

## EVALUATION OF COST BENEFIT ANALYSIS AS A TOOL ON FINANCIAL PERFORMANCE OF SELECTED PUBLIC SUGAR FIRMS IN KENYA

*Wasike Edward Wanyonyi<sup>1</sup> (Mount Kenya University)*

*Dr. Martin Onsiro Ronald<sup>2</sup> (Mount Kenya University)*

*Dr. Robert Mindila<sup>3</sup> (Mount Kenya University)*

*Dr. Evans Mwiti<sup>4</sup> (Mount Kenya University)*

### ABSTRACT

There has been a lot of concern over rising operational costs across the globe and more so particularly in Kenya due to energy costs, staff costs and even borrowing costs amongst many others. Sugar firms have over the last few years faced financial challenges causing uncertainty and anxiety to key stakeholders within and outside the company. The problem for the research was the apparent high operational costs that continued being exhibited which resulted in losses and therefore poor performance. The purpose of this study is to evaluate cost benefit analysis tools on financial performance of selected public sugar firms in Kenya. The specific objective of the study was to determine the extent of application of Cost-Benefit Analysis as a tool on financial performance. On average, the cost of producing a ton of sugar was highest at USD 870 and lowest at USD 300 in Kenya and Brazil which showed an extreme and unfavorable variance against sugar firms in Kenya of USD 570 (Eleventh Parliament, Third Session, 2015). The problem for the research was the apparent high operational costs that were being exhibited uncontrollably and which resulted in losses and therefore poor financial performance of the selected public sugar companies in Kenya. Cost - Benefit Analysis provides a means of appraising the future benefits in light of the costs that must be incurred in the present and its purpose is to measure the expected benefits of the investment so as to guide in rational resource allocation (Woodhall, 2004). Amongst the many accounting – based financial performance measurements are Return on Assets (ROA), Gross Profit Margin, Return On Investment (ROI) and Earnings Per Share (San & Heng, 2011). In the report of Cokins(2006), it stated that there was an overwhelming desire among firms to know well their costs and factors that drive them. It however found out that there is no clear understanding of the costs and the tools or methods to distinguish them. The reviewed literature above does not show any work done on evaluation of Cost Benefit Analysis Tools on financial performance of corporate organizations. A mixed methodology was used because

the data to be collected was both discrete and continuous which required the employment of both descriptive and inferential techniques. Descriptive research design was used because it covers both the quantitative and qualitative data in the research. The sample was derived from top management, accounting/finance staff, internal audit staff, procurement staff, sales revenue staff, sales staff of selected major suppliers of raw materials and services and the census method was used since the target population was 96. The study used both the questionnaire and interview schedule. In summary, the findings were that there was no significant influence to the improvement of financial performance by mere application of cost benefit analysis as per the null hypothesis. regression results revealed that the cost benefit analysis tool had no significant effect on the financial performance of the selected public sugar companies ( $\beta$ 0.046; P value .722 and a t value .357) thus the null hypothesis had to be accepted. This was supported by the fact that Cost Benefit Analysis Tool was lowly applied.

*KEY WORDS: Cost-Benefit Analysis; Financial Performance; Profitability; Return on Investment; Return on Assets*

### **Background to the Study**

Globally, businesses have continued to focus on cost reduction and effectiveness in operations. The study of Barbole et al (2013) on Impact of Cost Control and Cost Reduction Techniques on Manufacturing Sector carried out in India elaborates that firms should learn and understand various tools, techniques and approaches that are used in controlling and reducing costs due to global competition and need for business survival. This emphasized the need for evaluating application of cost benefit analysis as a tool in public sugar firms in Kenya based on the apparent high costs of production. At global level, manufacturing firms that apply various management techniques and practices which are latest gain positive performance financially in terms of increased sales volumes, profitability and other indicators of returns (Lwiki, Ojera, Mugenda, & Wachira, 2013). The public sugar firms are those controlled by the Government and include Mumias Sugar Company Limited, Nzoia Sugar Company Limited, Miwani Sugar Company Limited, Chemelil Sugar Company Limited, Muhoroni Sugar Company Limited, South Nyanza(Sony) and Sugar Company Limited. Amongst many problems that affect the sugar industry are imports, failure to pay farmers` dues on time, inefficiency, poor productivity, weaknesses in management, market distortions, few facilities of credit in development of sugarcane, fires and droughts (PKF Consulting Ltd;International Research Network, 2005).The financial

performance is still affected in regard to interest on borrowed loans, aged machinery and high input costs of materials, fuel, fertilizer and lubricants (Kenya National Audit Office, 2012). The specific objective of the study was to determine the extent of application of Cost-Benefit Analysis as a tool on financial performance of selected public sugar firms in Kenya.

