Analysis of Financial Performance of Income Generating Activities in Public Higher Learning Institutions: Experience from Egerton University, Kenya

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Abstract
Income generating units have been in operation in Kenyan Public Universities since the 1990s. Their establishment was aimed at cushioning the Universities from the effects of the reduction of Government capitation to finance their recurrent and capital expenditure. However, most Public Universities in Kenya still suffer from financial distress despite the creation of these IGUs. This study sought to evaluate the financial performance of the IGUs at Egerton University and its former Constituent Colleges between 2003 and 2012. Secondary data was collected from financial statements from which key financial ratios were computed and used to analyze the financial performance of the IGUs over a period of ten years. Empirical results indicated that Module II study programs were the most profitable IGU. Furthermore, the IGUs recorded a fifteen percent rate of return on investment and a liquidity ratio of over 3. However, the declared surpluses did not take into account the personnel emoluments for the University staff working in the IGUs. There is need for public Universities to maintain accurate and complete sets of financial statements for informed decision making.
Keywords: Financial Performance, Income Generating Activities, Financing Public Universities.

1. Introduction

Universities all over the world are regarded as engines of economic and suitable national development. They are veritable tools for the realization of national development; the development of cultured citizens and promotion of basic research. University education is therefore the most powerful and critical success factor for individuals and the society (Aina, 2007). For Universities to effectively perform their roles there must be adequate funding. The Kenyan government's priority to Universities in terms of funding has declined and this has limited the ability of the Public Universities to effectively and efficiently perform their duties, particularly the traditional roles of teaching and research.

Underfunding in Kenyan Public Universities is a consequence of the expansion of the higher education in response to the growing demand for the University education and the intensifying needs of modern economy driven by knowledge, without an increase in the corresponding available resources. This has had an effect on Universities' core business of teaching and research where the quality has fallen considerably because of lack of adequate teaching and research materials, among others. Furthermore, effects of inadequate funding are evident in the fact that the physical facilities in the Universities are in a state of despair and several capital projects have been abandoned (Kiamba, 2005).

The government developed a cost-sharing policy, which shifted the responsibility of generating resources to the local communities and schools. In addition, the government emphasized that the resources needed to be acquired and put to the best use in judicious management process. As regards this need, the government, in part, expected that various resources available to education institutions including land, finances, staff, time, facilities and equipment be managed properly and utilized in the most cost-effective manner to bring about efficient provision of quality and relevance in education (Republic of Kenya, 1998).

Over the years, Public Universities in Kenya had to innovate in order to cope with increased competition and diminishing capitation, particularly, from the Treasury. Apart from this, the perception of Universities as mere institutions of higher learning gradually gave way to the view that, Universities are important engines of economic growth and development (Kiamba, 2005). Since 1990, Public Universities have continued to receive less financial allocations from the government than their estimated expenditure. This has resulted to the accumulation of debts, delayed payments to suppliers and delayed payments to service providers, among others. According to a report of Ministerial Public Expenditure Review in 2005, there was a strong indication that the government was no longer able to fully finance Public Universities. Session Paper No. 1 of 2005 on Policy Framework for Education, Training and Research, clearly stated that

University education was particularly expensive to the Government and not sustainable within the resources that were existing (Republic of Kenya, 2005). This meant that, Public Universities had to plan well ahead about resources expected to be forthcoming from sources other than the Exchequer.

The problem of under-funding in Public Universities is not surprising considering the fact that in recent times, government revenues have not grown in proportion with its expenditure. Indeed, government priority to education has continued to be very low, as other sectors compete for the same resources, making funding of Universities by the government to decline gradually (Kiamba, 2005). As a result to the problem of under-funding on higher education, Public Universities resorted to various income generating projects to supplement their income. The purpose of these Income Generating Units (IGUs) was to supplement the ever declining government capitation and deliver the Public Universities from the financial hardship. Despite these efforts, Ngolovai (2006) observes that regardless of the various innovative methods introduced to generate additional income, Universities economic situation is still precarious, that the income generation measures that have been introduced only offsets a fraction of the huge financial burden facing the Universities. This raises key questions: how can Universities fill these financial gaps? Do these institutions have the capacity to significantly generate additional income to assist in plugging their budget deficits?

