



Generation of IGF and its Effects on Financial Performance of Universities: Evidence from Kumasi Technical University in Ghana

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ABSTRACT

The study assessed the generation of Internally Generated Fund(IGF) and its effects on financial performance of Universities, with evidence from Kumasi Technical University in Ghana. The objectives of the research work were to identify the sources of IGF; whether Kumasi Technical University has new strategies in the generation of IGF; and whether IGF of Kumasi Technical University was able to meet its expenditure. The research design was descriptive. Sixty- three out of seventy questionnaires administered were retrieved. Secondary data were extracted from relevant reports/articles, journals, and other documents. Convenience and purposive sampling were used to select respondents. Findings were that the largest contributor to IGF was fees; and actual IGF fell short of actual expenditure. The conclusions were that fees were the major source of funds to Public Tertiary Institutions; Government support was mainly in the form of wages and salaries and capital projects through Ghana Education Trust Fund (GETfund); and wages and salaries were the highest expenditure though directly paid by government. Staff motivation, assigning competent staff to revenue avenues, seeking approval from the Minister of Finance to do investments were some recommendations made on IGF and its effects on financial performance. Others were that the Government of Ghana (GoG) should continue to pay wages and salaries; the Institution should adhere to the tenets of public procurement; sponsor staff locally; and these will help cut down waste and reduce costs.

Keywords: Generation; IGF; Financial Performance; Universities; Kumasi Technical University

1. INTRODUCTION

1.1 Background to the Study

Funding is a crucial factor for the growth of every Organisation. The Report of the Educational Review Committee (2004) stated that Government of Ghana is able to meet about 50% of the budget requirements of public tertiary institutions. Out of this about 80% goes into personnel emoluments. In 2014, the Government allocated only GH¢150,571,282 to the Polytechnics out of a budget request of GH¢325,547,304(Report from NCTE, 2015).The deficit gap in funding must be financed by the institutions themselves.

This study will therefore seek to analyse the various sources of IGF (fees, miscellaneous income, and interest income) available to Kumasi Technical University and how these funds can meet its expenditure (wages and salaries, goods and services and non-current assets).

Kumasi Technical University was formerly a Polytechnic. The Polytechnic Law, 1992(PNDC L321) elevated the polytechnic to a tertiary institution. This was replaced by the Polytechnics Law, 2007 (Act 745).It has further been replaced by the Technical Universities Act, 2016(Act 922) as amended in 2018(Act 974).

1.2 Statement of Problem

According to Aryee (2003), in spite of statutory grant provisions and other central government financial support, the MDAs are unable to raise enough revenue at the local level for development. The low level of revenue generation coupled with misapplication of the funds has been a source of concern, especially to the central government. Having realised that revenue short-falls constitute a hindrance in meeting various expenditure, universities are empowered to adopt several strategies to strengthen the internal generation and financial performance of Institution funds. Transfer of funds from the central government to public tertiary institutions, especially for goods and services,has been inadequate for decades and further dwindling over the past few years. Universities have been attempting to find ways to generate revenue to undertake their development projects and meet other expenditure and Kumasi Technical University is no exception as it continues to struggle with inadequate financial resources to meet its expenditure. This study will therefore seek to analyse the various sources of IGF(fees, miscellaneous income, interest income) available to Kumasi Technical University and how these funds are able to meet various expenditure(wages and salaries, goods and services and non-current assets) in their quest to provide quality teaching, learning and research to clients.

1.3 Objectives

The objective of the study is to assess the generation of IGF on financial performance, specifically:

- To identify the various sources of revenue generation and whether or not they are able to generate adequate IGF;
- To identify whether Kumasi Technical University has devised new strategies in the generation and management of its revenue(IGF);and
- To identify whether IGF of Kumasi Technical University is able to meet its expenditure.

1.4 Research Questions

In order to achieve the research objectives of the study, the following research questions were formulated:

- Is Kumasi Technical University generating enough IGF and strengthening its financial performance?
- Is it feasible for Kumasi Technical University to devise new strategies for the generation and management of IGF?
- Is Kumasi Technical University prudently utilizing its IGF to meet its expenditure?

1.5 Significance of the Study

Almost sixteen years after the introduction of the Financial Administration Regulation(FAR), 2004, L.I 1802 on IGF generation in Ghana, there is an urgent need to have some mechanisms put in place to ensure the performance of public tertiary institutions, specifically Kumasi Technical University. An independent study to assess or evaluate the institution's financial performance on the generation of IGF is therefore important to assist Kumasi Technical University design efficient and effective ways not only to generate internal funds, but also to prudently meet its expenditure. The research work is significant because of the important role public tertiary institutions play in the generation and performance of their own IGF especially times of economic crisis. This study will further:

- Enable Government to be more aware of the problems facing the various universities in the country (especially Kumasi Technical University) in order to find lasting solutions to them;
- Make the management of Kumasi Technical University more aware of the problems associated with IGF by providing recommendations for the implementation of various strategies to combat the issue of inadequate revenue generation to meet expenditure;
- Enable management to adopt more strategic policies for the generation and financial performance of the IGF of the institution; and
- Serve as reference material to other researchers conducting studies on related subjects.

1.6 Scope of the Study

The scope of the study is limited to the Kumasi Technical University. This is as a result of the difficulty in getting data from the institutions. The findings and recommendations may be used for similar universities. Its wholesale use might not be effective unless supported by further research evidence from other universities. The study was based on

data pertaining to fourteen year periods from 2005 to 2018. The focus of the subject areas of the study was limited to the generation of IGF and its effects on financial performance of the Kumasi Technical University.

