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### Return on assets

The return on assets ratio, often called the return on total assets, is a profitability ratio that measures the net income produced by total assets during a period by comparing net income to the average total assets. In other words, the return on assets ratio or ROA measures how efficiently a company can manage its assets to produce profits during a period.

**Table 5: Variation of Return on Asset ratio**

Years	Net income Rwf (000)	Total assets Rwf (000)	ROA
2018	1,591,914	42,771,389	0.036
2019	1,368,740	76,676,646	0.031
2020	4,271,124	87,899,874	0.016

**Source:** BHC annual report, 2018-2020

The table 5 showed ROA ratio indicated the amount of net income generated by 100 Rwf invested in assets of BHC from the year 2018 to 2020. Means that to invest 100 Rwf in asset the BHC investors gained 3.6 Rwf as return during the period ended 2018, 3.1 Rwf as return during the period ended 2019 and 1.6 Rwf as return during the period ended 2020. These higher values of return on assets show that business is more profitable. The ratio should be only used to compare companies in the same industry. An increased trend of ROA ratio indicates that the profitability of the company is improving.

### Debt to assets ratios

The debt to assets ratio indicates the proportion of a company's assets that are being financed with debt, rather than equity. The ratio is used to determine the financial risk of a business. A ratio greater than 1 shows that a considerable proportion of assets are being funded with debt, while a low ratio indicates that the bulk of asset funding is coming from equity. A ratio greater than 1 also indicates that a company may be putting itself at risk of not being able to pay back its debts, which is a particular problem when the business is located in a highly cyclical industry where cash flows can suddenly decline. A company may also be at risk of nonpayment if its debt is subject to sudden increases in interest rates, as is the case with variable-rate debt.

**Table 6: Debt to asset ratio from 2018 up to 2020**

Years	Total liabilities	Total Assets	Debt ratio
2018	34,474,107	42,771,389	0.194
2019	54,806,759	76,676,646	0.196
2020	62,315,542	87,899,874	0.137

**Source:** BHC annual report, 2018-2020

This ratio indicates that BHC has more assets than debits (Liabilities) because debt ratio is less than 100 for all this period but it seems like most of BHC's assets are financed through debt since the ratio is greater than 10%, as in 2018 was 19.4% it shows that 19.4% of the BHC's assets are financed by the creditors or debt (and therefore 80.6% is financed by owners), in 2019 was 19.6% it shows that 19.6% of the BHC's assets are financed by the creditors or debt (and therefore 80.4% is financed by owners), in 2020 was 13.7% it shows that 13.7% of the BHC's assets are financed by the creditors or debt (and therefore 86.3% is financed by owners). The higher is the ratio, the more leveraged the company and the greater its financial risk. In this case is indicated that higher portion of BHC's assets are claimed by

its creditors which means higher risk in operation since the business would find it difficult to obtain loans for new projects.

**Degree of usefulness of each financial statement in decisions making**

BHC goes through a series of thorough analyses before approving a loan, extending a credit line or increasing a customer's credit profile. It does so to reduce credit risk, monitor debt levels and ensure that borrowers are forthcoming with performance data when they submit financial statements and accounting ratios.

**Table 7: Analysis on degree of usefulness of each financial statement in decision making.**

	Mean	Std. Deviation	Interpretation
Repayment ability is determined by previous financial performance of the borrower	4.6250	0.70711	Very strong mean and heterogeneity of responses
Cash flow information is more useful when making decisions than both income and sheet statements	4.5938	0.61484	Very strong mean and heterogeneity of responses
Balance sheet information is more useful when making decisions than both income statement and cash flow information	4.1563	0.95409	Strong mean and heterogeneity of responses
Income statement information is more useful when making decisions than both balance sheet and cash flow statement	4.7500	0.50800	Very strong mean and heterogeneity of responses
The three financial statements are important in creditor decision making	4.4375	0.91361	Very strong mean and heterogeneity of responses

**Source: Primary data, February 2021**

Table 7 presents the results showing item descriptive statistics (Mean and Standard deviation) on degree of usefulness of each financial statement in creditor decision in BHC are shown.

It is clear from the results that most commonly practiced items were: Repayment ability is determined by previous financial performance of the borrower (Mean=4.6250, SD=0.70711) this shows that there is very strong mean and strong evidence of the existence of the fact, Cash flow information is more useful when making creditor decisions than both income and sheet statements (Mean=4.5938, SD=0.61484) this shows that there is very strong mean and strong evidence of the existence of the fact, Balance sheet information is more useful when making creditor decisions than both income statement and cash flow information (Mean=4.1563, SD=0.95409) this shows that there is very strong mean and evidence that the fact appears more, Income statement information is more useful when making creditor decisions than both balance sheet and cash flow statement (Mean=4.7500, SD=0.50800) this shows that there is very strong mean and strong evidence of the existence of the fact.

The three financial statements are important in lending decision making (Mean=4.4375, SD=0.91361) this shows that there is very strong mean and strong evidence of the existence of the fact and Inadequate financial statement analysis skills among loan officers lead to high levels of NPLs (Mean=4.7188, SD=0.63421) this shows that there is very strong mean and strong evidence of the existence of the fact. BHC use Financial Statements to decide whether to grant a loan to a business. BHC assesses the financial health of a business to determine the probability of a bad debt. Any decision to create receivables is supported by a sufficient asset base and liquidity.

