and asset turnover ratios. These ratios show how well a company uses assets and capital to produce revenue. Better asset utilization means higher turnover ratios. Lower ratios suggest management or production challenges and poor asset utilization. A ratio of one means a company's net sales match its annual average total assets. The tables show the results:

**Table 18**
*Performance ratio of Prime Economic Zone*

| | 2021 | 2020 |
|---|---|---|
| Capital turnover Ratio | 0.42 | 0.32 |
| Asset turnover ratio | 0.13 | 0.06 |

The findings above show that in 2021 the, the Capital turnover Ratio was 0.42, and 0.32 in 2020. In 2021, the Asset turnover ratio was 0.13, and 0.06 in 2020.

**Table 19**
*Performance ratio of Kinazi Cassava Plant Limited*

| Ratios | 2021 | 2020 |
|---|---|---|
| Capital turnover Ratio | 0.35 | 0.32 |
| Asset turnover ratio | 0.31 | 0.26 |

The findings in the table above show that in 2021, the Capital turnover Ratio was 0.35 and 0.32 in 2020. In 20the 21, the Asset turnover ratio was 0.31, and 0.26 in 2020.

**Table 20**
*Performance ratio of RITCO Ltd*

| Ratios | 2021 | 2020 |
|---|---|---|
| Capital turnover Ratio | 6 | 9.92 |
| Asset turnover ratio | 0.94 | 0.63 |

The capital turnover ratio was 6 in 2021 and 9.92 in 2020, according to the table above. 2020's asset turnover ratio was 0.63; 2021's was 0.94. Table values were less than one. The company's assets are being underutilized. The corporation is in trouble. Solvency is a company's ability to repay long-term debt and interest (Aliabadi et al., 2019). It underlines the importance of financial risk analysis in firm survival (Aliabadi et al., 2019). Thus, rectification majors are needed to maximize company assets.

4. **The Effect of budget planning on the financial performance of state-owned enterprises in Rwanda**

   **4.1. Correlations Analysis**

To investigate the relationship between budget control and financial performance. We used Spearman correlation. Table 23 presents the findings.

Table 23 shows 0.372, 0.238, and 0.268 correlation coefficients between budget planning and liquidity, solvency, and financial performance, respectively. P-Values below 0.05 indicate significant associations. Budget execution has low

correlations with liquidity, profitability, solvency, and financial performance (0.348, 0.235, 0.333, and 0.347, respectively).

**Table 21**
*Correlations coefficient between Budget control and financial performance*

| Spearman's rho | | Liquidity | Profitability | Solvency | Financial Performance |
|---|---|---|---|---|---|
| Budget planning | Correlation Coefficient | .372** | .151 | .238* | .268** |
| | Sig. (2-tailed) | .000 | .123 | .014 | .005 |
| | N | 106 | 106 | 106 | 106 |
| Budget implementation | Correlation Coefficient | .348** | .235* | .333** | .347** |
| | Sig. (2-tailed) | .000 | .016 | .000 | .000 |
| | N | 106 | 106 | 106 | 106 |
| Budget review | Correlation Coefficient | .455** | .337** | .335** | .425** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 106 | 106 | 106 | 106 |
| Budget Control | Correlation Coefficient | .458** | .231* | .360** | .384** |
| | Sig. (2-tailed) | .000 | .017 | .000 | .000 |
| | N | 106 | 106 | 106 | 106 |

Legend:

| Size of correlation | Interpretation |
|---|---|
| 0.9-10 | Very high correlation |
| 0.7-0.9 | High correlation |
| 0.5-0.7 | Moderate correlation |
| 0.3-0.5 | Law correlation |
| 0-0.3 | Negligible correlation |

P-Values below 0.05 indicate significant associations. Budget review correlations are 0.455, 0.337, 0.335, and 0.425 for liquidity, profitability, solvency, and financial performance, respectively. P-values <0.05 indicate significant correlations. After examining budget control indicators and financial performance indicators individually, the researcher assessed the link between Budget Control as an independent variable and financial performance. Budget Control had a low correlation with liquidity, 0.231, 0.360, and 0.384 with profitability, solvency, and financial performance, respectively. P-values under 0.05 indicate significant relationships.

### 4.2. Regression Analysis

In this analysis, multiple regressions were used. The model summary is found in Table 24

**Table 22**
*Model Summary*

| Model | R | R Square | Adjusted R Square | Std. The error in the Estimate |
|---|---|---|---|---|
| 1 | .466a | .217 | .194 | .55371 |

a. **Predictors: (Constant), Budget planning, Budget implementation, Budget review**

Findings from Table 24 show that R Square is 0.217 showing that budget control contributes 21.7% to financial performance.