### **Statement of the Problem**

The eleventh parliament of Kenya, third session in 2015 noted that public sugar firms were struggling to pay even farmers' dues for the cane supplied. Moreover, the government had on several occasions injected fresh capital into the sugar firms to bail them out of the operational and financial challenges. The report stated that the regional production cost averaged USD415 and it was very excessive in Kenya at USD 550 per metric ton (Kenya National Assembly, Eleventh Parliament, Third Session, 2015). As a result public sugar firms, Mumias Sugar Company and Nzoia Sugar Company included were facing stiff competition from cheaper imports within Comesa member states where production costs were 3 to 5 times relatively cheaper. On average, the cost of producing a ton of sugar was highest at USD 870 and lowest at USD 300 in Kenya and Brazil which showed an extreme and unfavorable variance against sugar firms in Kenya of USD 570 (Eleventh Parliament, Third Session, 2015). The problem for the research was the apparent high operational costs that were being exhibited uncontrollably and which resulted in losses and therefore poor financial performance of the selected public sugar companies in Kenya. The null hypothesis was  $H_0$ : There was no significant relationship that exists between extent of application of Cost-Benefit Analysis as a tool and financial performance.

### **Literature Review**

The study was informed by the Transaction Cost Theory whose central question is whether a transaction is more efficiently performed within an organization or outside independent contractors. The researcher used Transaction Cost Theory in this study due the fact that uncertainty in matters of costing can lead to failure in optimizing on opportunities at hand and even opportunistic players can gain advantage based on their selfish interests in the operational processes. Uncertainties in business transactions in regard to costs require attention and useful techniques can go a long way in taming the same. It is in this view that this theory became relevant in evaluating cost benefit analysis tools on financial performance.

### **Cost-Benefit Analysis**

All forms of investment involve a sacrifice of present consumption so as to secure future

benefits in form of higher levels of output or income. Cost - Benefit Analysis provides a means of appraising the future benefits in light of the costs that must be incurred in the present and its purpose is to measure the expected benefits of the investment so as to guide in rational resource allocation (Woodhall, 2004).

Cost-Benefit Analysis is the right way to determine the correct outcome and costs and benefits can be summarized in money terms (Cochrane, 2014). Conducting a Cost-Benefit Analysis includes defining the scope of the analysis, obtaining estimates of program effects, calculation of present value and assessment of profitability, identification of the distribution of costs and benefits and also testing the riskiness of the conclusions via sensitivity analysis (Dossetor, 2011). It identifies and puts values on the costs and benefits of projects, thus benefits minus costs to get net benefits as follows:

$$\text{Net Benefits} = \text{Total Benefits} - \text{Total Cost}$$

The costs are subtracted from the benefits in order to get the net benefits or net costs if they are negative. The analysis relies on a lot of assumptions, sometimes complex calculations and results in wise judgment (Cellini & Kee, 2010). It is important to note that since not all costs and benefits can be quantified, other tools apart from Cost-Benefit Analysis should be taken into consideration when making decisions in regard to investments (Misurac, 2014).

### **Financial Performance**

The researcher believes that financial performance is critical if organizations have to exist continuously into the foreseeable future. In the study of Abbas et al (2014) on Financial Performance of Banks in Pakistan after Merger and Acquisition, profitability, efficiency, liquidity and leverage ratios were used as indicators of financial performance (Abbas, Hunjra, Azam, Ijaz, & Zahid, 2014). Furthermore, the implication of performance is to bring out results of all dynamics of the business firm like its strategy, operational activities and management across segments of the business as human resources, marketing, production and finance. Performance measures mostly include sales growth, market share increase, profitability, liquidity, employment, reputation, image etc (Dragnic, 2014). Amongst the many accounting – based financial performance measurements are Return On Assets (ROA), Gross Profit Margin, Return On Investment (ROI) and Earnings Per Share (San & Heng, 2011).