**Regression Analysis**

A study was conducted on the relationship between financial statement in decision making on level of non-performing loan of commercial BHCs. The analysis applied the statistical package for social sciences (SPSS) version 22.0 to compute the measurements of the multiple regressions for the study. The findings are provided below:

**Table 8: Regression**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
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1	.851 <sup>a</sup>	.724	.695	1.97706
a. Predictors: (Constant), Financial statement, decision making				

**Source: Primary data, February 2021**

In order to explain the percentage of variation in the dependent variable level of decision making as explained by the independent variables. The researcher used coefficient of determination that was obtained from the model summary in the table 8. Coefficient of determination was used to explain whether the model is a good predictor. From the results of the analysis, the findings show that the independent variables (Financial statement and decision making) contributed to 85.1% of the variation in level of significance as explained by adjusted R<sup>2</sup> of 0.695 which shows that the model is a good prediction.

**Table 9: ANOVAa**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	287.430	3	95.810	24.512	.000 <sup>b</sup>
	Residual	109.445	29	3.909		
	Total	396.875	32			
a. Dependent Variable: Level of decision making(Financial decision, investment decision, dividend decision and working capital decision)						
b. Predictors: (Constant), vertical analysis, horizontal analysis and ratio analysis						

**Source: Primary data, February 2021**

The test for the analysis of variance (ANOVA) showed that regression coefficients indicate that the significance of the sig is 0.00 which is less than 0.05. This indicates that the regression model statistically significant predictor of the outcome variable. There is therefore a significant relationship between financial statement analysis and decision making.

**Table 10: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	Sig.(p)
	B	Std. Error	Beta	
(Constant)	.544	.210	-	.035
Vertical analysis	.682	.019	.230	.000
Horizontal analysis	.631	.121	.088	.000
Ratio analysis	.899	.073	.041	.000

**Source:** Elaborated by using SPSS Program, 2022

Dependent Variable: Decision making (Financial decision, investment decision, dividend decision and working capital decision)

Based on these coefficients, the regression model therefore becomes;

$$Y = 0.682*At + 0.631*Bt + 0.899*Ct + \epsilon$$

A unit increase in horizontal analysis in one unit, while holding the other factors constant would lead to an increase in decision making by a factor of 0.682 units; A unit increase in vertical analysis in one unit while holding the other factors constant would lead to an increase in decision making by a factor of 0.631units. A unit increase in ratio analysis in one unit while holding the other factors constant would lead to an increase in decision making by a factor of 0.899 units.

The results of the simple regression model shows that there is a positive relationship between financial statement and decision making in BHC. This implies that a single unit increase in any of the independent variables results into a corresponding increase in decision making. The regression analysis was undertaken at 5% significance level. The criteria for comparing whether the predictor variables were

significant in the model was through comparing the corresponding probability value obtained and  $\alpha=0.05$ . If the probability value was less than  $\alpha$ , then the predictor variable was significant but from the above analysis. The results above show that the variables were significant since their corresponding predictor values were below 5%.

**Table 4.11: Correlations**

		Financial statement	Creditor decision
Financial statement	Pearson Correlation	1	.815**
	Sig. (2-tailed)		0
	N	32	32
Creditor decision	Pearson Correlation	.815**	1
	Sig. (2-tailed)	0	
	N	32	32

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

**Source: Primary data, February 2021**

Table 4.11 presents also the correlation between financial statement and creditor decision. The relationship between financial statement and creditor decision was performed by using Pearson Correlation. However, the following comments concerned only the correlations which were found statically significant. Table 4.16 showed that there is a strong and positive correlation between financial statement and creditor decision ( $r= 0.805$ ,  $p=0.000 < 0.01$ ).

**CONCLUSION AND RECOMMENDATIONS**

The major objective of this study is to come up with verifiable effect of financial statement on decision making. For the case of this study, the population of the study was finance officers, accountants and operational department officers equal to 47. The questionnaires distributed to 32 staffs, where the levels that used are mainly closed questions. With close questions, the collectors as respondents were limited to specific answers or choosing from a list of responses. The researcher used coefficient of determination that was obtained from the model summary in the table 4.9. Coffecient of determination was used to explain whether the model is a good predictor. From the results of the analysis, the findings show that the independent variables (vertical analysis, horizontal analysis and ratio analysis) contributed to 69.5% of the variation in level of decision making as explained by adjusted  $R^2$  of 0.695 which shows that the model is a good prediction.

The results of regression indicated that a unit increase in horizontal analysis in one unit, while holding the other factors constant would lead to an increase in decision making by a factor of 0.682 units; A unit increase in vertical analysis in one unit while holding the other factors constant would lead to an increase in decision making by a factor of 0.631units. A unit increase in ratio analysis in one unit while holding the other factors constant would lead to an increase in decision making by a factor of 0.899 units.

The results of the simple regression model show that there is a positive relationship between financial statement and decision making in BHC. This implies that a single unit increase in any of the independent variables results into a corresponding increase in decision making. The regression analysis was undertaken at 5% significance level. All research objectives were achieved and alternative hypotheses were confirmed and verified.

Having gone through this study, the researcher suggests the following as a way of incurring that financial statement analysis plays a vital role on decision making of any company.

1. BHC is advised to minimize its operation expenses in order to retain a great proportion of profit; moreover, it will attract more investors to extend the business.

2. Every financial statement should ensure that all material fact is reflected in their financial statement. These should be prompt provision of the financial statement at the end of each financial year.
3. Investment decision should not be on a vacuum or rule of thumb rather, the financial statements should be used as bedrock.

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