Contribution of satellite campuses on Financial Sustainability of Public Universities in Kenya

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Abstract:
In the report by the auditor general queries were raised on financial statement of various Public universities. The University of Eldoret was noted to have huge student balances. Kenyatta University was reported to have huge deficit with current liabilities exceeding the current assets thus negative working capital hence unable to pay the statutory deductions. This study sought to determine the contributions of satellite campuses on financial sustainability of public universities in Kenya. The specific objectives will be to examine how financial viability and resource allocation contribute to financial sustainability of public universities in Kenya. The study also examined the moderating effect of effective management and leadership on satellite contribution toward financial sustainability of public universities. The study adopted descriptive survey research design. The target population was 176 selected staff of public universities in Kenya of which all of them were used in the study. The study adopted both descriptive analysis where percentages were used and for inferential statistical analysis; Pearson Correlation, multiple and hierarchical regression were used. The results indicated that there is significant relationship among financial viability, resource allocation, effective management and financial sustainability. Multiple linear regressions indicated that financial viability negatively predicted and resource allocation positively predicted financial sustainability at 5% significance level. Moderation was established using hierarchical regression, when the interaction terms of the moderator were added the value of R squared moved from 66.1% to 77.7% thus effective management and leadership implying moderating effects on the relationship between financial sustainability and contribution of satellite campuses. The study therefore, recommended public universities concerned should carry out a feasibility study to examine financial viability of the satellite campus before implementing them. Further, each satellite campus must have concrete timelines, revenue projections, payout models and deliverables
Key Word: Satellite Campuses, Resource Allocation, Financial Sustainability, Financial viability, Effective Management, Public Universities

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I. Introduction

The concept of financial sustainability for universities and other public institutions is essential in the light of the increasing importance of the public sector contribution to economic growth. Despite this important role, during recent years, the public funding of the university education in most countries has not increased, or at least not increased sufficiently to finance new investments. This seems strange but is comprehensible when considering that university education has to compete with other priorities in public budgets. Budgetary restrictions have been imposed by national governments as well as the aspiration of policy makers to introduce more "rational" management (Musundi, 2016), with the main objective of improving efficiency, effectiveness, and accountability.

According to the European University Association 'financial sustainability will be one of the key challenges for universities in the next decade (Estermann & Claeys-Kulik, 2013). Only those institutions that have sound financial structures and stable income flows will be able to fulfil their multiple missions and respond to the current challenges in an increasingly complex and global environment. Indeed, financial sustainability is not an end in itself; it aims to ensure a university's goals are reached by guaranteeing that the institution produces sufficient income to enable it to invest in its future academic and research activities' (Di Carl et al., 2019).

Financial sustainability in universities therefore consists of three factors cost containment income diversification; and sufficient, reliable, and sustainable public funding with appropriate accountability mechanisms. Ultimately, the two constituent elements for financial sustainability in universities are their capacity to attract funds from both government and alternative sources and to be efficient in the execution of their activities using acquired resources (Mattei, 2017).

Currently, there are four key challenges faced by universities, namely, pressure to deliver value for money, increased costs and shifting fund, changing demands on facilities, and the workforce that is not static. These challenges require universities to have sound financial structures and stable income flow. Financial sustainability is undeniably critical to ensure the university's goals are achieved by guaranteeing that the institution produces sufficient income to enable it to invest in its future activities. However, financial sustainability is a key challenge for many universities (Mamo, 2015).

Financial viability is a crucial aspect of evaluating organizations overall performance. Financial viability is about being able to generate sufficient income to meet operating payments, debt commitments and, where applicable, to allow growth while maintaining service levels. Assessment of financial viability is an integrated process involving a review of a provider's audited financial statements, Financial Performance Reports, business plan and other information that supports financial analysis. There are three dimensions to assessing financial viability of an organization. The first relates to the ability of the organization to generate enough cash to pay its bills or to be prosperous and profitable. The second deals with the sources and types of revenues on which the organization bases its costs. The third is the discipline for an organization to live within its means whereby its expenditure does not exceed its revenues (Tang & Lo, 2010).

