UNIVERSITY OF CAPE COAST

EFFECT OF INTERNALLY GENERATED FUND AND GOVERNMENT SUBVENTION ON THE FINANCIAL SUSTAINABILITY OF PUBLIC UNIVERSITIES IN GHANA: EVIDENCE FROM THE UNIVERSITY OF **CAPE COAST**

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UNIVERSITY OF CAPE COAST

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CAPE COAST

BY

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Dissertation submitted to the Department of Accounting of the School of

Business, College of Humanities and Legal Studies, University of Cape Coast,
in partial fulfilment of the requirements for the award of Master of Business

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NOBIS

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DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in the university of elsewhere.

Candidate's Signature:	Date:
Name: Gladys Aggrey	

Supervisors' Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Sig <mark>nature:</mark>	•••••	Date:

Name: Mr. Stephen Asante

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ABSTRACT

The study examined the effects of the Internally Generated Fund (IGF) and government subvention on financial sustainability at the University of Cape Coast. Specifically, the study assessed the effects of IGF on financial sustainability at the University of Cape Coast, assessed the effects of government subvention on financial sustainability at the University of Cape Coast, and identified identify the challenges associated with IGF and government subvention on financial sustainability at the University of Cape Coast. The study was guided by an explanatory research design. Data was collected from 135 University of Cape Coast staff (stores, audit, procurement and head of departments staffs) through a simple random sampling technique and analysed using partial least square estimation. The main finding of the study was that universities that incorporate IGF initiatives such as residential and academic user facility fees paid by regular students and fees by sandwich students, transcript fees, attestations fees, graduation fees, facility user fees, printing press, and consultancy services into their corporate objectives are more likely to attain and improve their financial sustainability. Also, the study found that universities able to access government subventions are better positioned to sustain themselves financially. Hence, it was recommended that the universities strive to generate funds internally and access government subvention to improve their financial sustainability. Again, the decisionmakers in these universities are to note that in order for them to improve financial sustainability, addressing the challenges associated with IGF and government subvention should be a major objective they should thrive to achieve.

KEY WORDS

Financial Sustainability

Internally Generated Funds

Government Subvention



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DEDICATION

To my parents, my beloved husband, my children, and the Animah family.



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1 Conceptual Framework of the Study



CHAPTER ONE

INTRODUCTION

Background to the Study

In today's competitive educational environment with constant changes in business operations, the success of publicly funded universities shall be possible by securing and managing their financial sustainability. This also requires such institutions to strategically direct their affairs to generate funds and get support from the government in the form of subvention (Mrutu & Mganga, 2016). This is because institutions' success highly depends on their financial sustainability from the funds they access internally and externally (Adu-Gyamfi, 2014). According to Karpavicius and Yu (2017), financial sustainability is the constant provision of funds for a particular activity or endeavor by the government to state institutions to improve their financial performance.

Wachira (2017) also described financial sustainability as the tendency of organisations to meet their financial goals through their IGFs and other grants from the government. According to Leon and Charl (2016), financial sustainability is an important pursuit for educational institutions that seek to create and provide value to their students and other stakeholders and enhance their survival. Watchira (2017) pointed out that universities are operating in an extremely volatile environment and have now realized that sustaining themselves financially is essential. Badu (2007) and Ajmal (2018) posited that universities could gain a competitive advantage through Internally Generated Funds (IGF) and government subventions.

In an attempt to understand and explain the factors that account for the financial sustainability of universities, some studies (Fosu & Ashiagbor, 2012; Adu-Gyamfi, 2014; Mrutu & Mganga, 2016; John, 2016; Ajmal, 2018; Akinleye & Dadepo, 2019) have been reviewed. The studies above revealed that IGF and government subvention are the main factors that could enhance financial sustainability. The IGF concept is an important conduit for attaining and improving organisations' financial sustainability (Adenugba & Ogechi, 2013; Fjeldstad et al., 2014; Chand, 2014; Innocent, 2016).

According to Adu-Gyamfi (2014), engaging in IGFs has been itemized as a significant channel through which institutions such as universities could get the need resources to work with it, which, in turn, could enhance their sustainability. Adu-Gyamfi (2014) advanced that IGF for universities comes from the sale of transcripts, attestations, souvenirs, graduation fees, catering services, facility user fees, printing press, and consultancy services. This means universities are given lawful authority to mobilise funds from various internal sources.

Similarly, it has been advanced government subvention in grants and endowments, which could enhance institutions' financial sustainability (Bingham & Walters, 2013). In Africa, the role of government in funding public education and universities cannot be downplayed. In Ghana, for instance, the government funds public universities through subventions. It has been confirmed empirically by Egboro (2016), Gyasi (2017), and Baraja and Yosya (2019) that government subvention plays a major role in funding public universities in Ghana.

Ghana is estimated to have paid approximately \$64,000 to support universities nationwide (Gyasi, 2017). Gyasi (2017) explained that the

government's motive for offering universities subventions is to improve their financial position.

The resource-based view theory (Barney, 1991) advanced that when institutions believe that government will provide resources needed for their work, their financial sustainability improves. The stakeholder theory also urges the government to consider their actions' effects on stakeholders such as universities (Freeman, 1984). The practical way that has been employed by most governments to either minimize or eliminate the negative effects of their actions on stakeholders is through the introduction of IGF and subvention, which appears to have positive outcomes for these Universities as well.

Building on the above theories, it can be established that universities that mobilize IGFs (Mrutu & Mganga, 2016) and get government subvention (Gyasi, 2017) are better positioned to enhance their financial sustainability (Chand (2014). Thus, giving universities the needed authority to mobilise funds internally could enhance their financial sustainability (the Republic of Ghana., 1992; Fosu & Ashiagbor, 2012; Adu-Gyamfi, 2014; Fjeldstad et al., 2014; Mrutu & Mganga, 2016; John, 2016; Ajmal, 2018; Akinleye & Dadepo, 2019).

Similarly, within the resource-based theory (Barney, 1991) perspective, it can be deduced that when institutions believe that government will provide resources needed for their work, their financial sustainability improves. Drawing on this theory, it is locally anticipated that once the government of Ghana provides funds to finance the public universities through subventions, such universities will sustain financially (Egboro, 2016; Gyasi, 2017; Baraja & Yosya, 2019).

Arguably, universities that are allowed to generate funds internally (Mrutu & Mganga, 2016) and access government subventions (Gyasi, 2017) could enhance their financial sustainability (Chand, 2014). In contrast, bad or no IGF initiatives and government subventions could make universities not to sustain themselves financially. According to Gyasi (2017), while there may be several studies (see Gyasi, 2017; Karpavicius & Yu, 2017; Jordao & Almeida, 2017; Baker & Kilincarslan, 2018) with regards to the nexus between IGF, government subvention, and financial sustainability in advanced nations comparative to emerging nations, the merit of IGF and government subvention are more substantial in developing nation, like Ghana linked to weak leadership in the form of mismanagement, lack of leadership commitment and unwillingness to allocate monies due for university education. In view of that, the advancement of IGF and government subvention in Ghana educational sector precisely, the university of Cape Coast has become vital for some scholars (Afutu, 2015; Gyasi, 2017; Gatsi, 2016).

Statement of the Problem

The continued existence of universities in the educational environment depends on their financial sustainability. As Ghana's economy continues to grow, it surely reflects in the educational sector, mainly the universities. For example, the Ministry of Education has given the universities the authority to mobilize funds internally and access government subventions. For instance, the University of Cape coast was able to generate GHS 2,018,995,722 internally from 2015 to 2021 (Extract from UCC financial statements, 2021). Also, the University of Cape Coast could access government subvention amounting to GHS 1,602, 318,7324 from 2015 to 2021.