Studies conducted on this research might not be as comprehensive due to the facts elaborated above by the researcher and hence limitation to this piece of work.

2. LITERATURE REVIEW

2.1 Introduction

Tertiary education has always been an important priority in the public agenda (Rena, 2008). For decades, researchers, authors, scholars, education administrators among others have written literature on financing education care in Ghana. The study reviews relevant literature on the revenue generation and expenditure policies in Ghana's education sector over the years. To be able to answer the research questions and reach the objectives, the researcher has been selective in the search of relevant theories and concepts. It includes an overview of government's policy on public tertiary financing in Ghana. It also reviews studies conducted by researchers with particular emphasis on revenue generation and expenditure policies in Ghana.

According to Salmi (1992), The most effective approach is an institutional diversification strategy. This is already evidenced in the increasing demand for tertiary education programmes.

2.2 Theories Underlying the Study

Three main theories will be considered: the African political economy (APE) model, the resource dependence theory and the Pecking order theory. The African political economy (APE) explains how Tertiary Educational Institutions behave in difficult resourcing times (Aina, 2002; Wangenge- Ouma et al., 2008). The force behind the APE model is on how tertiary educational institutions carry out their core functions, that is, teaching and research, especially in situations of major political and economic benefactors. The theory helps to explain the realities of the specific political, economic and socio cultural environments (Wangenge-Ouma et al., 2008) that confront a country. The reality is that, whenever government reduces funds by cutting budget allocations to the sectors, education of higher learning is worse hit (Ndagi, 1983).

On the other hand, the resource dependence theory postulates that for the institution to survive, it depends on how managers compete and win external resources and deploy them to key areas that required enough attention by stakeholders (Pfeffer & Salancik, 1978; 2003). Funding problems of the Tertiary Educational Institutions are rooted in the economic, social, cultural, and political structures in the country (Johnstone, 1998; Wangenge- Ouma et al., 2008). Ghana is facing an increasing debt burden, low investment, poor infrastructure and cultural impediments, and these confirm the realism of the model and its application in the determination of the impetus behind the growing emphasis on IGF. However, the resource dependence theory explains how the institutions respond to the critical environment surrounding the assumptions of the model unlike the APE model. Hence its application will not appear limited to the theoretical level.

The third theory- the pecking order theory- goes against the idea of companies having a unique combination of debt and equity finance, which minimizes their cost of capital (Donaldson, 1961). The theory suggests that when an institution is looking to finance its long-term investments, it has a well defined order of preference with respect to the sources of finance it uses. The first preference is to use internally generated funds over external sources of finance. If these prove insufficient the next preferred is to resort to external financing. These can be through bank borrowings and corporate bonds. After exhausting both of these possibilities, the next source of finance is to issue new equity capital. A more sophisticated explanation for the existence of the pecking order was put forward by Myers (1984). He suggested that the order of preference stemmed from the existence of asymmetry of information between the company and the markets. For example, suppose that a company wants to raise finance for a new project and the market has underestimated the benefit of it. The management, with their inside information, will consider the company to be undervalued by the market. Therefore, they will want to finance the project through retained earnings so that, when the market finally sees the true value of the project, the existing shareholders will benefit. If there are insufficient retained earnings, the company will choose debt finance in preference to issuing new shares, as the management will not want to issue new shares if they consider them to be undervalued by the market.

2.3 Funding University Education

Funding for Tertiary Education comes from several sources and that would depend on the ownership and the economy that the institution is located (Altbach, Reisberg & Rumbley, 2009). Tertiary education worldwide is funded by governmental and individual sources.

Significantly, the funding sources for university education depend on country by country and region by region. Sometimes, too it would depend on the philosophy of a country towards university education.

With the continued dwindling economic and national fortunes, it is becoming increasingly difficult for the Ghana government to meet its financial obligations towards its university education system. As a statutory responsibility the government shoulder the costs of university education in the country, and political influences have frustrated effort of institutions to raise funds through payment of tuition fees and other levies. For instance, free education campaigns have remained vital in many political manifestos and activities.

To this end, a number of tertiary educational institutions have established profit making commercial ventures, to raise alternative funds for the institutions.

2.3.1 Funding Universities from Internally Generated Funds (IGF)

Private universities are wholly funded from Internally Generated Revenue and for this reason public universities could follow suit even though both have different focus.

This call has become imperative in view of the challenges that most governments are facing on meeting the increasing demands of funding public tertiary educational institutions. No doubt policies like cost sharing and full cost recovery have been initiated and are being somehow implemented at various stages among Ghanaian and Nigerian public universities these days. As part of the implementation of the cost sharing idea and the issue of full cost recovery the management of public universities has been urged to look for alternative sources of funding their activities. To this end, Okojie (2009) states that the federal government of Nigeria, has directed through the National Universities Commission (NUC) that all federal universities should look at ways of raising funds internally to relieve the government from solving all their financial problems. Also, in recent times, the University Teachers Association of Ghana (UTAG) suggested that public universities could rely substantially on Internally Generated Fund (IGF) to fund most of their activities.

It is becoming increasingly clear that IGF is becoming a major source of funding for universities across board. This is because most public tertiary educational institutions are beginning to run programmes that are market oriented and are fee paying on sandwich, part-time and distance basis.

