UNDERFUNDING OF FEDERAL UNIVERSITY IN NIGERIA AND PERCEIVED IMPACT ON ADMINISTRATION: AN EXPLORATORY CASE STUDY

A thesis presented

by
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In the field of Education

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Dedication

I dedicate this effort to my family—
the source of my inspiration, strength and persistence.

For the love of my Children
Bradley Uchenna Dimunah
Hamilton Obioma Dimunah
Mitchell Chuka Dimunah
Jeffrey Chimdi Dimunah

For my loving husband who is so supportive of me
Martin U Dimunah
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Abstract

Universities in Nigeria have historically faced underfunding, and at an operational level, compete for attracting the best pool of students, achieving the highest grades. Adequately funded universities not only ensure a higher standard of University curriculum, but also have the potential to result in competitive advantages over other universities. Nigerian universities function with the shortage in key educational resources, such as research materials, library facilities, science lab equipment, and suffer the consequences of underfunding. In this study, the problem of underfunding in Nigerian federal universities, its effect on the University central administration, and its relationship with external actors was explored. Employing resource dependency theory, the researcher considered external environmental factors such as alternate financial sources and competing organizations. A qualitative research methodology was adopted to examine the Ahmadu Bello University as a case study. The central research question was: What are the organizational and systemic factors in the Nigerian Federal University system that impact funding management by University administrators? The four sub-questions which guided the study focused on: the role of University personnel in resource acquisition, the impact of the external environment, the alternative revenue generators explored by University administrators to overcome underfunding, and the experience of University administrators as they contend with the impact of underfunding by the Federal Government. The study found that University administrators at ABU require training on securing alternative resources. This research has also identified administrative practices that help federal university personnel, on a broader scale, to function in an environment of financial uncertainty.

Keywords: University underfunding, administrator perception, resource dependency theory
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Chapter One: Introduction

Underfunding of a university is defined by the lack of resources within a higher education institution. It is a condition which occurs when the allocations are not sufficient to be effective, and money needed to cover current and future expenses is not readily available. Ogot and Weidman (1993), caution that funding higher education should be a major priority in government budgets in Africa because of its importance in social and economic development. Universities are the main source of the knowledge acquisition and skill development that equip students to perform well in the competitive global marketplace. Due to the increasing interconnectedness of countries’ economies, it has become necessary for each country to produce students who can compete in the global economic marketplace. Adequate funding for higher education and research institutions is key to achieving this goal (Geuna, 2001). This study will address the general problem of underfunding in Nigerian federal universities and its effect on the University central administration and its relationship with external actors.

Inadequate funding of higher education institutions is not specific to Africa; it is a global issue. In a research on U.S. universities, Standler (2009) established that all research-oriented universities in the United States, both state and private, faced financial problems resulting from a drastic reduction in government financial support for scientific research in the 1970s. The consequences of these funding issues include tuition increases, which have since made college education unaffordable for many low- and middle-income families in the United States. President Barack Obama, in a report prepared by the Department of the Treasury with the Department of Education on February 27, 2012 stated, “We can't allow higher education to be a luxury in this country. It's an economic imperative that every family in America has to be able to afford” (Snyder & Dillow, 2012, p.1).
Government involvement in and support for resource allocation to higher education institutions differs among countries (Rosa, Amando, & Amaral, 2009). Meyer-Krahmer and Schmoch (1998) noted that in most advanced countries universities have more industrial funds in their research budget than government or public funds. In Germany, for example, state fund allocations are based on university performance and are “one way of setting an incentive for competitive practices amongst universities” (Orr, Jaeger, & Schwarzenberger, 2007, p. 4). Similarly, Dewatripont, Aghion, Mas-Colell, Hoxby, and Sapir (2007) documented a high variance in the funding and governance of universities across countries, including the United Kingdom and Switzerland. Table 1 presents the annual budgetary allocation for education by 20 different countries.