Satellite campuses came into being in order to cater for the growing demand of higher education in areas removed from the mother university to deal with the issues of accessibility, demand overload, address decline in enrolment at the main campus, convenience and extension of reach for universities to markets that were previously out of reach as well as at the of the region in question (Hlengwa, 2014). Rust (2014) talk about universities establishing branches abroad in order to be distinctive, have prestige, make imprints, and because they are tired of operating in the same place, grow graduate and research output and diversify income, which adds a complication of managing a distributed university.

However, since the start of reforms in the university sector, a total of over 24 satellite campuses have been closed across the country. Some of the notable universities which have downscaled their satellite campuses included Kenyatta University, Masinde Muliro University of Science and Technology, University of Nairobi, Jomo Kenyatta University of Agriculture and Technology, Kisii University, Egerton University among others. Most of the said universities have indicated that the satellite campuses are not sustainable in the long run. According to the Auditor General Report published on 3rd November 2018, public universities are struggling to meet their financial obligations, a report by the Public Investments Committee (PIC) shows. According to the PIC, accounts for the financial year 2013-14, revealed most public universities reported negative working capital.

Statement of the Problem

In the report by the auditor general (2018) queries were raised on financial statement of various Public universities. The University of Eldoret was noted to have huge student balances. (www.oagkenya.go.ke) Kenyatta University was reported to have huge deficit with current liabilities exceeding the current assets thus negative working capital hence unable to pay the statutory deductions. The report also showed that the UoN, K.U and Multimedia Universities recorded a negative working capital in 2017-2018 financial years and thus struggling to meet their financial obligations during the financial year. Further, as of 2019, reports from Auditor General have indicated that most of the public universities are unable to meet their financial obligations such as payment of lecturers and statutory levies to Kenya Revenue Authority (Gok, 2019). The commission of University Education indicated some universities have failed to periodically demonstrate that they are financially sustainable and that there are good governance practices. This implies that the state of financial sustainability of universities in Kenya is under threat (Charo, Okiya & Zaafrane, 2019).

Empirical findings have failed to adequately address financial sustainability in public universities in Kenya. Ng'ang'a and Kibati (2016) established that capital structure and resource allocation significantly influence financial sustainability of private middle level colleges in Nakuru County. However, Ngahu and Mutinda, (2016) established that financial accountability and resource mobilization has no impact on the financial sustainability of organization. Chelangat (2018) and Milelu (2018) recommended that further study should be done on other determinants of financial sustainability while Wachira (2018) recommended further studies to be conducted in other state owned entities especially non-commercial entities. Therefore, the study will sought to fill the existing gaps by examining contribution of satellite universities towards financial sustainability.

Objectives of the Study
  i)   To examine how financial viability of satellite campuses contributes to financial sustainability of public universities in Kenya.
  ii) To determine the moderating effective management and leadership on the relationship between financial viability and financial sustainability of public universities in Kenya.

Objectives of the Study
i) H_{01}: Financial viability of satellite campuses has no significant contribution to financial sustainability of public universities in Kenya.
ii) H_{02}: Effective management and leadership has no moderating effect on the relationship between financial viability and financial sustainability of public universities in Kenya.