Onuoha (2013) asserts that the IGF theory means that the central government should not have to accept the burden of providing funding for every expenditure item of public tertiary educational institutions. The implication is that the institutions are being called upon to seek for other means of earning additional revenue internally for their needs that could not be provided for by the government in a given budgeted period. At the initial stage of the IGF concept the Nigerian government instructed that all tertiary educational institutions should transfer their yearly IGF obtained into a central pool for management and the institutions could then re-access the funds by means of application (Onuoha (2013). That directive was spontaneously resisted by all university managers who kicked against it until the government abrogated its directive.

Okojie (2009) had affirmed that as a result of the IGF funding policy, a minimum of 10% of total annual fund sources for federal universities, comes from IGF.

Alao (2011) evolved some internal revenue generating initiatives for Obafemi Awolowo University in Nigeria which are applicable to all other tertiary educational institutions in the developing economies such as Ghana. In those strategies. Alao, suggested some specific measures the different faculties should undertake that would enable them generate funds. Instances were that the Faculty of Agriculture should do a number of things, which indicated that the Faculty should encourage its staff to engage in Agro-allied consultancies with River Basin Authority (relevant agro industries) in their respective countries; consultancies on storage facilities for food products in the country; commercial farming for staff and students on underutilized large expanse of university land and resuscitation of university teaching and research farms to make them more viable and profit oriented.

2.3.1.1 Sustainability of using Internally Generated Revenue to fund University Education

The literature review would not be complete without finding answers to the question posed by Bamiro (2012), which states that sustainable financing institutions of higher learning is largely predicated on the answer to the fundamental question – what are these institutions for? In other words, what are purposes of tertiary educational institutions in socio-economic development of a state?

This is a comprehensive view point about what university offers to the individual and the society at large and it is from this stand point that the funding for tertiary education is imperative. There have been arguments for using only IGF for the financing of public tertiary education with another argument against this line of thinking. In the view of the later, using only IGF for the funding of a public university is not sustainable because it would deprive the poor of their right to have that sought of education and rather allow only the elite and the wealthy in society to have it (Barr, 2004).

Newman et al. (2004) as cited in Ahmad, Farley and Naidoo (2012) emphasized that in this competitive and commercialized environment, there is a constant need to enhance the systems, policies, and strategies of higher learning education for a more efficient use of resources.

On his part, Christensen (2011) indicates that with the greater demand for accountability in spending public money, Higher Education Institutions (HEIs) are required to become more transparent in their dealings.

2.4 Challenges Involved in Mobilizing Finance for Tertiary Education

It is amply clear that there are a lot of challenges associated with mobilizing funding for tertiary institutions in Ghana and the rest of Africa. This has been demonstrated in scholarly articles. In the first instance, Djangmah (2010) revealed that African universities capacity to fully perform their mandated responsibilities to their individual countries have been seriously inhibited by inadequate funding. This has been supported with the studies conducted on behalf of World Bank and Association of African Universities.

Specifically, Ghanaian universities also face these same funding problems which are associated with tertiary education in many of the sub-Saharan African countries. These are in the form of deterioration of the academic facilities, shortages of books and laboratory materials, journal subscriptions being discontinued, inadequate provision of ICT equipment and poor wages and conditions of service for academic and administrative staff.

Similarly, Maslen (2010) emphasizes that tertiary education development in Sub-Saharan Africa is financing unsustainable since quality of education is seriously affected negatively partly due to inadequate and declining resources per student. He explained further that the issues are on the whole pressing in these times of global financial crisis when resources available for tertiary education tend to reduce country by country every year. This has happened because other sectors of the educational enterprise like the basic and secondary levels equally require substantial funding just as the tertiary levels.

The brunt of the crisis from 2008 gives a clear picture of the need to search for other innovative ways to broaden the horizons for securing fund for higher learning education in the Sub-Saharan Africa region including Ghana.

Ratha and Plaza, (2011) on their part suggested that, in the light of numerous challenges facing African governments, it is critical for tertiary educational institutions to diversify their sources of income to include mobilizing more funds from business entities, households and development partners.