Table 1

<table>
<thead>
<tr>
<th>Country</th>
<th>Budget allocation to education (%)</th>
<th>Rank</th>
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<tbody>
<tr>
<td>Ghana</td>
<td>31.0</td>
<td>1</td>
</tr>
<tr>
<td>Cote d’ Ivoire</td>
<td>30.0</td>
<td>2</td>
</tr>
<tr>
<td>Uganda</td>
<td>27.0</td>
<td>3</td>
</tr>
<tr>
<td>Morocco</td>
<td>26.4</td>
<td>4</td>
</tr>
<tr>
<td>South Africa</td>
<td>25.8</td>
<td>5</td>
</tr>
<tr>
<td>Swaziland</td>
<td>24.6</td>
<td>6</td>
</tr>
<tr>
<td>Mexico</td>
<td>24.3</td>
<td>7</td>
</tr>
<tr>
<td>Kenya</td>
<td>23.0</td>
<td>8</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>22.5</td>
<td>9</td>
</tr>
<tr>
<td>Botswana</td>
<td>19.0</td>
<td>10</td>
</tr>
<tr>
<td>Iran</td>
<td>17.7</td>
<td>11</td>
</tr>
<tr>
<td>USA</td>
<td>17.1</td>
<td>12</td>
</tr>
<tr>
<td>Tunisia</td>
<td>17.0</td>
<td>13</td>
</tr>
<tr>
<td>Lesotho</td>
<td>17.0</td>
<td>14</td>
</tr>
<tr>
<td>Bukrina Faso</td>
<td>16.8</td>
<td>15</td>
</tr>
<tr>
<td>Norway</td>
<td>16.2</td>
<td>16</td>
</tr>
<tr>
<td>Colombia</td>
<td>15.6</td>
<td>17</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>15.0</td>
<td>18</td>
</tr>
<tr>
<td>India</td>
<td>12.7</td>
<td>19</td>
</tr>
<tr>
<td>Nigeria</td>
<td>8.4</td>
<td>20</td>
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*Note. Adapted from “Selected 20 countries annual budgetary allocations to education” by World Bank, 2012. Washington D.C.*
The table shows Nigeria at the bottom of the table with 8.4 percent allocation to education with Ghana occupying the first position with 31.0 percent allocation to education. In Africa, universities were established with the objective of training and supplying manpower highly skilled in technology, as well as producing political and administrative elites to control state structures. Universities were also established for promoting civic standards, societal values, and knowledge, to improve standards of living, internal and international harmony and establishments of peace, based on human rights, democracy, tolerance and mutual respect (UNESCO, 1998). According to Ibukun (1997; 2004), the main purpose of University education in Nigeria is to provide the needed manpower to accelerate the socio-economic development of the nation. To achieve this purposes, these institutions of higher learning need to be adequately funded. Without sufficient funding, universities are not able to effectively manage the resources they are given (Ekundayo & Ajayi, 2009), nor are they able to fulfill the mandate for which they are established.

**Statement of the Problem**

Nigeria’s higher education system is like the British higher education system, due to the history of colonization. To understand the problem of underfunding of Nigerian higher education and its impact on administrators, the system infrastructure needs to be explored. Nigeria’s higher education system started with the Elliot Commission of 1943, which led to the formation of the University College of Ibadan in 1948 as an affiliate of the University of London (Ike, 1976). Nigerian universities established between 1960 to 1970, under the British colonial government, are called first-generation universities; universities established in the 1970s are called second-generation universities; and universities established between 1980 and the 1990s are called the third-generation universities by the Federal Government of Nigeria. Along with
the establishment of federal universities, many state governments, private organizations, and individuals established regional, and specialized privately-funded universities in various cities within Nigeria. Reported in a study by Bamiro & Adedeji, (2010), government funding to universities has declined and has negatively affected the ability of universities to perform their duties effectively, especially in the areas of teaching and research. They further stated that the quality of teaching and research has fallen because of inadequate research and teaching materials and overcrowded teaching and learning environment.

The University System in Nigeria

Nigerian higher education system reflects the regime changes that the country has experienced in its history. As a former colony, Nigerian higher education system resembles the British system with three years of undergraduate education required after completing high school. The first few universities in the country were established in the colonial rule. Thereafter, more universities were established to meet the demand of higher education in the military and current democratic rule. In Nigeria, universities may be classified by their year of establishment, public or private ownership, and whether they are degree granting or technical colleges.