Ideally, income generating activities in Public Universities were created in order to alleviate financial difficulties in these institutions. This was as result of the government inability to fully finance Public Universities through its capital expenditure budget, however, it is evident that Public Universities, continue to suffer from various financial problems including but not limited to debt accumulation and inability to promptly pay suppliers of goods and services; inability to make timely purchases of project inputs; delay in payment of salaries and implementation of Collective Bargaining Agreements (CBAs); limited number of academic field trips and academic conferences; curtailment in purchase of books; and reduction of research grants, among others. In fact, income generation measures that have been introduced in Public Universities over the years, only offsets a fraction of the huge financial burden facing the Universities. This raises key questions whether these income generation measures do significantly influence financing of Public Universities budgets. Given that Public Universities continue to suffer from financial problems despite the initiation of various IGUs, and since financial gaps are still evident in Public Universities' financial operations, a thorough investigation on the financial performance of IGUs in Public Universities is necessary. This study had three objectives of assessing IGUs return on investment, liquidity, and leverage in Egerton University. Likewise, it asked three research questions relating to these three objectives

2. Reviewed Literature

2.1 Financing Higher Education

Funding Universities throughout the world has witnessed dramatic challenges in the last decade of the 20th and the first decade of the 21st centuries. These changes are responses to a worldwide phenomenon of rising costs of University education in excess of the corresponding rates of increase of available revenues. In order to cope with government funding reductions, Universities worldwide now generate additional sources of funds (Johnstone, 2005). Universities funding shortfalls has been the norm for many years as enrollments have increased more quickly than the government's capacity to maintain its proportional financial support. Because government funding is insufficient to maintain institutional performance in teaching and research, Kenyan Universities, just like other Universities elsewhere in the world have sought to supplement their public funding with locally generated incomes.

Like most African countries, higher education in Kenya was historically free, with public purse covering both tuition and living expenses. The rationale for higher free education was based, among other things, on the country's desire to create highly trained manpower that could replace the departing colonial administrators. In return, graduates were bound to work in the public sector for a minimum of three years (Weidman, 1995). Economic difficulties, and the alarming increase in population, coupled with deteriorating climatic conditions affecting agriculture changed this trend and resulted to the reduction of the recurrent budget allocated to higher education. For Universities to effectively perform their roles there must be adequate funding. The Republic of Kenya, for a long time has been the sole financier of University education in country. There is no source tied to any particular expenditure item, and therefore, education has no special source of revenue tied to it alone, and thus continues to compete with other public service units. The amount of money that is allocated to education, not only depends on the total amount of revenue available, but on the order of priority ranking for any particular fiscal year.

The total government expenditure on education has increased from Ksh. 81 billion in 2004/05 to Ksh. 106

billion in 2008/09 fiscal year (Ministry of Finance, 2009). In 2011/2012 budget, education sector took up to Ksh. 149.4 billion of the total National budget and this was increased to Ksh. 233.1 billion the following 2012/2013 fiscal year (Ministry of Finance, 2012). While the government investment in primary and secondary education has increased dramatically in the last several years, the higher education portion of total education expenditures continues to diminish. In 1994, for example, the Republic of Kenya decreased the education budget from 37 percent of its total annual recurrent budget to about 30% stating that it was not possible to allocate additional funding to higher education (Kiamba, 2004). This shortfall in public budget for higher education brought about the impetus for institutions to look for alternative income generating sources, in effect, reducing their over-dependence on the government budget.

2.2 Financial Distress in Public Universities

Public Universities just like any other business can face financial distress. According to Bosire (2009) financial distress refers to a situation where cash flow is insufficient to cover current obligations. These obligations may include unpaid debts to suppliers and employees, actual or potential damage from litigation and missed principal or interest payments under borrowing agreements, some of which are being witnessed in our Public Universities. Financial distress is not unique to Kenyan Universities but it is a global problem with global recession and competition biting deeper in the past few years, more and more businesses are becoming insolvent. A dominant theme of higher education in the 1990s was financial distress. This was the condition underlying the World Bank's declaration in 1994 that higher education was in crisis throughout the world.