Conceptual Framework of the Study

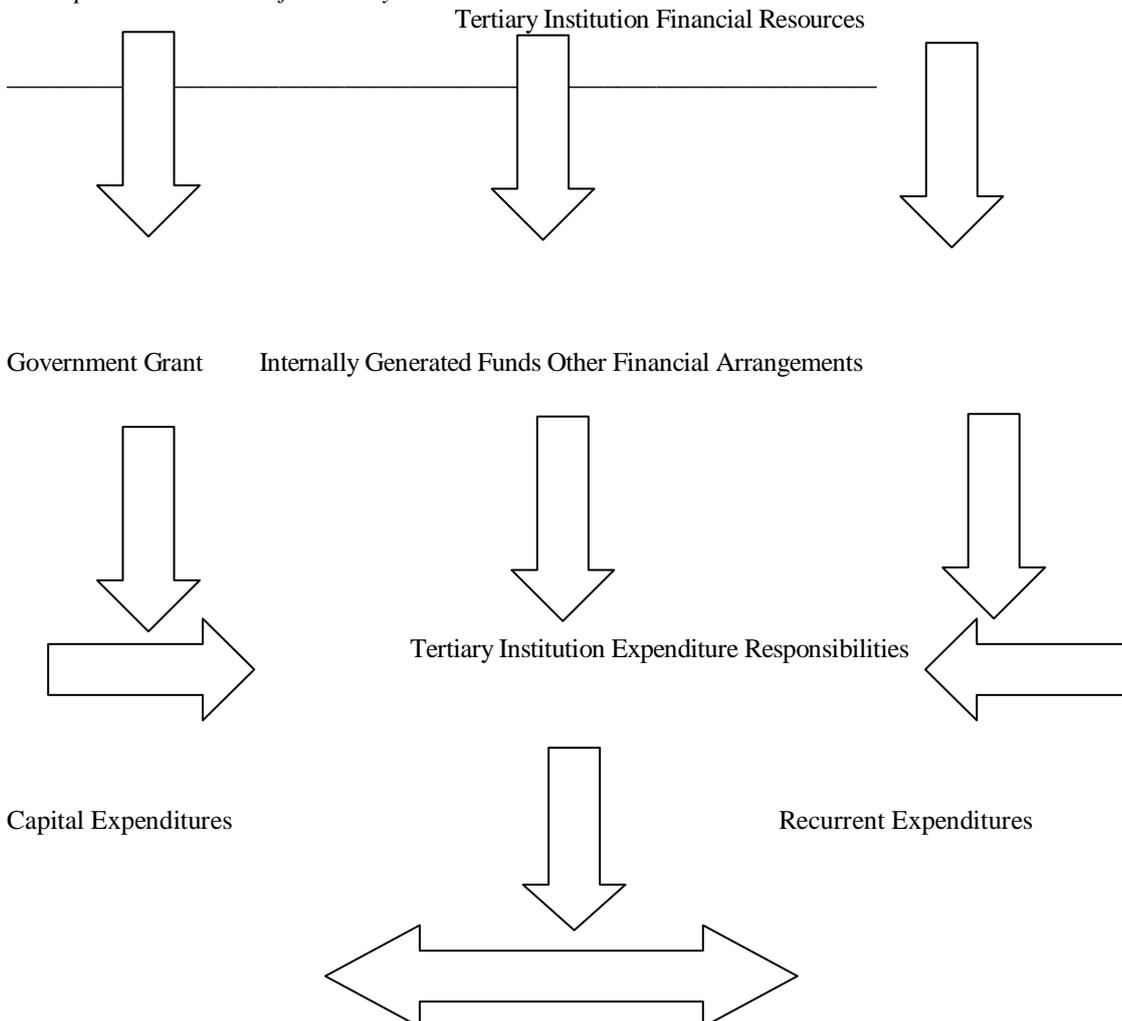


Figure 1. Conceptual Framework on Public Tertiary Education Sector

Source: Researcher's own Construct, 2019

As it can be seen from figure 1 above, the tertiary institution's revenue envelope mainly comes from three different sources. The first source is the government grant which is mainly subvention from the central government and from GETfund. The subvention generally covers monies received for goods and services, and wages and salaries (especially for the universities). However at Kumasi Technical University, the wages and salaries are paid directly by the Controller and Accountant General Department while no subvention for goods and services have been received from 2012 to 2016. The GETfund comes in to support capital investments. The second source is internally generated fund (IGF) which comprises the institution's own revenue from non-tax sources. At Kumasi Technical University IGF are broadly categorised as fees, miscellaneous income and interest income.

In fact this IGF is the major concern of this study. More over public tertiary institutions have additional sources of finance in the form of bank loan to finance operations.

The financial resources from the different sources are channeled to the tertiary institution's expenditure responsibilities either in the form of capital expenditure or recurrent expenditure. This is usually based on the institutions priorities and needs. The capital expenditure are in the form of noncurrent assets while the recurrent expenditure are in the form of wages and salaries and goods and services. However the wages and salaries include personnel emoluments and book and research allowances which are paid directly by government. The universities are reimbursed sums of money they incurred on wages and salaries.

3. METHODOLOGY

3.1 Introduction

The study considers the methods or techniques adopted in collecting and analysing data.

3.2 Research Design

This is a research setting based on the survey design. The descriptive method of research was employed. It uses both qualitative and quantitative data.

3.3 Population of the Study

The population of interest comprised workers of all universities but the study population used in this research comprised workers at the Kumasi Technical University. There were about six hundred and eleven (611) workers at Kumasi Technical University as at 31st December, 2019.

3.4 Sample of the Study

The sample comprised seventy (70) staff members from Kumasi Technical University. They were mainly senior staff and senior members who were responsible for the generation, use and management of IGF.

3.4.1 Sampling Techniques

The sampling technique used for the research was qualitative and quantitative methods of purposive sampling and convenient sampling. The convenience sampling technique was used to sample the management of Kumasi Technical University whilst the purposive or judgmental sampling technique was used to select only people knowledgeable and experienced in the area under this study.

3.5 Data Types and Sources

Both primary and secondary data were used in collecting the information for the study in order to ensure accuracy and reliability of data.

Both primary data and secondary data were used together in this research for a number of reasons. First, it can lead to triangulation: the situation where the same phenomenon is studied from several research methods; secondly, complementarily: the studying and understanding of a wide range of factors related to human behavior; and thirdly, it aids interpretation: to make meaning of the data gathered and by which the emergent knowledge is applied.

3.6 Method of Data Processing and Analysis

Data analysis involves studying, categorising, tabulating, screening, or otherwise recombining both qualitative and quantitative evidence collected to address the initial questions of the study.

Data collected from the questionnaires were analysed, summarised, and interpreted accordingly with the aid of descriptive statistical techniques such as simple percentages. Qualitative as well as quantitative methods were used in the analysis of the primary data collected. The quantitative data was analysed using Statistical Package for Service Solution (SPSS) and Microsoft Excel tables.