First generation universities. First generation universities are the five universities established between 1948 and 1965, following the recommendation of the Ashby Commission set up by the British Colonial Government to study the necessity of University education for Nigeria. These universities are fully funded by the Federal Government. They were established primarily to meet a need for qualified personnel in Nigeria, and to set basic standards for University education. These universities have continued to play their roles in producing qualified personnel and the provision of educational standards, which have helped to guide the subsequent establishments of other generations of universities in Nigeria. Universities in this tier include
University of Nigeria Nsukka, University of Lagos, University of Ife, Ahmadu Bello University Zaria, and University of Ibadan (UNESCO, 2012).

**Second Generation Universities.** Second generation universities were established due to the increased number of students who needed University education in Nigeria, and the growing needs for scientific and technological developments. Twelve universities were established between 1970 and 1985.

**Third Generation Universities.** Third generation universities were established to address the special areas of technological and agricultural demand. Consequently, 10 additional Universities were established between 1985 and 1999.

**State Universities.** State universities were established by state governments due to the pressures from students from each state who could not get admitted to any of the Federal Universities. These universities were established after 1999 to present.

**Private Universities.** Federal Government of Nigeria passed a law in 1993, allowing private sectors to establish universities following the guidelines articulated by the Federal Government.

The duration of undergraduate programs in Nigerian universities depends largely on the program of study. For example, social sciences/humanity related courses are four years, engineering/technology related courses are five years, pharmacy courses are five years, and law courses are 5 years, each with two semester sessions per year. Medicine (vet/human) degrees take 6 years and have longer sessions during the year (UNESCO, 2012).
Impact of Underfunding.

Documentation of underfunding of Nigerian universities was provided in a study by Nwadiani and Akpotu (2002) who explicitly linked the crises in Nigerian universities to governance, control, and underfunding. According to the authors, the university system has experienced a “high state of anxiety and frequent crises of different types and intensity” (p. 1). Among these crises, scarce resources, underfunding, brain drain, and staff turnover are the most crucial and central (Nwadiani, 1999). Halidu (2015) reported that federal universities are seriously underfunded and the underfunding issues has affected academic performance which has resulted to lack of physical facilities, brain drain among highly qualified faculty, and administrative staff, library facilities and laboratory equipment and professional development for staff.

Other research (Ibukun, 1997; Ekundayo & Ajayi, 2009; Faniran & Akintayo, 2012) has demonstrated that in Nigeria, underfunding of universities has led to overcrowded classrooms, deteriorating physical facilities, and a lack of resources such as textbooks, teaching materials, and laboratory equipment. Lack of resources and deteriorating teaching facilities have subsequently led to campus unrest and strikes by both students and staff, resulting in the unscheduled closure of universities for months (Faniran & Akintayo, 2012). Osun Radio (2013) analyzed the history of ASUU strikes in the Country since 1999 as follows. In 1999, ASUU went on strike for 5 months, 3 months in 2001, 2 weeks in 2002, 6 months in 2003, 3 days in 2005, 1 week in 2006, 3 months in 2007, 1 week in 2008, 4 months in 2009, 5 months 1 week in 2010, 3 months in 2011 and 5 months 20 days in 2013. Lack of funding was central to these strikes.
Similarly, Sanni (2009) reported that many organizations, parents, labor unions, etc., have been pointing to the government as the cause of inadequate funding of the university education system in Nigeria.

In 2010, at a federal executive council meeting, the Nigerian education minister declared that the government would be establishing six new universities in each of the six geopolitical zones of the country that did not already have federal universities to extend access to university education in 2011. Reacting to this announcement, Subair Omotayo, an administrator from the Obafemi Awolowo University (OAU), “described the creation of new universities as ill-conceived and unnecessary” (Furtune, 2010, p.1). According to him, “existing universities were facing the problems of accreditation, funding, and staff welfare and suggested expanding the existing universities to absorb more students, while academic programs should be strengthened and improved to get proper accreditation,” (p.1).