Despite the authorities mentioned above, given the universities and the funds they have been able to make from IGF and government subventions, there are still many hurdles confronting public universities, specifically UCC. Among the hurdles is financial unsustainability (Wamiori, Namusonge & Sakwa, 2016). Amanda (2015) posits that financial unsustainability disadvantages institutions such as universities to other state institutions. However, Williams (2017) argued that such financial unsustainability could be controlled if the institutions and government adopt IGF and subvention. Given this argument, some studies have been conducted to determine the connection between IGF, government subvention, and financial sustainability (Adu-Gyamfi, 2014; Mrutu & Mganga, 2016; Gyasi, 2017; Karpavicius & Yu, 2017; Jordao & Almeida, 2017; Baker & Kilincarslan, 2018) but their results were rather inconclusive.

For instance, Adu-Gyamfi (2014) and Gyasi (2017) found that IGF, government subvention, and financial sustainability are connected. Other studies (Ajmal, 2018; Akinleye & Dadepo, 2019; Baraja & Yosya, 2019) confirmed a positive nexus between IGF, government subvention, and financial sustainability. In contrast, Egboro (2016) found that IGF and government subvention do not always lead to financial sustainability. He argued that good leadership in the form of proper management and commitment could sustain them.

Researchers in the educational domain have suggested some reasons for such inconsistent findings. For instance, while Adu-Gyamfi (2014) argued that the wrong conceptualization of IGF and government subvention could explain such inconsistencies, Wachira (2017) blamed the neglect of certain vital variables in prior studies. Hence, addressing these inconclusive results

requires further studies on the constructs of the study to aid our understanding of how IGF and government subvention influence financial sustainability.

Further, Gyasi (2017) argued that while there may be various studies (Karpavicius & Yu, 2017; Jordao & Almeida, 2017; Baker & Kilincarslan, 2018) with regard to the relationship between IGF, government subvention, and financial sustainability in advanced nations comparative to an emerging nation, the merit of IGF and government subvention are more substantial in an emerging nation, as Ghana connected to weak leadership.

As a result, the advancement of IGF and government in the context of Ghana has become a significant interest to researchers (Afutu, 2015; Gakuru & Mungania, 2016; Gyasi, 2017). Essentially, the public sectors, including the Ghana Education Service, specifically universities, are under extra pressure to mobilize funds internally to replace and seek government subventions in order to sustain themselves financially. This means that IGF and government subvention is not a new phenomenon in Ghana, but it is still in its introductory phase compared to the advanced nations. I, however, debate that this could be due to the difficulties associated with the effective implementation of IGF policies at the universities and allocation from government subvention (Afutu, 2015; Gatsi, 2016).

This inability to recognise the precise IGF and government subvention policies that could improve financial sustainability has created the need for broad research on IGF and government financial sustainability and to extend the discussion on the effects IGF and government subvention could have on financial sustainability from a Ghanaian university perspective. This is because a majority of the studies on IGF and government subventions endeavors in Ghana generally focused on developmental projects of district

assemblies in Ghana (Mensah, Bawole & Ahenkan, 2013; Adu-Gyamfi, 2014; Gatsi, 2016), neglecting the effects IGF and government subventions could have on the financial sustainability of universities, specifically, the University of Cape Coast.

Following Gatsi (2016), this study is driven by the development of the University of Cape Coast, which is regarded as an important conduit for training future leaders; hence, their financial sustainability is vital. Therefore, this study seeks to examine the effects of IGF and government subvention on the financial sustainability of the University of Cape Coast.

Purpose of the Study

This study aimed to examine the effects of the Internally Generated Fund (IGF) and government subvention on the financial sustainability of the University of Cape Coast.

Research Objectives

The following objectives guided the study. These are to:

- assess the effects of IGF on financial sustainability at the University of Cape Coast.
- assess the effects of government subvention on financial sustainability at the University of Cape Coast.
- 3. identify the challenges associated with IGF and government and government subvention on financial sustainability at the University of Cape Coast.

Research Questions

The following three research questions were generated based on the study objective:

- 1. What are the effects of IGF on financial sustainability at the University of Cape Coast?
- 2. What are the effects of government subvention on financial sustainability at the University of Cape Coast?
- 3. What are the challenges associated with IGF and government subvention on financial sustainability at the University of Cape Coast?

Significance of the Study

The study results will contribute to our understanding of prevailing knowledge on the link regarding IGF and government subvention on financial sustainability that can be referred to in further studies. Also, the finding of this study would support the management of the University of Cape Coast to formulate and execute IGF polices in order to sustain itself financially. Furthermore, the finding of this study would support the management of the University of Cape Coast to seek government subventions to improve financially.

Delimitation of the Study

The accessible respondents for this study include the entire staff of the University of Cape coast in the finance, stores, audit, procurement, and all the heads of departments that prepare a budget. The choice of UCC stems from the fact that similar studies were conducted by Combey (2019) and Lasim (2020) using selected regions instead of all the universities in the country.

Limitations of the Study

This study is scoped around the use of only UCC, and therefore, the findings of the study could not be generalized to other universities. Moreover, the data was collected through questionnaires due to their quantitative nature. In this sense, some respondents felt too busy and reluctant to respond to the instrument. Further, some respondents stated that the questions were difficult to understand.

Definitions of Key Terms

Internally Generated Fund: These are funds generated internally through rents, charges, property rates, licenses, issuance of transcripts, attestations, souvenirs, graduation fees, catering services, facility user fees, printing press, and consultancy services.

Government Subvention: It is explained as the support or grant government offers state institutions to enhance their financial sustainability.

Financial Sustainability: The concept of financial sustainability is explained as the tendency of organisations to meet their financial goals.

Organisation of the Study

The study was organized into five chapters. Chapter one comprised the background to the study, statement of the problem, study objectives, research questions, significance of the study, delimitation, limitations, and organisation. Chapter two presents a review of the theoretical and empirical literature pertaining to the concerns of the dissertation. Chapter three provided information on the methodology used in the research, population, sample, and analysis tools used in the study. In Chapter four, the results of the study were presented and discussed. Chapter five also contained a summary of the major findings, conclusions, recommendations, and suggestions for further studies.

Chapter Summary

This chapter of the study captured information on the effects of IGF and government subvention on the financial sustainability of the University of Cape Coast. Specifically, the chapter focused on the background of the study, the statement of the problem, research objectives, research questions, significance of the study, delimitation of the study, limitations of the study, and organisation of the study.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The study aimed to examine the effects of IGF and government subvention on the financial sustainability of the University of Cape Coast. The write-up of the chapter began with a review of theories underpinning the study. Also, the chapter provided a conceptual and empirical review of IGF, government subvention, and financial sustainability. The final section presented the conceptual framework for the study.

Theoretical Review

This section has explored the theories of resource mobilisation and stakeholders. Given this, the theory of resource mobilisation was utilised to support the major theory, and the stakeholder theory served as the primary theory.

Stakeholder theory

According to the stakeholder theory, government initiatives should focus on the growth of important stakeholders, including universities. (Freeman, 1984). The idea was put out that the government oversees several stakeholders at once. It is stated that the government may assist institutions in accessing assistance through a grant via their subventions, strengthening their financial foundation. According to the stakeholder hypothesis, additional interested parties with a strong interest in government choices should be included in its tasks (Freeman, 1984). The idea also exhorts the government to consider how its actions may affect universities interested in its initiatives (Freeman, 1984). The practical way that most governments have employed to either minimise or eliminate the negative effects of their decisions on

stakeholders is through their subventions and empowering them to IGF, which appears to have positive outcomes for these universities. Friedman (1970) argued that the government is responsible for providing public goods.