3.7 Ethical Issues

In conducting the research, the researcher observed certain ethics. The respondents were informed on the purpose of the research and their consent was obtained devoid of inducement, deception or pretence. The information obtained from the respondents was handled with confidentiality. Again, the information that was obtained from the respondents was used purposely for this study. The anonymity of the respondents was observed and all information used other than those obtained by the researcher were acknowledged.

4. RESULTS AND DISCUSSION

4.1 Introduction

This section gives a description of the data gathered from Kumasi Technical University on IGF. It also shows the various sources of IGF and their composition. Again, it analyses the IGF patterns as well as the expenditure items.

4.2 Data Presentation

This section analyses, interprets and discusses the results of the data gathered from Kumasi Technical University. It also presents the financial statements of Kumasi Technical University from 2005-2018

Table 1:Background Details of Respondents

Items		Frequen cy	Perce ntage
Gender of respondents	Male	39	61.9
	Female	24	38.1
	Total	63	100.0
Highest educational qualification of respondents	First degree	21	33.3
	Master's degree	33	52.4
	Professional	6	9.5
	Others	3	4.8
	Total	63	100.0

Source: Fielddata, 2019

4.2.1 Gender of Respondents

Table 1 showed that 39 respondents representing 61.9% were males while 24 respondents representing 38.1% were females. Although the males dominated it showed a fair balance of mixture of gender. This means that both male and female staff have knowledge and are involved in the generation and use of IGF.

4.2.2 Highest Educational Qualifications of Respondents

Table 1 also showed that 21 respondents representing 33.3% were first degree holders; 33 respondents representing 52.4% were masters degree holders; 6 respondents representing 9.5% were professionals; 3 respondents

representing 4.8% had other qualifications. These are staff with HND and other diploma certificates. The statistics indicated that most of the respondents possessed higher qualifications and this is an indication that reading and understanding the questions were not generally difficult and this helped to speed up the rate of response.

Table 2: Sources of Internally Generated Funds at Kumasi Technical University

Item		Responses	
		N	Percentage
Some sources of generating internal funds	tender document as a source of revenue	2	1.2%
	part-time programs as a source of revenue	22	13.2%
	selling of admission forms as a source of revenue	36	21.6%
	production units as a source of revenue	10	6.0%
	rent of school facilities as a source of revenue	31	18.6%
	school fees and hostel fees as a source of revenue	20	12.0%
	maintenance sources as another way of revenue	4	2.4%
	students project work as a source of revenue	3	1.8%
	fashion exhibition as a source of revenue	2	1.2%
	payment of certificate and transcript as a source of revenue	20	12.0%
	consultancy services from lecturers as a source of revenue	5	3.0%
	id card replacement as a source of revenue	2	1.2%
	student photo upload as a source of revenue	1	.6%
	graduation fee as a source of revenue	4	2.4%
	resit fee as a source of revenue	4	2.4%
purchase of car stickers as a source of revenue	1	.6%	
Total		167	100.0%

Source: FieldData, 2019

4.2.3 Some Sources of Generating Internal Funds

The results in Table 2 indicated that most respondents gave more than one response to the sources of generating funds at Kumasi Technical University resulting in the 167 responses. The study showed that 114 respondents representing 70.4% responded that the sources of generating internal funds are mainly from fees; and 53 respondents representing 29.6% responded that the sources of generating internal funds are mainly from miscellaneous income. No respondent identified interest income as a source of generating internal funds. Respondents from different departments have diverse knowledge on the sources within and outside their departments. It can therefore be concluded that Kumasi Technical University generates more from fees than other sources of generating internal funds.

Table 3: Problems Encountered While Mobilising IGF

Item	Responses	
	N	Percentage
delay in payment of fees	16	33.3%
money received are not sent to the institution bank	1	2.1%
staff using the school services for free	2	4.2%
lack of checks and balances	4	8.3%
lack of proper supervision	15	31.3%
lack of cooperation	4	8.3%
lecturers demanding more for teaching part-time programs	1	2.1%
high allowances	1	2.1%
low level of motivation	4	8.3%
Total	48	100.0%

Source: FieldData, 2019

4.2.4 Problems Encountered while Mobilising IGF

Table 3 above showed that 16 of the respondents representing 33.3% responded delay in payment of fees; 1 respondent representing 2.1% responded monies received are not sent to institutions bank; 2 respondents representing 4.2% responded staff using the school services for free; 4 respondents representing 8.3% responded lack of checks and balances; 15 respondents representing 31.3% responded lack of proper supervision; 4 respondents representing 8.3% responded lack of cooperation; 1 respondent each representing 2.1% each responded lecturers demanding more for teaching part time programs and high allowances respectively; and 4 respondents representing 8.3% responded low level of motivation. It can be concluded that delay in payment of fees and lack of proper supervision are key problems encountered while mobilising IGF for Kumasi Technical University.