**Research Gap**

The reviewed literature above does not show any work done on evaluation of Cost Benefit Analysis Tools on financial performance of corporate organizations. In the study of Lwiki et al(2013), sugar firms in Kenya were found not to have adopted, for instance inventory management by vendors that would effectively transfer challenge of controlling stocks onto suppliers which reduces exposures, risks and costs associated with inventory within their precincts but not yet applied into the production process (Lwiki, Ojera, Mugenda, & Wachira, 2013). In the report of Cokins (2006), it stated that there was an overwhelming desire among firms to know well their costs and factors that drive them. It however found out that there is no clear understanding of the costs and the tools or methods to distinguish them.

**Conceptual Framework**

The conceptual model included the construct of cost analysis tools (thus Cost-Benefit Analysis) which was proposed to influence financial performance. This conceptual model was tested in selected public sugar firms in Kenya, thus Mumias Sugar Company Ltd and Nzoia Sugar Company Ltd in regard to cost benefit analysis tool on financial performance. The following conceptual framework was derived by the researcher for purposes of the study.

**INDEPENDENT VARIABLE(S)  
COST ANALYSIS TOOL**

**DEPENDENT VARIABLE  
FINANCIAL PERFORMANCE**

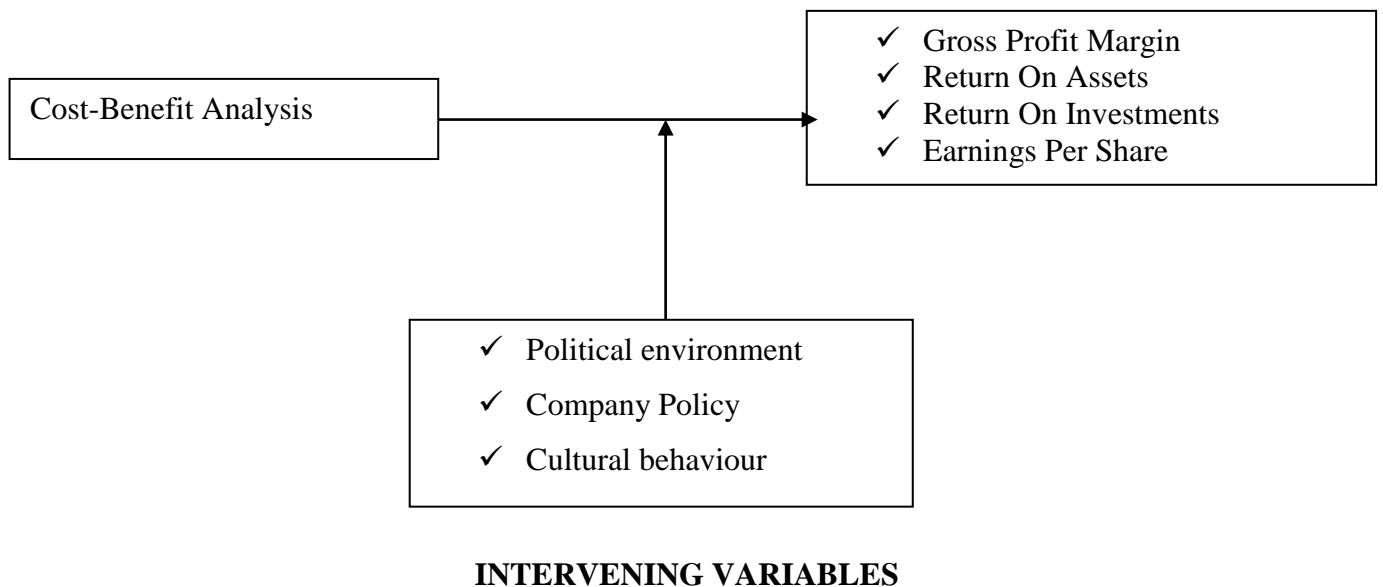


Figure 1.1 Conceptual framework

Source: (Researcher, 2016)

## Research Design and Methodology

The researcher applied mixed methodology and the study resulted into both quantitative and qualitative data. A mixed methodology was used because the data to be collected was both discrete and continuous which required the employment of both descriptive and inferential techniques. The research design was important because it assisted the researcher to collect relevant data at minimal cost, time and effort and hence achieving optimal efficiency (Kothari, 2004). Descriptive research design was used because it covers both the quantitative and qualitative data in the research.

## Target Population, Sample Size and Sampling techniques and Instruments

The sample was derived from top management, accounting/finance staff, internal audit staff, procurement staff, sales revenue staff, sales staff of selected major suppliers of raw materials and services . The census method was embraced because the respondents were not many and there was adequate time and a higher degree of accuracy was required and the respondents were as follows.