II. Literature Review
Conceptual Review
      The conceptual frame work for this study comprises of financial viability and resource allocation as independent variables. On the other hand, effective management and leadership was used as a moderating variable while financial sustainability was used as dependent variable as shown in Figure 1.0.
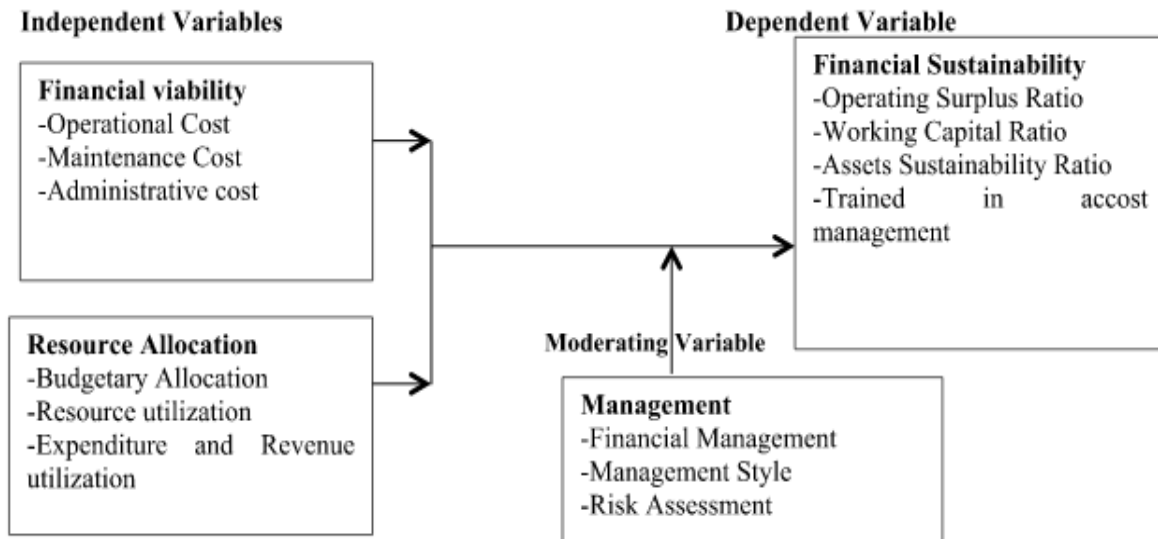
Source: Researcher (2020)

Figure 1.0: Conceptual Framework

Empirical Review
      Bashir (2015) in research paper financial viability and sustainability of microfinance institutions, the findings of their research showed that the breath and the depth of outreach lead to improvement of asset quality. The burden outstanding loans and loan loss provision showed increasing trends leading to dismal efficiency. The results also found that there was revenue loss in spite of low levels of non-performing loans. Thus financial viability had a negative relationship with financial sustainability.
In world bank report on Improving Institutional Capability and Financial Viability to Sustain Transport, Financial viability was secured often through a reliance on diverse funding sources, in terms of types of funds The funding came from diverse sources: state budget; license fees (hackney permit, road taxes, license plate registration, and vehicle registration); concession fees; and other road user charges (tolls)(world bank report 2013)
      Rogina and Šandrk (2021) in their paper the role of financial viability in sustainability and the increase of green roofs as elements of green infrastructure in Croatia. Theoretical framework was based on the relevant literature review, which had been conducted using qualitative methods of analysis, synthesis, comparison, induction and deduction. The empirical part of the study had been conducted as a here is a need to raise awareness among this population segment, as they are future decision-makers. Survey amongst the civil engineering students, using questionnaire as the survey instrument. Results: The theoretical part of the research identified the relevance of costs in GI implementation and its social and economic effects, circularity principles and EU funding options. Empirical findings indicated that the majority of Millennials from the sample find the implementation of green infrastructure to be financially demanding. Moreover, they are largely unaware of the availability of EU funding for such purpose and find the frugality aspect of green roof implementation very important. Conclusion: It is acknowledged that financial viability is inevitable when considering the implementation of green infrastructure. The level of environmental awareness among Croatian Millennials is satisfactory.
      Bashir and Kokabdurri (2018) analyze the financial viability and sustainability of the one premier micro financial institutions of the Jammu and Kashmir State namely Jammu and Kashmir Grameen Bank. The

results of the study indicate that the bank has achieved the breadth and depth of outreach, and the interest spread and asset quality of the bank has improved over the reference period. However, results also indicate that burden, loans outstanding and loan loss provisions has shown increasing trend, which is reveals dismal efficiency on the part of the bank. Finally, with regard to slippage analysis, bank is losing good amount of revenue in spite low levels of non-performing assets.