Table 4: Ways To Improve Revenue Generation at Kumasi Technical University

Item	Responses	
	N	Percentage
improved monitoring and supervision	17	24.3%
massive advertising	12	17.1%
good auditing of accounts	7	10.0%
reduced spending	1	1.4%
staff should be highly motivated	17	24.3%
consultancy services should be improved	1	1.4%

the institution should establish a printing firm	1	1.4%
vendors must be made to pay fines when they delay in payments	2	2.9%
publicity of the school facility	1	1.4%
cash office should operate on weekends	8	11.4%
innovation and expansion	3	4.3%
Total	70	100.0 %

Source: Field Data, 2019

4.2.5 Ways to Improve Revenue Generation at Kumasi Technical University

Table 4 above indicated that 17 respondents representing 24.3% responded improved monitoring and supervision; 12 respondents representing 17.1% responded massive advertising; 7 respondents representing 10% responded good auditing of accounts; 1 respondent representing 1.4% responded reduced spending; 17 respondents representing 24.3% responded staff should be highly motivated; 1 respondent representing 1.4% responded consultancy services should be improved; 1 respondent representing 1.4% responded the institution should establish a printing firm; 2 respondents representing 2.9% responded vendors must be made to pay fines when they delay in payments; 1 respondent representing 1.4% responded publicity of the school facility; 8 respondents representing 11.4% responded cash office should operate on weekends; and 3 respondents representing 4.3% responded innovation and expansion. Some respondents provided more than one response. It can be concluded based on the study that there should be improved monitoring and supervision and highly motivated staff so as to improve revenue generation at Kumasi Technical University.

Table 5: Major Expenditure of the Institution in Which IGF are Expended

Item	Responses	
	N	Percentage
personnel emoluments	1	.7%
Utilities	12	8.1%
general expenses	48	32.2%
travelling and transport	22	14.8%
maintenance, repairs and renewals	15	10.1%
land, building and equipment	30	20.1%
supplies and stores	21	14.1%
Total	149	100.0%

Source: Field Data, 2019

4.2.6 Major Expenditure of the Institution in which IG Fare Expended

Table 5 showed that 1 respondent representing 0.7% responded personnel emoluments; 12 respondents representing 8.1% responded utilities; 48 respondents representing 32.2% responded general expenses; 22 respondents representing 14.8% responded travelling and transport; 15 respondents representing 10.1% responded maintenance, repairs and renewals; 30 respondents representing 20.1% responded land, building and equipment; and 21 respondents representing 14.1% responded supplies and stores. Some respondents provided more than one response. Respondents did

know that wages and salaries(personnel emoluments,book and research allowance) were paid by government and not directly by Kumasi Technical University thus the low response.It can be concluded, based on the study, that Kumasi Technical University spends a lot of its IGF on general expenses and land,building and equipment.

Table 6: Reasons Why IGF Are Unable To Meet All Expenditure Including Wages and Salaries

Item	Responses	
	N	Percentage
wages and salaries are huge	24	45.3%
revenues generated is not enough	11	20.8%
high number of staff	2	3.8%
expenditure exceeds revenue	13	24.5%
government policies and regulations preventing the institution from charging realistic fees	3	5.7%
Total	53	100.0%

Source: Field Data, 2019

4.2.7 Reasons why IGF are unable to meet Expenditure including Wages and Salaries

Table 6 indicated that 24 respondents representing 45.3% responded wages and salaries are huge;11 respondents representing 20.8% responded revenue generated is not enough;2 respondents representing 3.8% responded high number of staff;13 respondents representing 24.5% responded expenditure exceeds revenue; and 3 respondents representing 5.7% responded government policies and regulations were preventing the institution from charging realistic fees.Some did not provide responses.It can be concluded,based on the study, that Kumasi Technical University cannot meet its expenditure if it also takes on board wages and salaries because the wages and salaries are huge.

4.3 Internally Generated Fund (IGF)

The sources of internally generated fund (IGF) for Kumasi Technical University are broadly from fees, miscellaneous income, and interest income. The fees are from sale of admission forms, hall fees, school fees, The miscellaneous income is collection from testimonials, attestation letters, introductory letters, transcripts, among others. Interest on bank accounts and interest on deposits constitute interest income.

Table 7:Actual IGF Revenue from 2005-2018 In Ghana Cedis(GHS)

YEAR	HALL FEES	ADMISSION FORMS	SUNDRY FEES	MISCELLANEOUS INCOME	INTEREST INCOME
2005	43,801.50	108,572.95	902,252.21	37,275.78	130,955.74
2006	21,610.76	153,118.50	1,021,835.38	49,917.06	109562.78
2007	48,288.40	216,215.10	1,948,434.22	144,646.63	132,816.87
2008	64,822.00	297,090.00	2,516,493.92	170,055.70	81,479.23
2009	72,266.00	402,185.00	3,180,852.38	374,805.13	245,312.48
2010	206,417.00	460,031.50	4,425,626.69	528,381.46	681,854.50
2011	209,390.00	385,964.00	3,477,072.41	892,772.39	321,729.03
2012	274,034.00	450,945.00	5,159,058.22	537,026.09	356,920.83
2013	382,495.00	607,681.40	7,990,679.94	960,191.75	303,337.76
2014	406,616.00	567,430.00	9,162,813.74	1,092,581.00	1,058,354.22
2015	468,605.10	694,946.00	12,485,956.78	1,145,387.14	721,958.08
2016	623,630.50	690,165.30	14,372,146.93	1,896,307.30	781,220.33
2017	741,408.00	942,040.79	17,406,956.68	1,784,737.69	446,920.74
2018	881,287.00	996,973.00	17,363,896.99	1,824,893.54	1,306,953.61
	4,444,671.26	6,973,358.54	101,414,076.49	11,438,978.67	6,679,376.21

Source: Kumasi Technical University Annual Financial Statements, 2005-2018

For consistency, the 2005 to 2007 figures were converted to the new currency (Ghana Cedi). Although there was a decline in hall fees from GHS 43801.50 in 2005 to GHS 21610.76 in 2006 by 50.66%, hall fees, sale of admission forms and sundry fees experience steadily increased along the years. The sharp increase in hall fees from GHS 72266 in 2009 to GHS 206417 in 2010 representing about 186% was due to the fact that Get fund Halls Blocks A and B were handed over to Kumasi Technical University and this helped boost their revenue base from the halls. However, both sale of admission forms and sundry fees decreased in 2011 to GHS 385964 and GHS 3477072.41 by 16.10% and 21.43% respectively. This may be attributable to the long strike embarked upon by TUTAG. For the years under review, sundry fees constituted about 77.44% of the total IGF; sale of admission forms by about 5.33% and about 3.39% for hall fees. In all, total fees constituted about 86.16% (GHS 112832106.29) of the total IGF from 2005 to 2018.