**Table 1.0: Sample Size**

Strata	Mumias Sugar Co.	Nzoia Sugar Co.	Target Population	Sample (100%)	Sample Size
Top Management	8	9	17	100% X12	17
Management Accounting staff	4	5	9	100% X9	9
Costing Staff	5	3	8	100% X8	8
Internal Audit Staff	7	9	16	100% X16	16
Procurement & Stores Staff	11	9	20	100% X20	20
Sales Revenue Staff	6	8	14	100% X14	14
Major Suppliers of materials (accountants)	5	2	7	100% X7	7
Major Suppliers of services(accountants)	3	2	5	100% X5	5
<b>Total</b>	<b>49</b>	<b>47</b>	<b>96</b>		<b>96</b>

*Source: (Researcher ,2016)*

## RESULTS

### Extent of application of Cost-Benefit Analysis as a tool on financial performance of selected public sugar firms in Kenya from 2011 to 2015

Under objective one of the study, the researcher sought to determine the extent of application of Cost-Benefit Analysis as a tool on financial performance of the selected public sugar firms in Kenya from 2011 to 2015.

**Table 1.1.1: Cross tabulation of Cost-Benefit Analysis Tool being understood and improved financial performance of firms in terms of Gross Profit Margin, Return on Assets, Return on Investments and Earnings per Share since 2011 to 2015**

		Application of Cost-Benefit Analysis as a tool has improved financial performance of firms in terms Gross Profit Margin, Return On Assets, Return On Investments and Earnings Per Share since 2011 to 2015			Total
		Strongly disagree	Disagree	Agree	
Cost-Benefit as a tool is well understood	Not applicable	0	1	0	1
	Strongly disagree	0	1	0	1
	Disagree	1	4	0	5
	Agree	6	52	6	64
	strongly agree	2	11	0	13
<b>Total</b>		<b>9</b>	<b>69</b>	<b>6</b>	<b>84</b>

**Source: Research data 2016**

The cross tabulation results in table 4.1.1a above show that respondents agreed that cost benefit analysis tool was well understood by staff but they disagreed that the tool had improved financial performance of the selected public sugar companies in terms of gross profit margin, return on assets, return on investment and earnings per share since 2011 to 2015 as indicated by 52 respondents. This disagreement is supported by challenges of applying Cost-Benefit Analysis based on the respondents such as absence of lack of cooperation, practical expertise, management support, non-costing of operations, clear statistical information, presence of price wars, un automated (unintelligent) systems and lack

of will by decision makers.

**Table 1.1.2: Cross tabulation for the level of Cost – Benefit Analysis application and improved financial performance of firms in terms of Gross Profit Margin, Return on Assets, Return on Investments and Earnings per Share since 2011 to 2015**

		Application of Cost-Benefit Analysis has improved financial performance of the firm in terms of Gross Profit Margin, Return On Assets, Return On Investments and Earnings Per Share since 2011 to 2015			Total
		strongly disagree	Disagree	Agree	
To what level is Cost – Benefit Analysis Applied	Moderately	1	9	0	10
applied in operations undertaken at work	Lowly Applied	8	61	5	74
<b>Total</b>		<b>9</b>	<b>70</b>	<b>5</b>	<b>84</b>

**Source: Research data 2016**

Results of table 4.1.1b above show that Cost-Benefit Analysis is lowly applied (61 respondents) in the selected public sugar companies and the same number of respondents disagree that its application had contributed to improved financial performance of the selected public sugar companies in terms of gross profit margin, return on assets, return on investment and earnings per share since 2011 to 2015.



**Table 1.1.3: Cross-tabulation of Net Financial Benefits contribution and improved financial performance of the selected public sugar firms in terms of Gross Profit Margin, Return On Assets, Return On Investments and Earnings Per Share from 2011 to 2015**

		Application of Cost-Benefit Analysis has improved financial performance of firms in terms of Gross Profit Margin, Return On Assets, Return On Investments and Earnings Per Share since 2011 to 2015			Total
		Strongly Disagree	Disagree	Agree	
	Not Applicable	0	1	0	1
Net Financial Benefits	Strongly				
can be well realized if	Disagree	1	0	0	1
Cost-Benefit Analysis	Disagree	0	1	0	1
as a tool is used	Agree	2	25	1	28
	Strongly Agree	6	42	5	53
	<b>Total</b>	<b>9</b>	<b>69</b>	<b>6</b>	<b>64</b>

**Source: Research data 2016**

Results of table 1.1.1c above show that respondents strongly agree that Net Financial Benefits can be well realized if Cost-Benefit Analysis as a tool is used but disagree that the same has improved financial performance of the selected public sugar companies in terms of gross profit margin, return on assets, return on investment and earnings per share from 2011 to 2015.