III. Material And Methods

The study used a descriptive survey research design and presupposes a worldview and a plurality of worldviews (Creswell, 2006). The design of descriptive survey research incorporates scientific methods for critically analyzing and examining source materials, interpreting data, and arriving at generalization and prediction (Neeru, 2012). The study aimed to recruit 176 respondents from Kenya's 22 public universities and constituent colleges as of July 2020. As a result, the research concentrated on public institutions founded after 2015 that have at least one satellite campus. To collect primary data for the study, revenue accountants, finance officers, payroll accountants, management accountants, internal auditors, expenditure accountants, IGU directors, and university management staff (Vice-Chancellors and Deputy Vice-Chancellors Finance). Due to the fact that all respondents at the 176 public universities were included in the study and served as the unit of analysis, Kombo and Tromp (2009) defined a sample as a discrete subset of a statistical population whose properties are studied in order to obtain generalized information representative of the entire universe.

The study will rely on primary data gathered through a questionnaire. The questionnaire will use a five-point Likert scale, with five being "strongly agree." 4-Agree, 3-fairly Agree, 2-disagree, and 1-strongly disagree. Interviews with VCs and DVCs Finance will be scheduled to elicit detailed information about the financial sustainability of universities. Secondary data were gathered from the audited financial statements of Kenya's chattered public universities. Individual institutions and Auditor General Reports will provide the published reports. The data will be secondary and will be based on six years of published annual reports from 2015 to 2020. A pilot study was conducted to ascertain the research instruments' validity. A pilot study was conducted to select a pilot university in Kenya at random. The validity of the study instrument was determined using content validity. Content validity was used to determine the extent to which the data collected via the questionnaire met the study's objectives. Cronbach alpha was used to determine reliability.

The Statistical Package for Social Sciences (SPSS) Version 24 software was used to analyze the data collected. The data analysis was descriptive as well as inferential. Descriptive analysis was used to determine the basic trends in the data by calculating percentages, means, and standard deviations of the scores on items in the study variables. Inferential analysis, on the other hand, took the shape of both correlation coefficient and multiple regression analysis (Kothari 2004). Factor analysis was used to determine the suitability of test items for variables with a large number of observed constructs. Communalities in factor analysis indicate the degree to which a test item correlates with all other test items. At the 0.05 level of significance, the study hypotheses were tested (95 percent confidence level). The findings were presented statistically in the form of descriptive and inferential tables. The regression model below was further employed to guide multiple regression analysis of the collected data.

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$……………………………………………Unmoderated regression Model

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_{1*}Z + \beta_4 X_{2*}Z + \varepsilon$……………………………………………moderated regression Model

Where:

Y = Financial sustainability for university

α = regression constant derived from the y-intercept

β_1 to β_4 = regression coefficients,

X_1 = Financial viability

X_2 = Resource Allocation

Z = Effective Management and Leadership

$X_{1*}Z$ = Interaction of Financial viability and Effective Management and Leadership

$X_{2*}Z$ = Interaction of Resource Allocation and Effective Management and Leadership

ε = error term.

IV. Result and Discussion

Preliminary Findings

One hundred and seventy six (176) questionnaires were provided to respondents, who included revenue accountants, financial officers, payroll accountants, management accountants, internal auditors, expenditure accountants, IGU directors, and university management employees. One hundred and five surveys were returned, representing a response rate of 59.7 percent, whereas 71 questionnaires were not returned, representing

40.3 percent of the total questionnaires issued. According to Mugenda & Mugenda (2004), a response rate of more than 50% is sufficient for analysis.

A pilot study was conducted to determine the reliability of the test items used to gather primary data. Cronbach alpha was used to determine reliability for each variable, which had a range of 0.934 to 0.938; hence, for this research, a Cronbach alpha statistic of 0.7 or above was deemed reliable. The test items were retained and used in this study hence considered reliable as shown in the Table 1.

Table 1: Reliability Tests

Variable	Cronbach's Alpha	Number of items
Financial viability	0.935	9
Efficient management	0.938	11
Financial sustainability	0.934	11

Factor analysis

Factor analysis was undertaken on all a variables to determine the suitability of the variables the KMO measure of sampling adequacy for all the variables were in the range of 0.5 to 1.0 that showed that factor analysis was adequate.