The implication of the stakeholder theory to the study

The stakeholder theory maintains that government should be interested in addressing the concerns of key stakeholders such as state universities. Universities are one of the main concerns for the government because their financial sustainability is vital for its survival. The theory argues that the importance of universities cannot be ignored; hence, the government needs to implement good practices via their subventions to help them improve their financial position.

Resource mobilisation theory

The theory of resource mobilisation (McCarthy & Zald, 2001) is a theory that came into existence in the 1970s. The tent of the theory is about organisations or institutions mobilizing funds internally towards their sustainability (Kendell, 2006). The theory assumes that sufficient funding is needed for social growth. (Kendell, 2006). According to the resource mobilisation hypothesis, IGF mobilisation and utilisation are essential for achieving the institution's goals. Resources are essential for enhancing the institution's financial performance (Axin, 1978). Governments have been advocated as crucial in mobilising available funds to achieve a specified aim (Shrestha, 2009). Plans for raising money have reportedly been advised to include a purpose and long-term goal (Chawla & Berman, 1996). One of the main responsibilities of governmental entities is raising money. This is because resource mobilisation helps state institutions thrive (Juul, 2006).

Implication of the resource mobilisation theory to the study

The resource mobilisation theory maintains that state institutions including universities should be interested in mobilising resources internally. Universities are one of the main concerns for the state because their financial sustainability is vital for its survival and continued existence. According to the argument, raising money from inside the university system is necessary because of the indisputable value of higher education.

Conceptual Review

Internally generated fund (IGF)

According to Owusu (2016), there is no general definition for the IGF concept even though it was developed in the literature some years ago. As a result, some scholars have tried to define the concept, but there is no valid definition. Adu-Gyamfi (2014) argued that this happens because institutions wrongly conceptualize the concept. Given this, an essential credited IGF comes from Owusu (2016). The scholar clarified IGF to include rents, charges, property rates, licenses, and expenses. Adu-Gyamfi (2014) advanced that IGF for universities comes from issuing the transcript, attestations, souvenirs, graduation fees, catering services, College of Distance Education revenue, facility user fees, etc. printing press, and consultancy services. For instance, the University of Cape coast was able to generate GHS 2, 018, 995, 722 internally from 2015 to 2021 (Extract from UCC Financial Statement, 2021).

Mrutu and Mganga (2016) posit that revenue collection performance among government institutions is deemed suitable to sustain them financially. The tent of resource mobilisation theory is that the mobilisation and using funds through IGF are the essential university prerequisites. Building on this theory, the viability of mobilising revenue systems of universities depends on

the measure of funds the mobilisation techniques have been able to generate. It has been suggested that plans for mobilising revenue must be a long-term objective or agenda (Chawla & Berman, 1996). Ahwoi (2010) stipulated that the institutions need skilled and unskilled labour to mobilise funds internally.

Sera and Beaudry (2007) support that establishing policy for mobilising revenue should be toward the financial performance of institutions raising it. Adu-Gyamfi (2014) presented that educating the general public on the need to pay their fees, catering services fees, CoDE revenue, facility user fees, printing press, and consultancy services, and disciplining defaulters of tax are some of the methods universities can use to effectively mobilise their internal revenues. Adu-Gyamfi (2014) further referenced that training and maintaining staff responsible for tax collection, among others, should be encouraged. Similarly, Puopiel and Chimsi (2015) noted the sensitisation of general society through radio, commitment to IGF collection, and motivating authorities as some of the strategies the universities can use. Scott (2016) stresses that mobilising funds locally should be done by universities and should be geared towards development and financial sustainability.

Government subvention

It has been advanced that government subvention is one factor that enhances state institutions' financial sustainability. According to Gyasi (2017), government subvention is the support or grant government offers state institutions such as universities to enhance their financial sustainability. In Africa, the role of government in funding public education and universities cannot be downplayed. In Ghana, for instance, the government of Ghana provides funds to finance public universities through financial grants. Watchira (2017) pointed out that because universities operate in an extremely

volatile environment, they now realise that sustaining themselves financially through government subvention is essential.

It has been confirmed empirically by some scholars, Egboro (2016), Gyasi (2017), and Baraja and Yosya (2019), that government subvention plays a major role in funding public universities. Gyasi (2017) explained that the government's motive for offering universities subventions is to improve their financial position. Chitiga-Mabugu and Monkam (2013) opined that Ghana has a system of financial allocations meant for universities.

Financial sustainability

Adu-Gyamfi (2014) and Watchira (2017) argued that corporations generate their own internal funds and acquire funds from other sources to meet their business operations. Karpavicius and Yu (2017) clarified financial sustainability as the government's provision of funds to state institutions. According to Leon and Charl (2016), financial sustainability is an important pursuit for educational institutions that seek to create and provide value to their students and other stakeholders. Wachira (2017) also described financial sustainability as the tendency of organisations to meet their financial and non-financial goals.

Moreover, some researchers (Egboro, 2016; Baraja & Yosya, 2019) have described financial sustainability as the administrative actions organisations take to meet the financial target of such an organisation. Gyasi (2017) view financial sustainability as one of the key factors for an organization's successful running because it directly influences its survival. It has been advanced that sustainable funding of public universities is a critical factor that ensures financial sustainability.

According to Abor and Adjasi (2007), financial sustainability is a significant determinant of an organization's survival. Castelli et al. (2006) argued that corporations acquire funds to meet their operations capital requirements. Carter et al. (1997) stated that organisations that access financial support from the government can withstand the competition in the financial market. Following Federal Reserve's 1998 review, Coleman (2007) found that government subvention in grants is financial sustainability indicator.

Empirical Review

Internally generated fund and financial sustainability

The theory of stakeholders (1984) exhorts government to take into account how decisions may affect stakeholders like universities. (Freeman, 1984). Empowering them to create funds internally has been a realistic strategy used by most governments to either minimise or totally remove the negative impacts of their actions on stakeholders, and it looks to be beneficial for these institutions as well. Additionally, the resource-based hypothesis (Barney, 1991) argued that universities' financial sustainability increases when they assume the government will let them generate money domestically.

Relying on the resource-based theory (Barney, 1991) and stakeholder theory (1984), Adu-Gyamfi (2014) advanced that IGF for universities that come from the issuance of transcript fees, attestations fees, sale of souvenirs, graduation fees, catering services, CoDE revenue, facility user fees, printing press, and consultancy services. It has been postulated that institutions such as universities that make decisions concerning incorporating IGF initiatives into their business strategy are more likely to access finance, which, in turn, improves their financial performance (Portillo & Block, 2012). Some researchers in the IGF domain (Bhatia, 2009; Thies, 2010; Salami, 2011) are

of the opinion that generating funds internally has the propensity of increasing and sustaining the financial position of institutions.

Adenugba and Ogechi (2013) empirically investigated the relationship between IGF and financial performance and discovered a sizable positive relationship between the two. Afutu (2015) conducted a comparative analysis of the IGF and financial performance at the University of Education, Winneba, and found that residential and academic user facility fees paid by regular students and fees by sandwich students had a significant influence on the university's income creation.