### **Regression Analysis Results**

Based on collected data and subsequent regression analysis, the following model summary was obtained.

**Table 1.2.1: Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Durbin-Watson
						F Change	df1	df2	
1	.056 <sup>a</sup>	.003	-.013	.41456	.003	.199	1	63	.657
2	.095 <sup>b</sup>	.009	-.023	.41666	.006	.367	1	62	.547

**Source: Research data 2016**

a. Predictors: (Constant), To what level is Cost – Benefit Analysis applied in operations undertaken at work

b. Predictors: (Constant), To what level is Cost – Effectiveness Analysis used in operations at your station of work

c. Dependent Variable: Application of cost analysis tools has improved financial performance of firms in terms Gross Profit Margin, Return On Assets, Return On Investments and Earnings Per Share since 2011 to 2015

The results in column labeled R in table 4.1.6.1a above show values of the multiple correlation coefficients between the predictors and the outcome. When only cost- benefit analysis is used as a predictor, this is a simple correlation between application of Cost-Benefit Analysis and financial performance (.56). The next column gives us a value of  $R^2$ , which is a measure of how much variability in financial performance of sugar companies is caused by predictors. For the first model its value is .003, which means that application of cost benefit analysis accounts for 0.3 % in improved financial performance of sugar companies.

Finally the table shows Durbin –Watson statistic in the last column. This statistics informs us about whether the assumption of independent errors is tenable. The closer to 2 that value is, the better, and for these data the value is 1.644, which is close to 2 therefore the assumption has almost certainly been met. The researcher was contented with the findings which the Durbin-Watson statistic at 1.644 confirmed that they were error free. More so, based on collected data and subsequent regression analysis, the following ANOVA table was obtained.

**Table 1.2.2: ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.034	1	.034	.199	.657 <sup>b</sup>
	Residual	10.827	63	.172		
	Total	10.862	64			
2	Regression	.098	2	.049	.282	.755 <sup>c</sup>
	Residual	10.764	62	.174		
	Total	10.862	64			

**Source: Research data 2016**

a. Dependent Variable: Application of costing tools improved financial performance of firms in terms of Gross Profit Margin, Return On Assets, Return On Investments and Earnings Per Share since 2011 to 2015.

b. Predictors: (Constant), To what level is Cost – Benefit Analysis applied in operations undertaken at work

c. Predictors: (Constant), To what level is Cost – Effectiveness Analysis used in operations at your station of work

**Table 1.2.3: Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics		
	B	Std. Error	Beta		Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	
(Constant)	2.773	.409		6.781	.000	1.956	3.590					
1 To what level is Cost – Benefit Analysis applied in operations undertaken at work	.064	.143	.056	.447	.657	-.221	.348	.056	.056	.056	1.000	1.000

(Constant)	2.651	.457		5.799	.000	1.737	3.565						
To what level is Cost – Benefit Analysis applied in operations undertaken at work	.052	.145	.046	.357	.722	-.237	.341	.056	.045	.045	.981	1.019	
To what level is Cost – Effectiveness Analysis used in operations at your station of work	.066	.109	.077	.606	.547	-.152	.284	.084	.077	.077	.981	1.019	

Source: Research data 2016

a. Dependent Variable: Application financial tools have improved financial performance of firms in terms Gross Profit Margin, Return On Assets, Return On Investments and Earnings Per Share since 2011 to 2015

The established multiple linear regression equation becomes:

$$\text{Financial performance of selected public sugar firms in Kenya in the last five years, 2011 to 2015} = 2.773 + .046X_1(\text{cost- benefit analysis}) + .077X_2(\text{cost –effective analysis}) + .0X_3(\text{ activity bases costing}) +.0X_4(\text{cost saving})$$

**Where**

$\alpha_0 = 2.773$ , shows that if all independent variables were rated zero, financial Performance of sugar companies rating would be 2.773