Table 2: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.690
Bartlett's Test of Sphericity	Approx. Chi-Square	1867.519
	Df	190
	Sig.	.000

Table 2.0 presents the results of a Kaiser-Meyer-Olkin (KMO), this measures sampling adequacy which examine appropriateness for the use of factor analysis. A range of 0.5 – 1.0 in KMO indicates the use of factor analysis is appropriate (Tanasă. Horomnea & Ungureanu, 2012). The KMO value of 0.690 signified factor analyses was appropriate for this research. Considering Bartletts test of sphericity the chi- square value was 1867.519 with a p value of .000 which was significant at 99% confidence this showed that items used in the study, independent and dependent variables were correlated

Inferential analysis

To find the relationship between the study variables, inferential analysis was used. The correlation coefficient and regression analysis for Pearson's product moment were used in the research for inferential analysis. To determine if there was a significant link between the dependent and independent variables, a correlation analysis was conducted. The findings of the analysis are as shown below:

Correlation Analysis

Table 3: Overall Correlation Analysis Results

		Resource Allocation	Financial Viability	Effective management and Leadership
Resource Allocation	Pearson Correlation	1		
	Sig. (2-tailed)			
Financial Viability	Pearson Correlation	-.002	1	
	Sig. (2-tailed)	.981		
Effective management and Leadership	Pearson Correlation	.682**	.030	1
	Sig. (2-tailed)	.000	.762	
Financial Sustainability	Pearson Correlation	.798**	-.043	.658**
	Sig. (2-tailed)	.000	.017	.000

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

From the correlation table above Resource allocation was positively correlated to financial sustainability, p value was 0.000 (p <0.01) and R value= 0.798 this was significant at 99% confidence level thus increase in Resource allocation makes financial sustainability to increase. Financial viability was negatively

correlated to financial sustainability, p value was 0.000 (p <0.05) and R value= -0.043 this was significant at 95% confidence level thus increase in financial viability makes financial sustainability to decrease. Efficient management was positively correlated to financial sustainability, p value was 0.000 (p <0.01) and R value= 0.658 this was significant at 99% confidence level thus increase in efficient management makes financial sustainability to increase.

Linear Regression Analysis

Table 4: Financial viability Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson
1	.810[a]	.656	.650	.517865261796536	1.909

a. Predictors: (Constant), ZFVIABI, ZRALLOCA

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52.247	2	26.123	97.408	.000[b]
	Residual	27.355	102	.268		
	Total	79.602	104			

a. Dependent Variable: FSUST
b. Predictors: (Constant), ZFVIABI, ZRALLOCA

Coefficientsᵃ

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	2.435	.051		48.172	.000
ZRALLOCA	.698	.051	.798	13.750	.000
ZFVIABI	-.120	.051	-.137	-2.364	.020

a. Dependent Variable: FSUST

Where ZFVIABI is Zscore for financial viability, ZRALLOCA is Z-score for resource allocation, and FSUST is financial sustainability

From regression above the value of R square was 0.656 this shows that financial viability explains 65.6 percent of variance in financial sustainability. Auto-correlation test results is a test that the residuals from a linear regression are independent, the rule of the thumb is that if the value of Durbin-Watson value is around 2 then there is no serial correlation (Garson, 2012). Ogundipe, Idowu and Ogundipe (2012) used Durbin – Watson test in their data residuals. The results of their study gave Durbin – Watson coefficient value 1.909 which is between 1.5 and 2.5 they indicated that there was no autocorrelation in the data residuals hence no autocorrelation problem. From the table above the model for regression of resource allocation and financial viability on financial sustainability had a p value <0.01 which means it's significant hence feasible. From the table above showed that resource allocation was positively correlated to financial sustainability (p <0.01) and it was significant at 99% confidence level thus increase in resource allocation makes financial sustainability to increase. However, financial viability was negatively correlated to financial sustainability (p <0.05) and it was significant at 95% confidence level thus increase in financial viability makes financial sustainability to decrease. This is similar to research done (Karwigi, 2011; Makkar & Singh, 2015). The regression equation was
$Y_{SUST} = \beta_O + \beta_{ZRALLOCA} + \beta_{FVIABI} + \epsilon$
The regression becomes $Y_{SUST} = 2.435 + 0.698_{ZRALLOCA} - .120_{ZFVIABI}$