Government subventions and financial sustainability

State institutions, according to Adu-Gyamfi (2014) and Watchira (2017), get funding from the government to support their daily activities. In order to produce and provide value to its students and other stakeholders, educational institutions must pursue financial sustainability, according to Leon and Charl (2016). Financial sustainability was also defined by Wachira (2017) as an organisation's propensity to achieve its financial objectives. According to some academics (Egboro, 2016; Baraja & Yosya, 2019), financial sustainability refers to the administrative measures organisations use to reach their financial goals. Gyasi (2017) believes that financial stability is crucial to an institution's good management since it directly affects its survival capacity.

Karpavicius and Yu (2017) assert that governments in many nations are the primary funders of public universities via their grants and endowments in both developed and developing countries, drawing on stakeholder theory (Freeman, 1984). For instance, in Ghana, in order to support public colleges financially, the government provides funding via subventions. A few studies (Egboro, 2016, Gyasi, 2017, Baraja & Yosya, 2019) used empirical evidence

to support the theory that government subsidies, of which the University of Cape Coast is one example, play a significant role in subsidising public institutions.

According to Wachira (2017), the government should prioritise achieving financial sustainability among public institutions via grants and endowments. In reality, assessments from the World Bank and the Organisation for Economic Co-operation and Development (OECD) have indicated that government subsidies make up a larger share of the income base for African state institutions. (OECD, 2018; World Bank, 2019). This indicates that one of the most dependable and long-term sources of income for public institutions like universities continues to be government subvention.

It has been established that financial sustainability is a significant determinant of firms' survival (Abor & Adjasi, 2007). Castelli et al. (2006) claimed that corporations acquire funds from external sources to survive and continue their business operations. Carter et al. (1997) argued that firms that access financial support from the government could withstand the competition in the financial market. Following Federal Reserve's 1998 review, Coleman (2007) found that government grant subvention indicates financial sustainability.

Challenges sssociated with internally generated fund (IGF) and government subvention on financial sustainability

Given the importance connected with IGF and government subventions among universities towards financial sustainability, there are many hurdles associated with the constructs (Bhatia, 2009; Thies, 2010; Salami, 2011; Amanda, 2015; Wamiori, Namusonge & Sakwa, 2016; Williams, 2017). Among the hurdles are political influence, absence of horizontal and vertical

structural integration, inefficient monitoring (Adu-Gyamfi, 2014; Mrutu & Mganga, 2016; Gyasi, 2017). Other studies documented that inadequate management skill and limited tax administrators within the university domain could explain some of the challenges connected with IGF and government subvention among universities towards financial sustainability (Karpavicius, & Yu, 2017; Jordao & Almeida, 2017; Baker & Kilincarslan, 2018). Adu-Gyamfi (2014) argued that the wrong conceptualization of IGF and government subvention could also account for some of the challenges linked to IGF, government subventions as well as financial sustainability.

Conceptual Framework

The framework basically links Internally Generated Fund (IGF) and government subventions to financial sustainability.

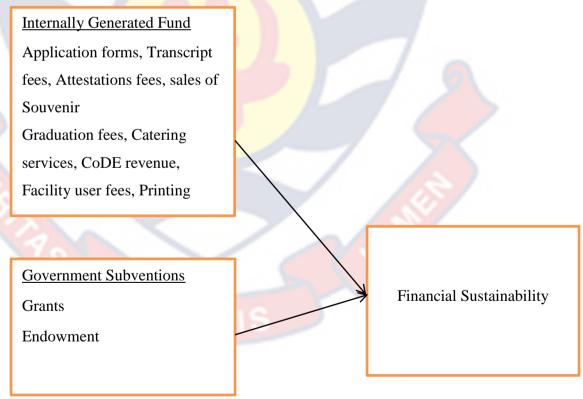


Figure 1: Conceptual Framework of the Study

Source: Author's Construct (2021)

Figure 1 presents the link between Internally Generated Fund (IGF) and government subventions to financial sustainability. This framework means that universities that entrust themselves greatly to Internally Generated Fund (IGF) and government subventions stand a chance to improve their financial sustainability.

Chapter Summary

The definitions of the concepts and theories of Internally Generated Funds (IGF), government subventions, and financial sustainability have been addressed in this chapter. It reviews the works of other scholars related to the subject matter. The chapter also comprises an empirical review of the the effect of the Internally Generated Fund (IGF) and government subventions on financial sustainability and the development of a conceptual framework.

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CHAPTER THREE

RESEARCH METHODS

Introduction

This study aimed to examine the effects of IGF and government subvention on the financial sustainability of the University of Cape Coast. This chapter is made up of the study methods and designs. It describes the procedures employed in conducting the study. It presents the research approach, research design, study area, study population, sample size and sampling procedure, data collection instrument, reliability and validity of the instrument, data source, data processing and analysis, and ethical considerations.

Research Approach

According to Pradipta, Forsman, Bruchfeld, and Alffenaar (2018), the quantitative research strategy is a well-known, unbiased, and organised method for describing and analysing correlations among study variables. As a result, numerical measurements may be used to statistically analyse data that has been acquired quantitatively. According to Creswell (2014) and Alase (2017), the quantitative research methods are mostly appropriate for studies that produce numerical data so that they may go through rigorous statistical analysis in a tight and disciplined way. Because of this, the study used a quantitative research strategy. This is so that researchers may explain the nexus between study variables using statistical data collected from respondents using a quantitative technique. (Golafshani, 2003; Tashakkori & Teddlie, 2010; Ofori & Dampson, 2011). It also applies to situations where numerical expression is possible (Creswell, 2014).

Research Design

According to Decoteau (2017), explanatory research focuses on cause-and-effect relationships. The researcher said the fundamental goal is to clarify how one variable influences another. The explanatory design was used to accomplish the research's objectives because it is thought to be ideal for identifying and reporting connections between various features of phenomena under examination. (Sekaran & Bougie, 2016). According to Yin (2003), questions that aim to explain alleged causal linkages but are too complicated for a survey technique may be answered using an explanatory research design.

The explanatory design also helps researchers to describe and explain research objectives (Barifaijo, Basheka & Oonyu, 2010; Sekaran & Bougie, 2016). The explanatory research design is also appropriate as it helps researchers conduct a holistic, comprehensive, and in-depth analysis of the research objectives (Saunders, Lewis, Thornhill & Bristow, 2015; Decoteau, 2017). According to Cantwell (2020), experimental explanatory research often involves testing hypotheses and assessing research issues.

Study Area

The University of Cape Coast has the distinction of being one of the world's few seaside campuses. Cape Coast University is a public, coeducational research institution in Ghana's second-largest city. The necessity for educated and trained professionals led to the university's founding in 1962. It was founded because the two existing public universities at the time could not meet the need for graduate teacher preparation for second-cycle schools, including teacher training colleges and technical institutes. Since then, the university's mission has expanded to include preparing medicine, agriculture, and educational administration, professionals.

Similar studies were undertaken by Combey (2019) and Lasim (2020); however, they only included institutions from a few locations rather than from all across the nation. This is why UCC was chosen.

Population

A study's research population consists of all of the potential participants in that study. (Booth & Tannock, 2014). Every study's sample size is a crucial aspect of the research plan. The reliability of a study may be greatly affected by how well researchers choose their sample subjects. Before collecting data, it is crucial to define the overall population and the specific group that will be the focus of the study (Booth & Tannock, 2014). The population for this study consists of the entire staff of the University of Cape Coast in the finance, stores, audit, and procurement staff, as well as all the heads of departments that prepare a budget. The available population for the study is 209 staff.