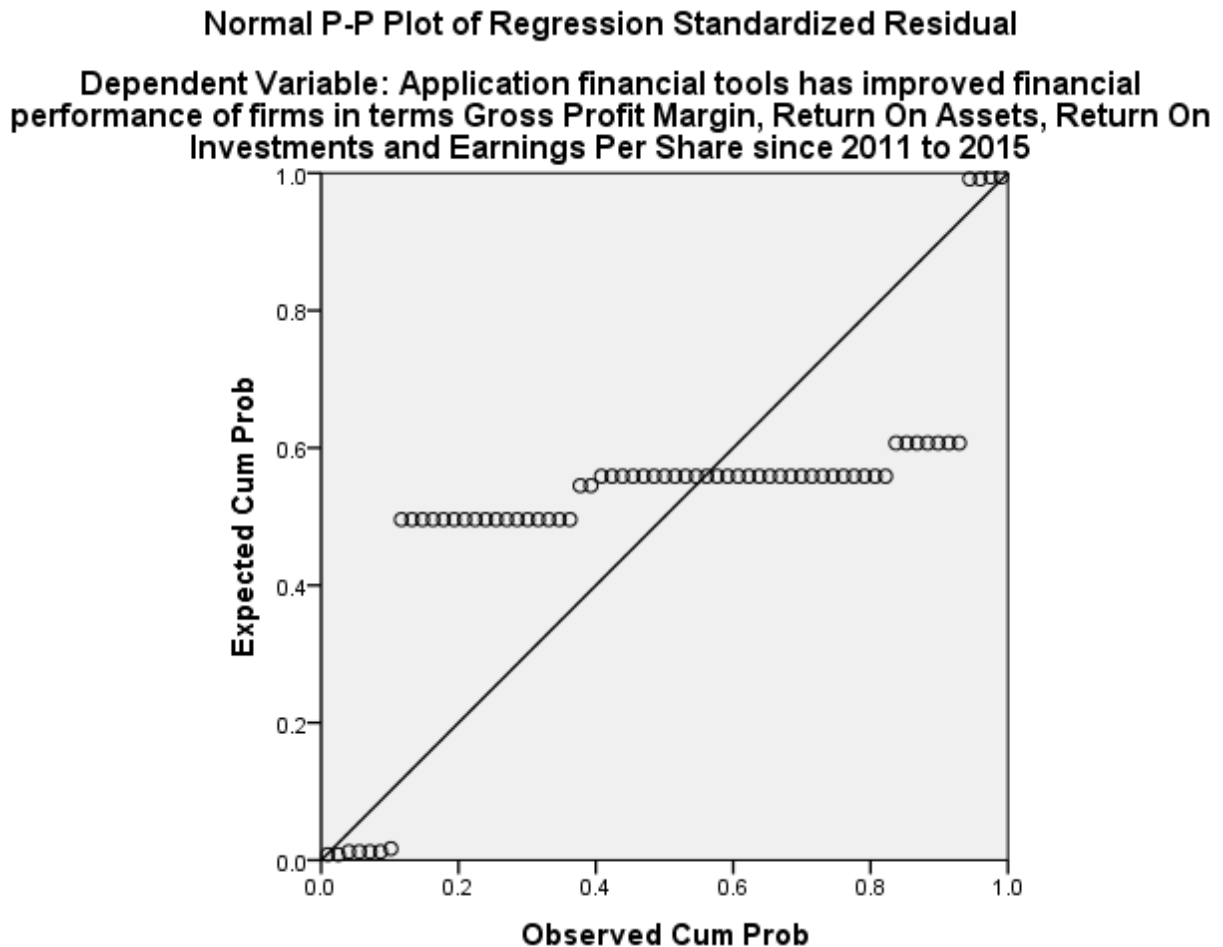
$\alpha_1 = .046$ , shows that one unit change in application of Cost-Benefit Analysis tool results in .064 units increase in financial Performance of sugar companies when other factors are held constant.

$\alpha_2 = .077$ , shows that one unit change in application of Cost Effectiveness Analysis results in .066 units increase in financial Performance of sugar companies when other factors are held constant.

$\alpha_3 =$  non results in regression line shows that there was very limited or totally no application of Activity Based Cost (ABC) analysis as a tool to increase Financial Performance by selected public sugar companies

A4 = non results in regression line shows that there was very limited or no application of Cost Savings Analysis tool to improve Financial Performance by the selected public sugar companies.

**Fig 1.2: Regression future predictions of financial performance for inappropriate application of financial tools**



The figure above shows a horizontal alignment of predictor residual of analysis tools. Thus cost benefit analysis as a tool could not be used to predict the financial performance of the selected public sugar companies because their level of application was below expectation and could therefore not have any significant contribution to financial performance.