Hierarchical regression

Table 5: Hierarchical regression for Model Summary

Model	R	R Squar	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin Watson
					Change Statistics					
1	.050[a]	.002	-.007	.8780241	.002	.254	1	103	.615	
2	.813[b]	.661	.651	.5165920	.659	98.273	2	101	.000	
3	.830[c]	.689	.676	.4976848	.027	8.820	1	100	.004	2.003
4	.881[d]	.777	.763	.4257108	.088	19.336	2	98	.000	

a. Predictors: (Constant), Periodofserviceinthecurrentposition
b. Predictors: (Constant), Periodofserviceinthecurrentposition, ZRALLOCA, ZFVIABI
c. Predictors: (Constant), Periodofserviceinthecurrentposition, ZRALLOCA,ZFVIABI, ZEMANAGE
d. Predictors: (Constant), Periodofserviceinthecurrentposition, ZRALLOCA,ZFVIABI, ZEMANAGE, FVEM, RAEM

Where ZFVIABI is Zscore for financial viability, ZRALLOCA is Z-score for resource allocation and FSUST is financial sustainability, ZEMANAGE is Z score for management, FAEM is interaction of management and financial viability, RAEM is interaction of management and resource allocation.

Model 1 in the table the control variable period of service was weakly and positively correlated to financial sustainability (r = 0.002) the model was insignificant p> 0.05. The value of R squared was 0.002. This show that period of service explains 0.2% of variance in financial sustainability. When the standardized z scores for the financial viability and resource allocation were added the value of r moved to 0.661 and was positive and significant p< 0.05 this shows that financial viability and resource allocation was strongly correlated to financial sustainability. The value of R squared change was 0.651 which show that independent variables explain 65.1% percent of variance in financial sustainability and this was significant. When efficient management was added as a moderator, there was significant change in r-square by 2.7% to 67.8% (R squared=0.676) finally in the hierarchical analysis, when the interaction terms of financial viability was added the value of r moved to 0.777 indicates that efficient management as a moderator is positive to financial sustainability. The value of R squared was 0.777 that means that financial viability moderated by efficient management explains 77.7 percent of variance in financial sustainability and this was significant. The Durbin Watson value for all the model was 2.003 this implied that there was no problem of autocorrelation, autocorrelation problem is a situation where the residues from a regression are correlated, the rule of the thumb is that Durbin Watson vale should be within the range 1.5 to 2.5. If the value is below 1.5 then there is serial correlation and if it's more than 2.5 then there is problem of autocorrelation,

Table 6: Hierarchical regression ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.196	1	.196	.254	.615[b]
	Residual	79.406	103	.771		
	Total	79.602	104			
2	Regression	52.648	3	17.549	65.760	.000[c]
	Residual	26.954	101	.267		
	Total	79.602	104			
3	Regression	54.833	4	13.708	55.344	.000[d]
	Residual	24.769	100	.248		
	Total	79.602	104			
4	Regression	61.841	6	10.307	56.872	.000[e]
	Residual	17.760	98	.181		
	Total	79.602	104			

a. Dependent Variable: FSUST

b. Predictors: (Constant), Periodofserviceinthecurrentposition

c. Predictors: (Constant), Periodofserviceinthecurrentposition, ZRALLOCA, ZFVIABI

d. Predictors: (Constant), Periodofserviceinthecurrentposition, ZRALLOCA, ZFVIABI, ZEMANAGE

e. Predictors: (Constant), Periodofserviceinthecurrentposition, ZRALLOCA, ZFVIABI, ZEMANAGE, FAEM

From the ANOVA table only model 1 where period of service as a control variable the model was insignificant thus not applicable as the value of p< 0.05. All other models 2, 3 and 4 were significant thus they were feasible.