Sampling Procedures

Research sample size continues to be a challenge. Some researchers, however, have offered opposing viewpoints. While Ali, Rasheed, Siddiqui, Naseer, Wasim, and Akhtar (2015) claimed that the sample size should be at least 100, Faber and Fonseca (2014), Boddy (2016), and Taherdoost (2017) also supported the idea that researchers should get the largest sample size possible. Additionally, Berger, Bayarri, and Pericchi (2014) argued that a small sample size might skew the research results. (Berger, Bayarri & Pericchi, 2014). The study's target population consisted of 209 employees. To provide a 5% margin of error, 135 employees were chosen at random from 209 employees in accordance with Krejcie and Morgan (1970). Because it is difficult to gather data in Ghana and other African countries because most

individuals are not used to filling out and returning surveys, a simple random sample approach was utilised (Gyensare, Anku-Tsede, Sanda, & Okpoti, 2016).

Source of Data

This study examined the effects of Internally Generated Fund (IGF) and government subvention on financial sustainability of the University of Cape Coast. A main data source was employed to gather the data in accordance with the study's goal. Primary data is a kind of data gathered by researchers directly from primary sources using methods including interviews, surveys, and experiments, among others, according to Easterby-Smith (2008). The researcher noted that using primary data allows fresh data generation for studies of this kind (Easterby-Smith, 2008). Saunders and Lewis (2012) argued that since primary data are gathered from unidentified sources, they should always be reliable, current, and relevant to research.

Data Collection Instruments

A self-administered questionnaire was the major tool used to gather data for this research. According to Sekaran and Bougie (2016), using a questionnaire to gather data ensures higher uniformity, consistency, and impartiality. This approach is also acceptable since the variables under investigation could not have been observed and could only have been ascertained through learning the respondents' thoughts, emotions, and perceptions (Touliatos & Compton, 1988). Additionally, it saves respondents' time and may be completed without the researcher present (Touliatos & Compton, 1988).

The majority of respondents also believe that adopting questionnaire approach allows them to react without worry (Touliatos & Compton, 1988).

Additionally, respondents' privacy and comfort may be achieved when filling out the questionnaire, assuring better anonymity (Neelankavil, 2015). To collect the information required to respond to the research questions and meet the goals for this study, closed-ended questions were utilised. The answers to the closed-ended questions must be selected from a list of options, and the reply must consider each option without regard to the others. Given the respondents' hectic schedules, it is reasonable to utilise a self-administered questionnaire so they may reply in an unsupervised manner. The survey was a composite questionnaire made up of demographic inquiries to gauge the responses. The measuring items from Sawyer's Farjoun, Ansell, and Boin (2015) were altered for use in the IGF and government subsidy questionnaires. Additionally, financial stability was evaluated in accordance with Man (2011), Burton, and Goldsby (2009).

There were four parts to the questionnaire. (A, B, C and D). Self-developed questions in Section A of the questionnaire were used to gather respondents' demographic data, including gender, age, and years employed in the department. Information about IGF was gathered in Section B. Section C also included crucial data on government subsidies. Information was gathered in Section D on the difficulties with IGF's financial viability and government subsidies. All items in sections B, C, and D were scored on a continuum of strongly disagree, disagree, neither agree nor disagree, agree, and highly agree.

Reliability and Validity of the Instrument

Joubert and Ehrlich (2007) define reliability as having the same results even if the measures were taken multiple times. Reliability was achieved by using a relatively large sample size. The instrument was derived from tested

and standardised instruments to minimise random measurement errors. Additionally, internal consistency reliability, convergent, and discriminant validity, as well as the dependability of specific items, were also examined in this research to assess reliability (Chin, 1998; Hulland, 1999; Henseler, Ringle & Sarstedt, 2015).

Table 1: Checking for Reliability of the Instrument

Alpha value
.852
.800
.806
.700

Sources: Fieldwork (2021)

Validity

Validity is the accuracy or precision with which a phenomenon is described (Bagozzi & Yi, 1988; Chin, 1998; Ogah, 2013). Based on this study, validity was checked by examining the AVE of the model. In this investigation, the AVE in each latent variable was utilised to calculate discriminant validity in accordance with Fornell and Larcker (1981).

Table 2: Fornell-Larcker criterion for determining discriminant validity

	IGF	FS	GS
IGF	0.955		
FS	0.824	0.927	
GS	0.805	0.889	0.889

Source: Fieldwork (2021)

Note: Internally Generated Fund (IGF), Financial Sustainability (FS) and

Government Subvention (GS).

Data Collection Procedures

The Human Resource Manager was consulted for ethical clearance. This enables respondents in the various offices and departments to respond to the research instrument. In addition, participants were assured that their responses would be kept strictly confidential and used for academic reasons only. The researcher handed out the questionnaire there, and the responders filled it out and sent it back.

Data Processing and Analysis

The technique known as PLS-SEM was used to test the predetermined hypotheses. Using PLS-SEM, researchers may avoid making biassed estimates of item loadings, according to certain authors (Götz, Liehr-Gobbers, & Krafft, 2010). Using statistical data, Hair, Hult, Ringle, and Sarstedt (2016) argue that PLS-SEM facilitates testing and analysis of the causal link. PLS-SEM has been carefully considered as a superior statistical tool for making inferences about the connections between variables.

The concurrent evaluation of the nexus in model constructions is another feature of PLS-SEM. (Hair, Sarstedt, Hopkins & Kuppelwieser, 2014). The variance inflation component will be employed in PLS-SEM to assess

collinearity between constructs and degree of significance with associated p-values from 5000 bootstraps (VIF), the goodness of fit with (R^2), effect size (R^2) and predictive relevance (R^2).

Ethical Considerations

Whatever the situation or time, a person must uphold certain moral standards. (Akaranga & Makau, 2016). Focused on are the moral guidelines that researchers in many disciplines of study must adhere to. (Fouka & Mantzorou, 2011). The idea put out by Awases (2006) is that morality-what is good and wrong is primarily related to ethics. So, according to Rubin and Babie (2016), it is crucial for anyone doing research to be aware of ethical difficulties. The researcher took the greatest care to inform participants of the purpose of the study.

Chapter Summary

The methodology to be used for this study was covered in this chapter.

Additionally, it offers details on the population, sampling methods, sample size, analytical methodology, research tools, validity, and reliability.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter presents the study's results and discusses the findings. Three (3) main components comprised the questionnaire employed in this investigation. The study's respondents' demographic information is gathered in the first part. Results on the IGF and financial sustainability are included in the second part. Results related to government funding and financial stability are presented in the third part. The last section discusses the challenges of IGF and government subvention on financial sustainability.

Demographic Characteristics of Respondents

As introduced in Table 1, it can be stated that 51.0% of respondents denote males and 49.0% represent females hence, it can be confirmed that the males are more than females in this study. The result also shows that the ages between 30-39 years documented the highest responses whiles ages between 50 years documented the lowest response. Questions on the number of years of working in the university shows that the years between 1-5 years represent 44.5%, 6-10 years represent 28.2%, 11-15 years represent 17.9%, 16-20 years represent 5. 2% and 21 years represent 3.7 % (see Table 3).