Arora et al. (2002) contends that three major factors contribute to this pervasive condition of financial distress in Universities. The first is enrollment pressure especially in those countries combining growing populations of secondary school leavers with low current higher educational participation rates and inadequate higher educational capacity to meet the growing demand. A second cause is the tendency of unit costs in higher education to rise faster than unit costs in the overall economy. Finally, a cause of tertiary education's financial distress is the increasing scarcity of public revenue function due to competition from other public needs like basic education; and also due to the inability of many countries to rely on former methods of raising public revenues.

2.3 Entrepreneurism in Public Universities

Over the years, Public Universities in Kenya have continued to receive less financial allocations from the government than the expected expenditure. Public Universities were therefore called upon to explore ways and means of financing University programs partly with funds generated from sources other than the Exchequer. This led Public Universities to engage in entrepreneurial activities in order to generate more income to finance their capital and revenue expenditure (Kiamba, 2005).

According to Kartz (2008), entrepreneurship refers to the practice of identifying, mobilizing, utilizing and exploring ideas, concepts, opportunities and resources in order to generate an occupation, an income, attain self-sufficiency or fulfillment as well as achieve set goals. IGUs in Public Universities, just like any other business enterprise requires approach of new ventures skillfully. To achieve the goals and purpose of an entrepreneurial University there is need for creativity and innovations (Teyie & Kariuki, 2009). This encompasses aspects such as management, leadership, business policy, motivation, communication, promotion, and product development, financing and customer services.

2.4 Categories of Income Generating Activities in Public Universities

In an effort to make up the financial shortfalls and enhance their missions, Public Universities mounted innovative income-generating activities (IGAs). These are organized around self-sponsored academic programs (Module II of study), business and productive ventures (non-academic commercial units), consultancy services, and hiring out University facilities to external users. Non-academic IGAs include running guesthouses, farms, bakeries, cyber-cafés, bookshops, restaurants and mortuaries. New study programs and courses have also been initiated in response to public demand, on the basis of charging full-cost fees plus overheads. The introduction of these courses has not only increased access to University education programs during evenings and weekends but has also contributed to generating valuable income for these institutions (Mwiria et. al. 2007).

These various activities have been successful in generating significant income for the Public Universities. Income generating activities, currently undertaken by Universities in Africa, can be generally classified in two groups, namely; teaching programs and non-teaching income generating activities. The academic

oriented income generation means that income generation may be purely academic through the provision of education and teaching services. This academic-oriented income generation can be done through the development of academic-based business unit, which provides science and technology-based products. The principle of academic-oriented is a principle that income generating based on the realization of the main tasks and functions of Universities that are teaching, research, and community service (Ogada, 2000).
The financial resources available to Public Universities in terms of capitation from governments have been declining across Sub-Saharan African countries (World Bank, 2010). In this regard, there are several theories that explain organizational responses to resource challenges. Resource dependence theory (RDT) provides useful conceptual tools for understanding organizational responses to financial challenges. This theory argues that no organization is completely self-contained. The need to acquire resources creates dependencies between organizations and their external units and the scarcity of resources determines the degree of dependency. According to RDT, when resources are in a state of short supply, organizational stability is threatened. Under such circumstances organizational efforts are directed at regaining stability and removing the source of the threat to the organization (Mamo, 2011). Therefore, an organization must engage in an exchange with its environment in order to survive. Consequently, from the resource dependence perspective, Universities can manage resource dependence difficulties arising from state funding by competing for resources from a market. As Universities can operate in multiple markets, they may be able to establish multiple exchange relationships for mitigating disruptive resource instabilities through developing multiple revenue streams (Clark, 1998; Wangenge-Ouma, 2011).

3. Methodology

3.1 Research Design and Data Collection

The study used a descriptive research design as it enabled obtaining an in depth information on the financial performance of the IGUs. A data collection sheet was used to collect secondary data on financial performance from audited financial statements and financial budgets of the University.