Table 7: Coefficients for Hierarchical regression

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.296	.287		7.987	.000
	Periodofserviceinthecurrentposition	.051	.101	.050	.504	.615
2	(Constant)	2.230	.174		12.790	.000
	Periodofserviceinthecurrentposition	.075	.061	.073	1.226	.223
	ZRALLOCA	.703	.051	.803	13.836	.000
	ZFVIABI	-.104	.052	-.119	-1.996	.049
3	(Constant)	2.202	.168		13.088	.000
	Periodofserviceinthecurrentposition	.086	.059	.083	1.445	.152
	ZRALLOCA	.568	.067	.649	8.500	.000
	ZFVIABI	-.108	.050	-.124	-2.153	.034
	ZEMANAGE	.199	.067	.227	2.970	.004
4	(Constant)	-.845	.975		-.867	.388
	Periodofserviceinthecurrentposition	.095	.052	.093	1.824	.071
	ZRALLOCA	-.525	.188	-.600	-2.798	.006
	ZFVIABI	-.051	.203	-.058	-.249	.804
	ZEMANAGE	-.537	.301	-.614	-1.786	.077
	RAEM	.375	.061	2.192	6.191	.000
	FAEM	-.064	.074	-.348	-.862	.391

a. Dependent Variable: FSUST

In the first model the period of service as a control variable was not significant as p value > 0.05. In model 2 the period of service is also not significant as p value > 0.05. The standardized values of financial viability and resource allocation were positive and significant to financial sustainability as p value was < 0.05. Increase in financial viability, financial sustainability will decrease, thus when financial sustainability change by one unit financial viability will change by 0.104 units in the opposite direction if all other independent variables are assumed to be zero. Increase in resource allocation, financial sustainability will increase, thus when financial sustainability change by one unit financial viability will change by 0.704units in the same direction if all other independent variables are assumed to be zero. In model 3 period of service as a control was negative and insignificant as the p vale was> 0.05. The standardized values of financial viability and resource allocation were also significant to financial sustainability as p value was < 0.05.

In model 4 period of service as a control was negative and insignificant as the p vale was> 0.05. The standardized z score of resource allocation had positive relationship to financial sustainability as p value < 0.05 while financial viability had negative relationship to financial sustainability as p value > 0.05. However, to interpret how efficient management moderates the relationship between contribution of satellite campuses and financial sustainability, regression equations were calculated for each level relationship at low and high levels of efficient management. The regressions undertaken centred terms using process model 1 method advanced by Andrew F. Hayes (Dawson, 2014). The resulting showed the interaction effects between the predictor variables, financial allocation and resource allocation and the moderator efficient management were plotted on an excel file so as to interpret the interaction graphically presented as shown below.
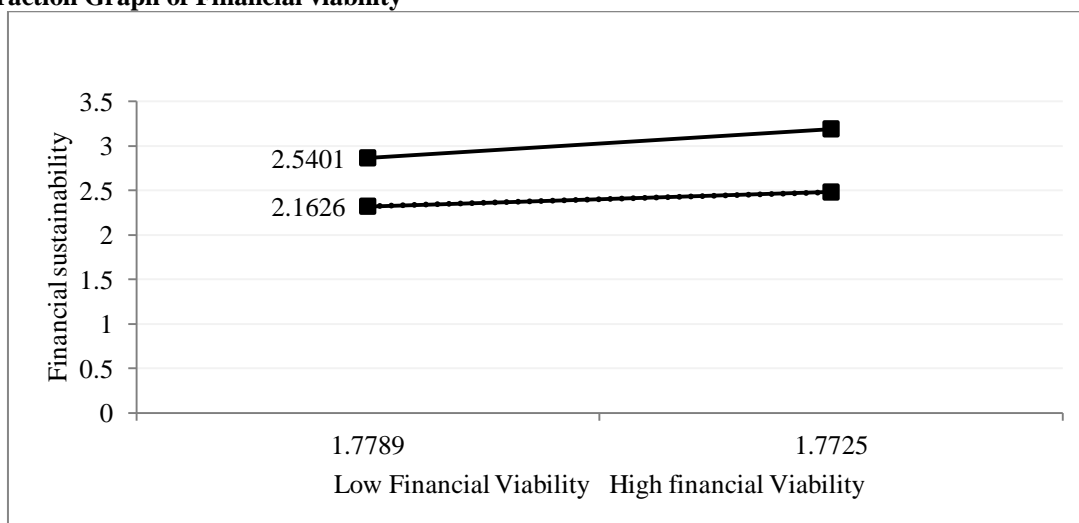
Interaction Graph of Financial viability