This made the fees component the largest contributor to IGF at Kumasi Technical University. The next largest contributor to IGF for the years under review is miscellaneous income contributing about 8.74 % (GHS 11438978.67) of the total IGF for the period. The last contributory component of the total IGF is interest income which yields about 5.10 % (GHS 6679376.21) of the IGF. This is consistent with the survey undertaken as the results indicated that 70.4% of respondents responded that the sources of generating IGF are mainly from fees making it the largest contributor, 29.6% respondents responded that the sources of generating IGF are mainly from miscellaneous income making it the next largest contributor. No respondent identified interest income as another source of generating IGF making it the last contributory component to IGF.

4.4 Expenditure

These are broadly categorised as wages and salaries, goods and services and noncurrent assets. The wages and salaries include personnel emoluments, and book and research allowance. Goods and services include general expenses, travelling and transport allowance, supplies and stores, maintenance, repairs and renewals, and utilities. The noncurrent assets include land and building, equipment and vehicles.

Table 8: Actual Expenditure from 2005 to 2018 by Sources in Ghana Cedis(GHS)

YEAR	Personnel Emoluments	Book & Research Allowance	Travelling & Transport	General Expenses
2005	969,237	71,959	72,758	398,983
2006	1,248,898.69	118,172.80	65,657.27	485,459.30
2007	1,627,178.98	126,205.65	82,552.37	980,635.72
2008	2985705.56	264200	143510.8	1142201.06
2009	3933211.74	456805	162753.67	1689787.9
2010	4104209.38	459222.15	192057.35	1882269.15
2011	2908264.58	885458.5	344359.11	3960658.11
2012	25502928.35	944924.65	443182.43	3665747.12
2013	20715707.11	1,132,850.00	505981.24	4468080.52
2014	23393738.44	1445645.15	908680.02	5760086.52
2015	22690454.51	1908682.20	1048618.83	7969484.66
2016	26581466.30	2180670.20	1350604.54	9878997.08
2017	29361867.53	2476486.00	1138901.43	11043499.08
2018	31425876.60	2530422.28	1317367.99	11049042.04
TOTAL	197448745.01	15001703.08	7776985.06	64374930.79

YEAR	Utilities	Maintenance, Repairs & Renewals	Supplies & Stores	Land and Building, Equip and Vehicle
2005	53,954	57,565	18,716	757,007
2006	39,078.34	37,100.94	24,424.33	122676.00
2007	335,117.01	34,192.62	30,433.01	41,100.46
2008	288297.24	70350.69	33583.86	300680.57
2009	14664.21	101038.9	120506.5	252446.4
2010	236560.87	134329.96	105991.77	776783.4
2011	578907.41	201861.66	34363.91	1735025.55
2012	307438.63	253010.5	59250.98	1811613.16
2013	490060.93	363523.15	263322.48	1320530.21
2014	364713.48	611984.8		1187566.65
2015	740443.43	1014388.05		2456340.77
2016	541403.13	1637762.06		3052006.94
2017	804649.08	1026503.38		1550070.24
2018	602821.98	1187064.70		1878237.02
TOTAL	5398109.93	6730676.50	690,592	17242084.83

Source: Kumasi Technical University Financial Statements, 2005-2018

*In 2014, supplies and stores were classified into General expenses.

For consistency, the 2005 to 2007 figures were converted to the new currency (Ghana Cedi). Book and research allowance shows a steady increase along the years. This may be attributable to the dollarisation of this particular allowance with the cedi continuously depreciating against the dollar. In all, it is 4.77% of the total expenditure. Personnel emoluments also show 62.75% of the total expenditure. These two expenditure items constitute wages and salaries and are paid directly by government through the Ministry of Finance. They are considered here to know the actual expenditure position of the institution with respect to its IGF. General expenses; land and building, equipment and vehicle; travelling and transport; utilities, maintenance, repairs and renewal; supplies and stores constitute 20.46%, 5.48%, 2.47%, 1.72%, 2.14% and 0.22% respectively. In all wages and salaries constitute about 67.52 % (GHS 212,450,448.09) of the total expenditure making it the largest expenditure item. Goods and services closely followed with about 16.86 % (GHS 53,042,143.92) of the total expenditure with expenditure on noncurrent assets constituting about 5.48 % (GHS 17,242,084.83) of the total expenditure.

- In all the years under review, the actual total expenditure exceeded the actual IGF. The total IGF for the period was GHS 130,950,461.16 and the total actual expenditure including wages and salaries was GHS 314,663,827.66 and this showed that actual IGF fell short to total actual expenditure by 140.29%. This is in line with the survey conducted as 84.13% responded that internal funds are unable to meet expenditure, and 15.87% responded that internal funds are able to meet expenditure (including wages and salaries), all other factors being equal.

5. SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This section summarises the findings of the research and conclusions. It also gives recommendations in accordance with the research objectives and these will help improve IGF revenue generation and expenditure policies in the tertiary education sector and ultimately help in the provision of quality teaching, learning and research in the country.

5.2 Findings

Based on the analysis of data, the main findings of this work are presented below.

5.2.1 Sources and Adequacy of Generating IGF

- An analysis of the components of IGF revenue at Kumasi Technical University revealed that on a year by year basis the fees component comprising sundry fees, hall fees and admission forms always exceeded the miscellaneous income and the interest income.

- The analysis of the secondary data showed that, apart from 2011, the IGF increased throughout the years. The 2011 case may be attributed to the long strike action embarked upon by Technical University Teachers Association of Ghana (TUTAG). The Institution reopened school quite later in the year around November. More revenue was not actualised in the year thereby accounting for the low revenue.

- Respondents did not know that interest income is a component of IGF.

5.2.2 Ability of Internal Funds to meet Expenditure

- It was realised from the analysis of the secondary data that in all the years under review the IGF fell short of expenditure (including wages and salaries).

- From the secondary data, it was found that generally, expenditure increased with a corresponding increase in IGF, and such increases in IGF still cannot meet the increases in expenditure. This means that there is a direct relationship between IGF and expenditure.

- The main expenditure items identified from the analysis are wages and salaries, travelling and transport, maintenance, repairs and renewals, utilities, supplies and stores, land, building, equipment and general expenses. This is in line with the guidelines provided by the Ministry of Finance (MOF, Financial Reporting Framework Guide, 2012). The wages and salaries including personnel emoluments and book and research allowance are paid directly by the government.

- The analysis of the secondary data showed that ,apart from expenditures on wages and salaries paid directly by government which amounts to GHS 212,450,448.09, general expenses constituted the next highest expenditure item amounting to GHS 64,374,930.79; followed by noncurrent assets amounting to GHS 17,242,084.83 in that order for the whole period under study.

5.2.3 Strategies to Improve Revenue Internally

There were good strategies to improve revenue generation at Kumasi Technical University according to the study. These included improved monitoring and supervision and highly motivating staff. These strategies will help counter some of the problems encountered while mobilising funds such as lack of proper supervision and delay in payment of fees.

5.3 Conclusions

Based on the findings above, the following conclusions can be drawn with respect to IGF revenue generation and its effects on financial performance of universities in Ghana. Emphasis must be made that the under listed conclusions were based on the case study at Kumasi Technical University. The conclusions below can apply to Kumasi Technical University in particular and the education sector of Ghana as a whole. This is because its strategic location attracts a lot of students. In terms of sources of IGF and effect on financial performance to the tertiary education sector, it can be concluded that:

- At every point in time, fees are the major source of funds to universities.
- Government of Ghana support to the tertiary education sector is mainly in the form of wages and salaries. GETfund comes in to support some capital projects.
- Wages and salaries (personnel emoluments and book and research) is the highest category of expenditure though directly paid by the government, followed by general expenses and noncurrent assets in that order. It can be concluded that, should the institutions pay their salaries the tertiary education sector will spend more on wages and salaries than on general expenses and noncurrent assets.
- The actual IGF generated cannot cover actual expenditure including wages and salaries.

5.4 Recommendations

Since IGF is now discovered to be the most reliable source of revenue in the tertiary education sector, policies, strategies and control measures must be put in place in order to enhance revenue generation and financial performance. From the above conclusions flowing from the findings, the following are recommended:

- All revenue avenues should be clearly defined by the institution and competent, reliable and qualified staff put in place to carry out their tasks appropriately.
- Internally Generated Fund accruing to the institutions from all sources should be harnessed and appropriately controlled to ensure that they are not abused particularly in compensating staff who are fully employed and enjoying their salaries and allowances.
- The management of the institution should be given training and refresher courses on contemporary revenue generation and emerging issues in IGF. This will enable them to appreciate the need to generate more revenue for the institution .This can be done through improved monitoring and supervision.
- Workers should be given regular training so as to boost their morale to give out their best.
- The Institution should seek approval from the Minister of Finance in accordance with the Public Financial Management Act, 2016(ACT 921) to do proper investments with its internal funds. This can help reap more interest income so as to meet pressing commitments.
- Since expenditure on goods and services over the period covered by the study were seen to be quite substantial, it is recommended that measures are put in place to adhere to the tenets of public procurement. This will ensure efficiency and effectiveness of resources and reduce waste.
- Management should not entertain staff members who make claims for private and unofficial travels. This will help cut down on night allowance claims and also save costs of fuel.
- Management should refocus its sponsorship for staff to pursue similar programmes locally. This will reduce the huge stipend transferred to staff outside the country for their upkeep.
- The Government of Ghana should continue to pay wages and salaries since such expenditure are substantial for which the institutions cannot bear together with other expenditure. The Universities which pay the wages and salaries directly should be reimbursed fully the monies they spend. This will make more funds available from IGF

for other financial commitments. If this is not done then the institutions should be allowed to charge realistic school fees so as to meet these commitments.

- Government should revisit providing subvention for goods and services as is done with noncurrent assets by the GETfund. This will also relieve the institution as goods and services are the next highest category of expenditure to the wages and salaries.

5.4.1 Recommendation for Future Research

This study used only one university. Future studies could improve upon the scope of the study by increasing the number of universities.

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