3.2 Data Analysis and Measurement of Variables

Data on financial performance and budgets was analyzed using financial ratios. According to Pandey (2005), financial ratios are effective performance indicators for comparing results over several periods. The data analyzed was presented in form of tables. To evaluate the financial performance of IGUs in the University, the study employed the Return on investment (ROI) ratio, Liquidity ratio and debt ratio. According to Brigham & Ehrhardt (2013) the ratios can be computed as follows:

$$ROI = \frac{Income \quad from \quad Investment - \quad Cost\,of \quad Investment}{\cos t \quad of \quad investmet} X \quad 100$$

$$Liquidity \quad Ratio = \frac{Current \quad Assets}{Current \quad Liabilities}$$

$$Debt \quad Ratio = \frac{Total \quad Debt}{Total \quad Assets}$$

4. Results and Discussions

4.1 Descriptive Statistics on the Financial Performance of IGUs

A scrutiny on audited financial statements of the University and its former constituent colleges indicated a divergent view on the financial performance of the Income Generating Units. Table 1 summarizes IGUs surpluses for Egerton University and its former Constituent Colleges. It shows the financial performance of the IGUs in Egerton University over the 10 year period (2003-2012). On average, the IGUs were profitable except for the farm and catering having an average loss of Kenya shillings 1.7 million and shillings 2.4 million respectively. Module II of study was the most profitable IGU in the University with a mean profitability of 40.499 million. Financial data from Chuka University College could not be obtained and therefore was not included in the analysis. According to table 2, Egerton University IGUs were the most profitable with a mean of 62.35 million over the 10 year period.

4.2 Return on Investment

The study sought to measure the performance of IGUs using a computation of return on investment from Egerton University and its former Constituent Colleges. This ratio acts as the most appropriate indicator of the earning power of the capital employed in a business. The standard ROCE is about 15% and above. Preparation of financial statements was not consistent within the period. Different formats were applied in reporting IGUs financial data within the period. During the period 2003-2008, there was no inclusion of IGUs income and expenditure in the audited financial statements but only a figure of surpluses. This made it difficult to compute ROI for the six years. From 2009-2012, a different format showing consolidated income and expenses for the IGUs was available. However, Table 3 indicates that on average for the four years, IGUs had a return on investment of 24% which was higher than the ideal of 15%. This implies that the IGUs recorded a higher productivity on investment. Data on individual IGUs was not available hence it was not possible to compute a return on investment for the individual units.

4.3 Liquidity of IGUs

Liquidity ratios measure the ability of a firm to meet its short-term liabilities. The acceptable current ratio for a business is 2 times. According to the results in Table 2, on average IGUs current assets were able to cover their liabilities by 3.02 times over the 10 year period. This means that the IGUs had greater ability to meet their liabilities (3.02>2). Nevertheless, the high current ratio implies that the IGUs were less efficient in the utilization of funds. The IGUs recorded the highest current ratio in 2007 of 6.27 times while 2003 recorded the lowest current ratio of 0.65 times.

4.4 Debt Ratio of IGUs

Debt ratio indicates the proportion of a company's assets that are financed through debt. The analysis of the debt ratio is given in Table 5. According to the results, IGUs had an average debt ratio of 33.1%. The IGUs recorded the highest debt ratio in 2003 of 154.7%. This indicates that most of the assets acquired by the IGUs in 2003 were financed by the use of debt. Nonetheless, table 4 shows that there was a significant decline in the debt ratio of the IGUs from 2004.

5. Conclusions and Recommendations for Policy

The study results indicated that Egerton University and its former Constituent Colleges initiated various income generating units to earn more income and address the issue of diminishing capitation from the government. The main IGUs in Egerton University and its former Constituent Colleges are the module II program of study, commercial ventures, research and consultancy and general production units like farm. The empirical results of the study showed that module II program had the highest surplus over the 10 year period as compared to other IGUs. The IGUs had an average return on investment of 24 percent and a current ratio of 3.02 times.

It can be deduced from the findings that the IGUs undertaken by Egerton University and former Constituent colleges are relevant in addressing financial hardships in the institutions. However they have not been effective as they generate a substantially small amount of surpluses as indicated in the audited financial statements for the ten years from 2003-2012. Documental evidence also indicated that the declared surpluses did not take into account all the expenditure as personnel emoluments for the staff in IGUs were included in the University expenditure hence the IGUs expenditures are not actual. This implies that the IGUs' surpluses could actually be deficits if all the expenses are included. The exclusion of personnel emoluments for staff engaged in IGUs makes it difficult to verify their profitability. These findings are supported by other past studies including Kiamba (2004), Mamo (2011) and Onyuma & Okumu (2015).