**Table 23**
*ANOVA*

| Model | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 8.682 | 3 | 2.894 | 9.439 | .000b |
| Residual | 31.273 | 102 | .307 | | |
| **Total** | **39.955** | **105** | | | |

a. **Dependent Variable: Financial Performance**
b. **Predictors: (Constant), Budget planning, Budget implementation, Budget review**

According to the ANOVA table, budget control has an impact on the financial performance of the companies. This is explained by the P-Value of.000, which is less than 0.05. Table 4.12 shows the model coefficients that show the effect of budget control and financial performance.

**Table 24**
*Coefficients*

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| (Constant) | 1.128 | .475 | | 2.373 | .020 |
| Budget planning | -.032 | .090 | -.036 | -.356 | .723 |
| Budget implementation | .295 | .137 | .220 | 2.146 | .034 |
| Budget review | .350 | .108 | .338 | 3.233 | .002 |

a. **Dependent Variable: Financial Performance**

Budget planning coefficients have no statistically significant effect on financial performance, according to Table 4.26. Other coefficients with P-values below 0.05 indicate that budget implementation and review affect a firm financial success.

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The study employed the regression model $Y = 0 + 1X1 + 2X2 + 3X3 +$. Y is the dependent variable (financial performance), 0 is the constant term, X1 is budget planning, X2 is implementation, and X3 is review.

$\beta1$, $\beta2$ and $\beta3$ are constant regression coefficients showing the condition of the independent variables to the dependent variables (Beta coefficients) and an Error term explaining performance variability due to unaccounted factors. $Y = 1.128 + 0X1 + 0.295 X2 + 0.350 X3$

The analysis demonstrates that the market is unpredictable, cash flows restricted, expenditure vs intended, Rigid Decision-Making, Lack of Trained and Skilled Labor, No Budget Lines, No Budget Control, Limited Cash, Unbudgeted activities, Not following budget guidelines, Insufficient resources to cover budgeted costs, Unplanned government priorities, Commodity and cash inflation.

## Suggestions

Market uncertainty, cash flow issues, overspending, Rigid Decision-Making, Lack of skilled workers, budget lines, and budget control, cash limit, Unbudgeted activity, Budget violations, Insufficient funds to cover budgeted costs, Unexpected government priorities, Commodity and cash inflation.

Regular budget revisions, financial goals, Employee training, Pre-decision company-decision maker consultation Flexible budgeting.

## Challenges to financial performance

Technology gap High expenses and low income, no central system to oversee all finance modules, Monthly management report accuracy and timeliness Finance performance not owned by all workers Slower recovery, Global inflation risks, Import cost, Poor marketing, and public tenders. Good investment analysis, badly managed subsidiary.

## Suggestions to increase the financial performance

Reducing dependence on small government tenders and introducing innovation, Professional training, a good financial system, recovering overdue payments, selling unwanted assets, feasibility studies before investing, and more marketing.

## CONCLUSIONS

Data-driven conclusions include:

1. Excellent budget preparation, implementation, and evaluation.
2. Plenty of liquidity, moderate profitability, and strong solvency.
3. Budget planning hardly affects liquidity, solvency, and financial performance.
4. Budget execution has little effect on profitability or solvency.
5. Budget Control has a low link with financial performance, profitability, solvency, and profitability.
6. Multiple regressions showed R Square of 0.217, showing budget control contributes 21.7% to financial performance.
7. The model was $Y = 1.128 + 0X1 + 0.295 X2 + 0.350 X3$. Budget planning, implementation, and review are X1–X3.

## RECOMMENDATIONS

Some recommendations were made to various stakeholders based on the findings and conclusions. The following were the recommendations:

## To the management of state-owned enterprises (SOE)

1. Management should sustain the assessment's high levels of budget planning, implementation, and evaluation.

2. Management should increase profitability from moderate to high.

3. SOE management should investigate why budget planning has a negligible correlation with financial planning when we know it should have a low correlation with liquidity, solvency, and financial performance.

4. Management should assess whether budget implementation improves financial performance.

5. Budget Control has little impact on financial performance. Management must improve this effect.

6. Budget control affected financial performance by 22%. Management should boost it.

7. The model showed that budget planning does not affect financial performance. Management should investigate why budget planning is not impacting financial performance.

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