Figure 1.0: Interaction Graph of Financial viability

When the level of effective management and leadership is high the relationship between financial sustainability and financial viability is relatively low. However when the level of effective management and leadership is low the slop of regression drops downwards representing a negative relationship between financial viability and financial sustainability. Interaction occurs at low values of effective management and leadership.
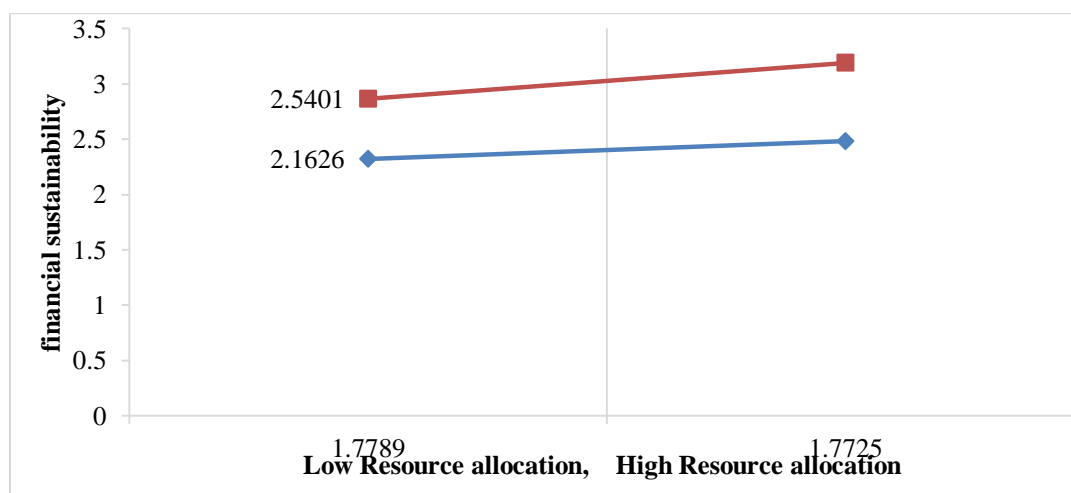
Figure 2: Interaction Graph of Resource Allocation

When the effective management and leadership is high the relationship between financial sustainability and resource allocation is high and when effective management and leadership is low resource allocation is found to have a positive influence on financial sustainability. The effective management and leadership was found to have a moderating influence on the relationship between financial sustainability and resource allocation.

V. Conclusion and Recommendation

The evidence suggests that resource allocation and financial viability is very crucial concept to ensure sustainability of public universities in Kenya. However, at the moment satellite campuses are not viable which affected financial sustainable of public universities despite the fact resources have been continually allocated to them. Satellite campuses' liabilities are greater than assets. Satellite campuses did not kept surplus financial resources to use during economic depressed periods. The study therefore, recommended public universities concerned should carry out a feasibility study to examine financial viability of the satellite campus before implementing them. Once this is done the universities should go ahead and establish them. Further, public universities to set clear guidelines on utilization of the internally generated funds. In this regard, clear rules and policies need to be put in place regarding revenue sharing fit with university priorities. Each satellite campus must have concrete timelines, revenue projections, payout models and deliverables.

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