Table 3: Demographic Characteristics of Respondents

Variable	Frequency	Percentage
Sex		
Male	69	51.0
Female	65	49.0
Age (years)		
20 - 29	39	28.9
30 – 39	75	55.6
40 - 49	14	10.4
50 and above	7	5.1
Number of years working with the University		
1 – 5 years	60	44.5
6 – 10 years	38	28.2
11 – 15 yea <mark>rs</mark>	24	17.9
16-20	7	5.2
21 years above	5	3.7

Sources: Fieldwork (2021)

Common Method Bias

There were 135 total participants, which is ten times more than the International Grants Fund (IGF) and government funding combined. Therefore, I do not anticipate issues with biassed estimations of path coefficients and indicator loadings (Chin, 1998). Harman's one-factor test and the collinearity test were used to check for common method bias in the data obtained to see whether the hypothesis was correct. All the variables were presented using Harman's one-factor test, and the factor for 28.123% was below the suggested threshold of 50% (Podsakoff & Organ, 1986) among

variables, demonstrating the absence of common method bias in the study's findings (Table 4). In addition, all VIFs (see Table 6) are less than the suggested threshold of 3.3 (Kock, 2015), indicating that the model is not influenced by common method bias, as determined by the complete collinearity test from the partial least squares structural equation modelling (PLS-SEM) findings.

Table 4: Total Variance Explained

	Extrac	ction sum of square le	oadings
Factor	Total	% of variance	Cumulative %
1	12.652	28.123	28.123%

Sources: Fieldwork (2021)

Extraction Method: Principal Axis Factoring.

Evaluating the Reliability and Validity of the Model

When an indicator's outer loading is more than 0.7, it is regarded as dependable (Henseler, Ringle & Sarstedt, 2015). The bulk of the indicators utilised in the model loaded well over 0.7, as seen in Table 5. Since the average variance retrieved for the majority of the constructs was over the minimum threshold of 0.5 at a significant level of p 0.05, indicators that were below the minimum threshold value of 0.7 were left in place (Henseler et al., 2015). The list of all latent variables, indicators kept, and their corresponding outer loadings are shown in Table 5. By examining the composite reliabilities of the constructs included in the model, the reliability of each construct was evaluated. Each construct's composite reliability is substantially above the threshold of 0.7, ranging from 0.937 to 0.952 (see Table 5), demonstrating the constructs' dependability (Hair, Sarstedt, Hopkins & Kuppelwieser, 2014).

Additionally, the average variance recovered for each concept was examined in order to evaluate convergent validity. The average variance extracted (AVE) of the latent variables utilised in a research should not have a minimum value lower than 0.5, according to Hair et al. (2014). The findings (see Table 4) show that most of the average variance extracted (AVE) of each latent variable utilised in the research is above the cut-off value of 0.5, showing that the convergent validity criteria have been satisfied.

Table 5: Summary of Measurement of Scale

Latent Variabl	Indicators	Mean	SD	Loadings	CR	AVE	Cronbac h Alpha
e							
Internally	Generated F	und			0.94	0.51	0.852
					9	6	
	IGF1	5.360	1.232	0.856		7	.53.74
	IGF2	5.704	1.103	0.853			
	IGF3	5.712	1.026	0.820			
	IGF4	5.904	1.929	0.835			
	IGF5	5.832	1.022	0.864			
	IGF6	5.956	0.891	0.870			
	IGF7	5.816	1.065	0.723			
	IGF8	6.060	0.872	0.863			
	IGF9	6.128	0.921	0.851			
	IGF10	5.896	0.995	0.797			
Governme	ent				0.95	0.65	0.800
Subventio	n				2	4	

GS1	5.512	1.503	0.914			
GS2	5.712	1.205	0.931			
GS3	5.740	1.121	0.920			
GS4	5.772	1.121	0.913			
GS5	5.472	1.284	0.784			
GS6	5.612	1.212	0.776			
Financial			. 5-200	0.93	0.53	0.806
Financial Sustainability	T			0.93 7	0.53 7	0.806
	5.892	1.409	0.947			0.806
Sustainability	5.892 5.972	1.409 1.157	0.947			0.806
Sustainability FS1						0.806
Sustainability FS1 FS2	5.972	1.157	0.933			0.806
Sustainability FS1 FS2 FS3	5.972 6.068	1.157 1.095	0.933 0.942 0.922			0.806

Source: Fieldwork (2021)

Evaluating the Research Questions

Table 6: Summary of Findings

IV	DV	Pathe coeff.	S.E	t-Stats	p- Values	\mathbb{R}^2	f^2	VIF	Q^2
IGF	FS	0.561	0.075	5.403	0.000	0.841	0.154	1.110	0.806
GS	FS	0.826	0.073	2.054	0.000	0.841	1.478	1.000	0.806

Source: Fieldwork, (2021)

Results and Discussion

This study examined the effects of the Internally Generated Fund (IGF) and government subvention on the financial sustainability of the University of Cape Coast. The PLS analytical technique was used to analyse the data. According to Fornell (1982), the PLS analytical technique may be used to

evaluate ideas at different phases of development without necessitating that the data obtained have multivariate normal distributions. In a similar vein, Chin (1998) asserts that the strategy is appropriate when the objective is a causal prediction test rather than a test of a whole theory.

Table 6 presents the findings of the multicollinearity tests for the independent variables used in the research. In all circumstances, the computed Variance Inflation Factor (VIF) is less than 2, showing that the analyses multicollinearity is unaffected (Henseler et al., 2015). According to the study questions model, government subsidies and IGFs account for 84% of the variance in financial sustainability and may be classified as modest, medium, and considerable (Cohen, 1988). According to Cohen (1988), it is critical to gauge the impact significance by calculating their effect size.

The effect size values $f^2 \ge 0.02$ mean small, $f^2 \ge 0.15$ represent medium, and $f^2 \ge 0.35$ denotes large effect sizes (Cohen, 1988). Therefore, the effect size measure shows that IGF ($f^2 = 0.154$) has a medium effect on financial sustainability. Government subvention with ($f^2 = 1.478$) greatly affects financial sustainability. Also, a Q^2 value higher than zero can have a predictive relevance (Götz, Liehr-Gobbers & Krafft, 2010). As a result, Q^2 values between 0.02 and 0.15 indicate a moderate amount of predictive relevance, whereas values between 0.15 and 0.35 indicate a substantial amount of predictive relevance. And so, a $Q^2 = 0.806$ shows that IGF and government subvention have a large relevance in predicting financial sustainability (see Table 6).

Fritzsche and Oz (2007) have reasoned that evaluating research questions can start once a correct measurement has been designed. Path coefficients and associated p-values were used to validate the study

hypotheses. Table 6 (β = 0.561, p < 0.000) means that IGF links to financial sustainability positively. Thus, universities incorporating IGF initiatives into their corporate objectives are more likely to attain and improve their financial sustainability. It has been affirmed that institutions such as universities that incorporate IGF initiatives into their business strategy are more likely to generate funds internally, which, in turn, will improve their financial sustainability (Portillo & Block, 2012).

The findings also connect to some researchers' results in the IGF domain (see Bhatia, 2009; Thies, 2010; Salami, 2011) that generating funds internally has the propensity of increasing and sustaining the financial position of institutions. The study results links to Adenugba and Ogechi's (2013) findings that IGF on financial sustainability is significant and positive. It is clear from Afutu's (2015) research that residential and academic user facility fees paid by regular students and fees by sandwich students significantly affect institutions' income production. Transcript fees, attestation costs, souvenir fees, graduation fees, catering services, CoDE income, facility user fees, printing press, and consultant services all contribute to institutions' IGF, as claimed by Adu-Gyamfi (2014), confirming the research outcome. For instance, the University of Cape Coast was able to generate GHS 2, 018, 995, and 722 internally from 2015 to 2021(Extract from UCC Financial Statement, 2021).