There is the need for Public Universities to maintain accurate and complete sets of financial statements for informed decision making. Furthermore, to improve financial performance of the IGUs, the management organs of Public Universities should take radical steps to establish investment companies to coordinate the IGUs. These units should be autonomous and independent and should operate in a private enterprise manner. They should also be manned by efficient and well-trained individuals, who are also business oriented. For those which still manage the units themselves, this may call for incorporation of investment companies in these Universities. Only this way can Public Universities be able to effectively utilize the available resources and generate wealth to effectively contribute towards their development and reduce overreliance from the Government. Public universities could also consider other sources of financing their budget deficits, including use of capital markets, other than IGUs (Onyuma and Okumu, 2015). These may include corporate bond issuances, securitization, private equity as well as profit-driven philanthropy.

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Table 1: Egerton University IGU Surpluses in Ksh. "000"

Year	Module II	ARC Hotel	Farm	Dairy	Bookshop	Catering	Combined	Total
	Ksh. "000"	Ksh. "000"	Ksh. "000"	Ksh. "000"	Ksh. "000"	Ksh. "000"	Ksh. "000"	Ksh. "000"
Total	283,490	17,614	(12,184)	2,005	356	(16,895)	349,117	623,503
N=	7	7	7	7	7	7	3	10
Mean	40,499	2,516	(1,741)	286	51	(2,414)	116,372	62,350

Source: Data Analysis

Table 2:Summary of IGUs Surpluses in Ksh. "000" – Consolidated

	Egerton - Main	Laikipia	Kisii	Chuka	Total
Year	Ksh."000"	Ksh."000"	Ksh."000"	Ksh."000"	Ksh."000"
Total	623,503	6,056	22,105	0	651,664
n=10	10	2	2		10
Mean	62,350	3,028	11,053	0	65,166

Source: Data Analysis

Table 3: Analysis of Return on Investment for IGUs

Year	IGUs Revenue	IGUs Expenditure	Actual Contribution (Surpluses to University)	ROI %
	Ksh. "000"	Ksh. "000"	Ksh. "000"	
2003			49,855	No IGUs data
2004			17,301	No IGUs data
2005			64,335	No IGUs data
2006			62,619	No IGUs data
2007			22,599	No IGUs data
2008			33,410	No IGUs data
2009	404,219	339,757	24,267	7
2010	558,319	404,183	154,136	38
2011	463,345	402,174	61,171	15
2012	671,104	509,133	161,971	32
Total	**2,096,987**	**1,655,247**	**401,545**	**24**
n	4	4	4	
Mean	524,247	413,812	100,386	24

Source: Data Analysis

Table4: Analysis of Liquidity Ratio for IGUs

Year	IGUs Current Assets	IGUs Current Liabilities	Current Ratio
	Ksh. "000"	Ksh. "000"	C.A/C.L
2003	12,985	20,085	0.65
2004	76,870	22,666	3.39
2005	108,751	21,368	5.09
2006	130,848	29,726	4.40
2007	167,149	26,645	6.27
2008	116,553	31,796	3.67
2009	84,260	42,347	1.99
2010	121,843	48,395	2.52
2011	99,829	46,837	2.13
2012	201,130	80,787	2.49
Total	**1,120,218**	**370,652**	**3.02**
mean	112,022	37,065	3.02

Source: Data Analysis

Table 5: Analysis of the Debt Ratio for IGUs

Year	IGUs Total Debts	IGUs Total Assets	IGUs Debt Ratio
	Ksh. (Millions)	Ksh.(Millions)	%
2003	20.1	13.0	154.7
2004	22.7	76.9	29.5
2005	21.4	108.8	19.6
2006	29.7	130.8	22.7
2007	26.6	167.1	15.9
2008	31.8	116.6	27.3
2009	42.3	84.3	50.3
2010	48.4	121.8	39.7
2011	46.8	99.8	46.9
2012	80.8	201.1	40.2
	370.7	**1,120.2**	**33.1**

Source: Data Analysis

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