### Research Discussions

**Extent of application of Cost-Benefit Analysis as a tool on financial performance of selected public sugar firms in Kenya from 2011 to 2015**

In respect to objective one, the cross tabulation results in table 1.1.1a showed that respondents agree that cost benefit analysis tool is well understood by staff but they disagree that this tool has improved financial performance of the selected public sugar firms in Kenya in terms of gross profit margin, return on assets, return on investment and earnings per share since 2011 to 2015 as indicated by 52 respondents. This represented 62%. Net Financial Benefits as an indicator of the results of using Cost Benefit Analysis from this study apparently reveal that they cannot be just realized based on its usage due to challenges faced in applying it such as lack of proper estimation of costs and benefits associated with every operational decision in an organization. Stakeholders in the business sector should manage these issues which appear to be of behavioral nature. The researcher is puzzled by the strong agreement that Cost Benefit Analysis tool is well understood by the respondents who particularly had a finance orientation and at the same time disagree that it does not improve financial performance. The question that begs is; of what value is the tool taught and written widely about in various sources if the players in the business sector do disagree that it contributes to financial performance of firms? The stakeholders would find this of interest given they expect value for their money from the staff and the training earned over time by them.

Results of table 1.1.1b above show that Cost-Benefit Analysis is lowly applied in the selected public sugar companies and the respondents disagree that its application had contributed to improved financial performance of sugar companies in terms of gross profit margin, return on assets, return on investment and earnings per share since 2011 to 2015. The researcher concurs with this result in that for Net Financial Benefits (which contributes to improved financial performance) to be realized as an indicator of Cost-Benefit Analysis, much more must be done that goes beyond the application of the tool. The low application of Cost-Benefit Analysis as a tool is of interest in terms of the challenges that come in its way. This was explained by reasons like bad culture in the firms, lack of motivation to the staff and also absence of support from top management.

The researcher wonders whether if the cost-benefit cost analysis tool was highly applied, the financial performance would have been much better. The challenges that limited the application of the tool should be investigated and settled once and for all if the benefit of the respondents' acknowledgement that the tool is well understood and can result in net financial benefits is to be maximally exploited.

The correlation results showed that there was no significant influence to the improvement of financial performance by just understanding of Cost-Benefit Analysis as a tool, application of Cost-Benefit Analysis tool and the mere fact that respondents agree that Net Financial Benefits could be well realized if Cost- Benefit Analysis as a tool was used as shown ( $r=-.056$ ,  $p>.05$ ), ( $r=.053$ ,  $p>.05$ ), ( $r=.066$ ,  $p>.05$ ) respectively. From this result, financial improvement in the selected public sugar firms cannot be just improved by understanding and application of Cost Benefit Analysis in operations due to the challenges alluded to by respondents in the questionnaires and interviews such as interference from interested parties, lack of motivation and absence of proper ways of estimating costs and benefits that would continuously give rise to Net Financial Benefits during the firm`s operations. Thus Cost-Benefit Analysis as a tool did not influence financial performance. The implication of this result is the fact that the high operational costs and therefore losses cannot just be resolved by the mere understanding, application and expectation of net financial benefits from the Cost-Benefit Analysis as a tool.

### **Regression Analysis Results**

The results in column labeled R in table 1.2.1 above show values of the multiple correlation coefficients between the predictors and the outcome. When only cost- benefit analysis is used as a predictor, this is a simple correlation between application of Cost-Benefit Analysis and financial performance (.56). The next column gives us a value of  $R^2$ , which is a measure of how much variability in financial performance of the selected public sugar firms is caused by predictors. For the first model its value is .003, which means that application of cost benefit analysis accounts for 0.3 % of the improved financial performance of the selected public sugar firms.

As such, the change in the amount of variance that can be explained gives rise to an F-ratio of .367, which is again not significant ( $p>.05$ ) hence these predictors did not contribute significantly to the improvement of financial performance of the selected public sugar firms.

Finally the table shows Durbin –Watson statistic in the last column. This statistics informs us about whether the assumption of independent errors is tenable. The closer to 2 that value is, the better, and for these data the value is 1.644, which is close to 2 therefore the assumption has almost certainly been met.