Also, it can be established that universities that mobilize IGFs (Mrutu & Mganga, 2016) are better positioned to enhance their financial sustainability (Chand, 2014). Thus, giving universities the authority to mobilise funds internally could improve their financial sustainability (Republic of Ghana., 1992; Fosu & Ashiagbor, 2012; Adu-Gyamfi, 2014; Fjeldstad et al., 2014;

Ajmal, 2018; Akinleye & Dadepo, 2019). The study found the IGF concept an important conduit for attaining and improving the financial sustainability of firms (Adenugba & Ogechi, 2013; Chand, 2014; Innocent, 2016).

Also, (β = 0.826, p < 0.000) indicates a significant positive nexus between government subvention and financial sustainability. Thus, the more universities can access government subventions, the better they can sustain themselves financially. This confirms what has been shown in other research (Egboro, 2016; Gyasi, 2017; Wachira, 2017; Baraja &Yosya, 2019): that government subvention plays a significant role in supporting public universities, hence strengthening their financial standing. It has been advanced that government subvention constitutes a greater portion of state institutions' revenue base and sustainability (OECD, 2018; World Bank, 2019). This means that government subvention remains one of the reliable and sustainable sources of funding for the state institutions like universities.

The finding also links to the research result of Castelli et al. (2006) that corporations acquire funds from external sources to survive and continue their business operations. Carter et al. (1997) argued that firms that access financial support from the government could withstand the competition in the financial market. Coleman (2007) also presented that government grant subvention indicates organisations' financial sustainability. Afutu (2015) and Gyasi (2017) explained that the government's motive for offering universities subventions is to improve their financial position. For instance, it has been stated that the University of Cape Coast could access government subvention amounting to GHS 1, 602, 318, and 7324 from 2015 to 2021 (Extract from UCC Financial Statement, 2021). Chitiga-Mabugu and Monkam (2013) opined that Ghana has a system of financial allocations meant for universities.

Challenges Associated with Internally Generated Fund (IGF) and Government Subvention on Financial Sustainability

The descriptive summary and analysis of the challenges associated with the Internally Generated Fund (IGF) and government subvention on financial sustainability were determined by using means, and the standard deviation is shown in Table 7 below.

Table 7: Challenges Associated with Internally Generated Fund (IGF) and Government Subvention on Financial Sustainability

and Government Subvention on Financial Sustainability								
	N	Mean	Std. Deviation					
Political influence hinder IGF initiatives	135	4.80	.497					
and access to government subventions								
Absence of horizontal and vertical	135	4.70	.493					
structural integration								
Inefficient monitoring	135	4.51	.507					
There is inadequate management skill and	135	4.42	.497					
limited qualified tax administrators within								
the university								
There is a lack of understanding of the IGF	135	4.37	.487					
and government subvention								
There is a lack of proper bookkeeping of	135	4.33	.471					
IGF and government subventions								

Source: Field Work (2021)

From Table 7, among the items measuring the challenges associated with IGF and government subvention on financial sustainability, political influence hinders IGF initiatives and access to government subventions had

the highest mean with standard deviation scores of (M = 4.80; SD = 0.497). This means that most respondents perceive that political influence hinders the extent to which universities generate funds internally and subventions from the government. It is also established from Table 7 that the absence of horizontal and vertical structural integration scored the next highest responses (M = 4.70; SD = 0.493). Moreover, inefficient monitoring had (M = 4.51; SD = 0.507). This finding implies that universities do not monitor the progress of their IGF policies. Also, the item that there is inadequate management skill and limited qualified tax administrators within the university (M = 4.42, SD = 0.497), there is a lack of understanding about IGF and government subvention (M = 4-37, SD = 0.487), and lack of proper bookkeeping of IGF and government subventions (M = 4-33, SD = 0.471).

Moreover, the study findings are consistent with the results of some studies (Adu-Gyamfi, 2014; Mrutu & Mganga, 2016; Gyasi, 2017) that political influence, absence of horizontal and vertical structural integration, inefficient monitoring are some of the challenges associated with collecting IGFs and accessing government subvention on financial sustainability among state institutions. Other studies documented that inadequate management skills and limited qualified tax administrators within the university domain could explain some of the challenges linked with IGF and government subvention among universities toward financial sustainability (Karpavicius & Yu, 2017; Jordao & Almeida, 2017; Baker & Kilincarslan, 2018). Adu-Gyamfi (2014) argued that the wrong conceptualization of the IGF and government subvention concept could also account for some of the challenges linked to IGF and government subventions toward financial sustainability.

Chapter Summary

The chapter detailed the various analysis based on the research findings. The literature was discussed which informed readers either the study confirms or disconfirms what other authors have done.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter is the final chapter of this study. As a concluding chapter, it captured information pertaining to a summary of the study, conclusions on the significant findings of the study, recommendations to the findings, limitations of the study and suggestions for future research. The presentations of the conclusions and the recommendations were in line with the three specific objectives discussed in chapter four.

Summary of the Study

The study examined the effect of IGF and government subvention on the financial sustainability of the University of Cape Coast. The study was guided by these three objectives, thus, to assess the effects of IGF on the financial sustainability of the University of Cape Coast, to assess the effects of government subvention on the financial sustainability of the University of Cape Coast, and to identify the challenges associated with IGF and government and government subvention on the financial sustainability of the University of Cape Coast. The applicable literature and research questions have been discussed. One hundred and thirty-five University of Cape Coast staff have been selected to participate in the research. The study was guided by an explanatory research design. Moreover, the study employed PLS-SEM to analyse the data. Also, the resource mobilisation theory and stakeholder theory have been reviewed.

Summary of Key Findings

Internally Generated Fund (IGF) and Financial Sustainability

The result of this study pays largely to the IGF and government subvention-related works. Firstly, the study advances the stakeholder theory that universities may connect well to the government if they are permitted to generate funds internally and access subvention from the government, which appears to have positive outcomes for these universities. This initiative may lead to financial sustainability (Freeman, 1984). Also, the study advances the resource mobilisation theory. The resource mobilisation theory maintains that state institutions, including universities, should be interested in mobilizing resources internally. This is because universities are one of the main concerns for the state. After all, their financial sustainability is vital for their survival and continued existence. The theory contends that universities must be funded and requires internal fundraising.

Moreover, the study revealed that universities that incorporate IGF initiatives such as residential and academic user facility fees paid by regular students and fees by sandwich students, transcript fees, attestations fees, souvenir fees, graduation fees, catering services, CoDE revenue, facility user fees, printing press and consultancy services into their corporate objectives are more likely to attain and improve their financial sustainability. Furthermore, it has been affirmed that institutions such as universities that include IGF initiatives in their business strategy are more likely to generate funds internally, which, in turn, will improve their financial sustainability (Bhatia, 2009; Thies, 2010; Salami, 2011; Portillo & Block, 2012; Adu-Gyamfi, 2014; Afutu, 2015).

Government Subvention and Financial Sustainability

Also, the results extend discoveries of prior investigations concerning government subventions and financial sustainability. It has been affirmed that the more universities can access government subventions, the better they can sustain themselves financially (Egboro, 2016; Gyasi, 2017; Wachira, 2017; Baraja &Yosya, 2019). It has been postulated that government grants constitute a greater portion of state institutions' revenue base and sustainability (OECD, 2018; World Bank, 2019). This simply means that government subvention remains one of the reliable and sustainable sources of funding for the state institutions like universities.

Public university finance was likewise shown to rely heavily on governmental subvention (Gyasi, 2017). Gyasi (2017) explained that the government's motive for offering universities subventions is to improve their financial position. For instance, it has been stated that the University of Cape Coast could access government subvention amounting to GHS 1, 602, 318, and 7324 from 2015 to 2021 (Extract from UCC Financial Statement, 2021). Chitiga-Mabugu and Monkam (2013) opined that Ghana has a system of financial allocations meant for universities.