### Hypotheses Testing results

Regression results revealed that the Cost Benefit Analysis tool had no significant effect on the financial performance of the sugar companies ( $\beta 0.046$ ; P value .722 and a t value .357) thus the null hypothesis had to be accepted. This was explained by respondents by the fact that workers operate without focus on specific operational plans which generally were not conspicuous. This finding was supported by a study on Challenges for Cost-Benefit Analysis of Financial Regulation, which established that during the financial crisis in the United States of America, the Treasury Secretary appeared before the Congress asking for \$700 billion without any clear plan for its use specifically but to obviously prop up market prices of mortgage –backed securities (Cochrane J. H., 2014).

### CONCLUSIONS AND RECOMMENDATIONS

The low application of cost benefit analysis as a tool worried the researcher given that the study of (Adler & Posner, 2008) alludes to the fact that Cost-benefit analysis has remained to be a proven and viable decision procedure. The implication with this finding is that financial performance of the selected public sugar firms would have been better if this tool or procedure was keenly applied in all decisions that involve funds.

The correlation results showed that there was no significant influence to the improvement of financial performance by just understanding of Cost-Benefit Analysis as a tool, application of Cost-Benefit Analysis tool and the mere fact that respondents agree that net financial benefit could be well realized if cost- benefit analysis as a tool was used. More so regression results revealed that the cost benefit analysis tool had no significant effect on the financial performance of the selected public sugar companies ( $\beta 0.046$ ; P value .722 and a t value .357) thus the null hypothesis had to be accepted. This was supported by the fact that Cost Benefit Analysis Tool was lowly applied.

In summary, the findings about the objective were that there was No significant influence to the improvement of financial performance by just understanding/application/mere anticipation of net benefits arising from Cost-Benefit Analysis as a tool. The researcher concludes that other causes of poor financial performance are interferences by other stakeholders, lack of commitment by the staff, management and low attitude to not only known costing tools but also less concern by a those players who mean well unlike the few rotten ones bent to do anything for their un explicable biased interests.



### Recommendations for further research in this field of study

The researcher recommended Evaluation of behavioural aspects of managers on financial performance of organizations, Assessment of non-costing tools of control on financial performance of organizations, Assessment of training techniques on application of costing tools in organizations and Analysis of Digital Dynamics on Financial Performance of Organizations as areas for further research arising from the study.

### REFERENCES

- Abbas, Q., Hunjra, A. I., Azam, R., Ijaz, M. S., & Zahid, M. (2014). Financia Performance of Banks in Pakistan after Merger and Aquisition. *Journal of Global Entrepreneurship Research*.
- Adler, M., & Posner, E. A. (2008). Happiness Research and Cost-Benefit Analysis. *Journal of Legal Studies*.
- Barbole, A. N., Nalwande, Y., & Parakh, S. D. (2013). Impact of Cost Control and Cost Reduction Techniques on Manufacturing Sector. *Indian Streams Research Journal*.
- Busch, R., & Kick, T. (2009). *Income diversification in the German banking industry*. Berlin: Deutsche Bundesbank Eurosystem.
- Cochrane, J. H. (2014). Challenges for Cost-Benefit Analysis of Financial Regulation. *Journal of Legal Studies*.
- Cokins, G. (2006). *Implementing Activity-Based Costing*. Montvale: Institute of Management Accountants.
- Dossetor, K. (2011). *Cost-Benefit analysis and its application to crime prevention and criminal justice research*. Canberra: Australian Institute of Criminology.
- Dragnic, D. (2014). Impact of Internal and External Factors on the Performance of Fast-Growing Small and Medium Businesses. *Journal of Contemporary Management Issues*.
- Eleventh Parliament,Third Session. (2015). *Report of the Departmental Committee on Agriculture, Livestock and Co-operatives on the Crisis Facing the Sugar Industry in Kenya*. Nairobi: Kenya National Assembly.
- Kenya National Audit Office. (2012). *Report of the Auditor-General on The Financial Statements of Nzoia Sugar Company Limited for the year ended 30th June 2012*. Nairobi: Nzoia Sugar Company.
- Kothari, C. (2004). *Research methodology;Methods and Techniques(Second Revised Edition)*. New Delhi: New Age International Publishers.
- Lwiki, T., Ojera, P. B., Mugenda, N. G., & Wachira, V. K. (2013). The Impact of Inventory Management Practices on Financial Performance of Sugar Manufacturing Firms in Kenya. *International Journal of Business,Humanities and Technology*.
- PKF Consulting Ltd;International Research Network. (2005). *Kenya`s Sugar Industry*. Nairobi: Export Processing Zones Authority.
- Woodhall, M. (2004). *Cost - Analysis in educational planning*. Paris: UNESCO : International Institute for Educational Planning.