Challenges Associated with Internally Generated Fund (IGF) and Government Subvention on Financial Sustainability

The study recognised some important challenges associated with IGF and government subvention on financial sustainability (Adu-Gyamfi, 2014; Mrutu & Mganga, 2016; Gyasi, 2017). It was revealed that political influence, absence of horizontal and vertical structural integration, and inefficient monitoring are some challenges associated with collecting IGFs and government subvention on financial sustainability among state institutions.

Similarly, other studies documented that inadequate management skills and limited qualified tax administrators within the university domain could explain some of the challenges connected with IGF and government subventions among universities toward financial sustainability (Karpavicius & Yu, 2017; Jordao & Almeida, 2017; Baker & Kilincarslan, 2018).

Conclusions

The study examined the effect of IGF and government subvention on the financial sustainability of the University of Cape Coast. The study was guided by these three objectives, thus, to assess the effects of IGF on the financial sustainability of the University of Cape Coast, to assess the effects of government subvention on the financial sustainability of the University of Cape Coast, and to identify the challenges associated with IGF and government and government subvention on the financial sustainability of the University of Cape Coast. First, the study documented the positive connection between IGF and the financial sustainability of the University of Cape Coast. I, however, argued that public universities could enhance their financial sustainability by introducing and executing IGF initiatives. In addition, the conclusions are drawn based on the study's findings.

- 1. Public universities with good IGF initiatives are more motivated towards generating residential and academic user facility fees, transcript fees, attestations fees, souvenir fees, graduation fees, catering services, CoDE revenue, facility user fees, printing press and consultancy services internally, which, in turn, may improve their financial sustainability.
- 2. Also, public universities able to access government subventions are better positioned to perform financially.

3. Besides, addressing the challenges such as political influence, absence of horizontal and vertical structural integration, inefficient monitoring associated with IGF and government subvention could also enhance the financial sustainability of the universities.

Recommendations

The study makes available a number of considerable inferences for the management of the universities.

- 1. Public universities should incorporate IGF initiatives such as residential, academic user facility fees paid by regular students and fees by sandwich students, transcript fees, attestations fees, souvenir fees, graduation fees, catering services, CoDE revenue, facility user fees, printing press and consultancy services into their corporate objectives in order to improve their financial sustainability.
- 2. The university management should note that once they are able to access government subventions in the form of endowment and support, they can sustain themselves financially. Hence, they should strive to get their shares of government subvention to perform financially.
- 3. Finally, although the link between IGF, government subvention and financial sustainability is positive, the management of universities should pay attention to the challenges such as political influence, absence of horizontal and vertical structural integration, inefficient monitoring associated with IGF and government subvention in order to enhance the financial sustainability of the universities.

Suggestions for Further Research

Other studies on IGF, government subvention and financial sustainability should be extended further in other sectors to confirm the nexus in this study. While this study contributes significantly to the extant literature on the relationship between IGF, government subvention and financial sustainability, the following limitations were identified. First and foremost, the study did not strictly follow the principle of randomisation because of the nearly impossible nature of accessing an accurate sampling frame for the population. However, given the size of the data collected, it is logical to assume that the findings and the recommendations of this study would be useful to the management of universities. In addition to the above, while the extant literature acknowledges that the constructs employed in this study have many aspects, not all were analysed. Hence, future studies could address how the different aspects could impact financial sustainability.

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APPENDIX A: QUESTIONNAIRE

QUESTIONNAIRE FOR STAFF

Dear Respondent,

This questionnaire has been designed for the purpose of collecting data in order to investigate how government subvention and internally generated funds utilization influence financial sustainability in the public universities in Ghana specifically university of Cape Coast. The data collected will be treated with a degree of confidentiality and it is meant for the purpose of academic work only.

Section A: Demographic Information of Respondents.

Instructions: Please tick the most appropriate item of your choice.

- 2. Sex Male [] Female []
- 3. Age 20-29 years [] 30-39 years [] 30-49 years [] 50 years and above []
- 4. Number of years of working in your department

1-5 years [] 6-10 years [] 11-15 years [] 16-20 years [] 21 years and above []

Section B: Internally Generated Fund (IGF)

Indicate your level of agreement on the following statements on IGF in your Institution. Rate your response by ticking using a scale of five units whereby 1=strongly disagree, 2= disagree, 3=moderately agree 4= agree, and 5=strongly agree.

Internally Generated Fund (IGF) Items	1	2	3	4	5
The university generate internal funds through					
residential, academic user facility fees paid by	7				
regular students and fees by sandwich students					
UCC generate funds internally through CoDE					
revenue					
UCC generate funds internally through printing					
press and consultancy services		_			
The sales of admission forms are also sources of					
the university's IGF		7		- A	
The university generate internal funds through					
issuance of transcript, attestations and souvenir					
Graduation fees is also the university's IGF		7			
UCC seek the ministry assistance to access loans			7		
from commercial banks for IGF mobilization					
UCC invests in fixed assets to raise resources					
(IGF)					
The university generate internal funds through					
resit fees paid by students.					
Monies paid by market men and women on					
campus are some of the IGF sources of the					
university.					

Section C: Government Subvention

Indicate your level of agreement on the following statements on government subvention in your Institution.

Government Subvention Items	1	2	3	4	5
UCC has a timely and efficient method of using					
government subvention for smooth financial					
operation.	71				
UCC uses the subvention efficiently and timely to					
settles the creditors for smooth financial					
operation.					
UCC uses the government subvention in					
financing administrative cost					
UCC uses subvention for payment of allowances					
and salaries		7			
UCC effectively matches the subvention inflows	_				
and outflows of cash so as to maintain adequate					
cash.	7		5		
UCC reserves some of the subventions for			\mathcal{I}		
forecasted or unexpected requirements					
UCC uses part of the subvention for infrastructure					
capital management					
UCC effectively manage subvention by investing					
in short term financial instruments					
UCC has best practices to ensure government					
subvention accountability and continuous					
improvement of financial utilization processes					

Section D: Financial Sustainability

Indicate your level of agreement on the following statements on financial sustainability in your Institution.

Financial Sustainability Items	1	2	3	4	5
UCC sets adequate allocation of financial					
resources for all planned activities	/2				
UCC ensures that government subvention and IGF					
are available in time according to the planned					
budget and schedule					
UCC manages debt and ensures the debts accrued					
are less than the previous year.					
UCC has diversified its income sources					
UCC has a monitoring and reporting system is in					
place on government subvention		7			
UCC undertakes Constant monitoring of					
administrative cost ratio					
UCC employ casual workers during peak seasons	/	7	<		
and closes unused facilities			9		
Laying of casual workers during low seasons and		W			
closing unused facilities					
UCC often calculates the operating surplus ratio to					
measure ability to fund on-going operations over					
the long-term.					

Section E: Challenges associated with Internally Generated Fund (IGF) and Government Subvention on Financial Sustainability

Indicate your level of agreement on the following statements on the challenges associated with Internally Generated Fund (IGF) and government subvention on financial sustainability in your Institution.

Challenges associated with IGF and Government Subvention on Financial Sustainability Items	1	2	3	4	5
Political influence hinder IGF initiatives and access to government subventions					
Absence of horizontal and vertical structural integration					
Inefficient monitoring					
There is inadequate management skill and limited qualified tax administrators within the university		7			
There is lack of understanding of the IGF and government subvention					
There is lack of proper book keeping of IGF and government subventions			7		

THANKS FOR YOUR COOPERATION.