This dissertation study examined this problem through a case study of Ahmadu Bello University Zaria (ABU). There are 40 federal universities in Nigeria including ABU, which was among the first five universities established after Nigeria’s independence from Britain in 1960. There are three main geographic regions in Nigeria (the Northern, Western, and Eastern regions); ABU is in the Northern Region. Founded in 1962, ABU became a federal institution in 1975. It depends solely on the Federal Government for its operating expenses (Muhammad, 2012). It was first called the University of Northern Nigeria, and was later renamed after the Sardauna of Sokoto, Alhaji Sir Ahmadu Bello, the first premier of Northern Nigeria. The University has a wide variety of undergraduate and graduate programs, as well as associate degrees, vocational programs, and remedial programs. The University also has a large medical program with its own teaching hospital, one of the largest in Nigeria.
The underfunding of ABU was highlighted in a study by Muhammad (2012) who found that the University needed funds to pay staff salaries, human resources, staff development, equipment for classrooms and offices, and the construction of new buildings, security, research development, library facilities, and scholarships. Availability of resources in the University was not commensurate with increases in student enrollment and other services needed. Further, Muhammad (2010) established that low funding of federal universities, including ABU, affected University management negatively, as it jeopardized the ability of universities to meet its operating costs, which constituted expenses such as salaries and learning resources. In addition, inadequate funding limited the federal universities from allocating monies towards capital expenses which are required to maintain the existing infrastructure assets so they do not depreciate rapidly.

**Alternative Funding Sources**

In Nigeria, federal universities do not charge any tuition; this is a problem because the customers (students) are not paying for the goods (education). Thus, they do not always appreciate its value. A study by UNESCO (2003) revealed that since the abolition of tuition fees in the year 1976 by the Nigerian Federal Government, the universities started on the path of being underfunded, and it is being continued today. In a study on Nigerian higher education, Okojie (2010) reported that federal university administrators are not happy that there is the problem of underfunding in the universities, yet they were not allowed to charge undergraduate tuition.

Udoh (2008) suggested the following ways of dealing with resource shortfall, i.e. graduate tax, checking fraudulent practices such as embezzlement of funds or fund mismanagement, commercializing activities on campuses, imposing a charge on university
accommodation, endowment funds, scientific breakthrough, consultancy, scholarship, loans, payment of tuition fees, part-time programs, staff exchange program, loans, scholarship, tax-relief, vacation and part-time job. In his discussion of potential sources of funding higher education in Nigeria, Adeyemi, (2011) listed bank loans for capital development, dedicated funds from property tax levies, donations from endowment, donations from parents/teachers/alumni associations, education tax, development levy, and lottery taxes. The Federal Government’s effort to carry out some of these suggestions has not been easy, as they have met with stiff oppositions from parents, instructors, and students (Udoh, 2008). Hisle (2002), who researched Nigerian University libraries, stated that raising funds from alternate sources is difficult for universities as they depend primarily on government financing (Emojorho, 2004) and do not have the need or experience in fundraising. This insight drawn by Hisle (2002) pertains to the organizational nature of universities, which are large bureaucracies in the Nigerian higher education system. Specifically, for such institutions, heavy reliance on citizen’s donations, lack of flexible administrative system, clear fundraising roles contribute to the inertia in seeking alternate funding sources. The issue is further complicated by the deep-seated culture bias where citizens view education as the government’s responsibility.

Arikewuyo (2001) discussed the ideology adopted by the larger civic community in Nigeria, which views higher education of the citizens as a public good, and places the responsibility of financing higher education on the government. This ideology implies that funding of university programs and operations is the responsibility of the government. Udoh (2008) clarified that according to most people in Nigeria, issuing scholarships, checking fraudulent practices, and loans are the responsibility of the government, while university
administration can help the government by administering the staff-exchange program and scientific break-throughs.

Udoh’s study highlighted antagonism in the views held by instructors, parents, and students on financing university education through student and employee fees or charges. In the conclusions, the author reported that instructors, parents, and students accepted scholarship, scientific break-through, staff exchange programs, checking fraudulent practices, and loans but rejected commercializing accommodation, payment of tuition fees, graduate tax, tax-relief and commercializing activities on campuses as alternative sources of funding university education. In the study, Udoh (2008) documented how underfunding of universities results in organizational stress in the universities and causes resource strain as they lack adequate resources to deliver essential services. The author warned that the Nigerian government should be careful in reintroducing tuition fees in the universities to avoid student strikes, which sometimes lead to closure of some universities. He proposed that rejection of tax-relief by citizens, as alternative source of funding University education in Nigeria, displays a lack of trust in government policy on the issue of funding.

**Nigerian Federal University’s Internally Generated Revenue**

Federal universities are pursuing other sources of generating revenue instead of relying completely on the Federal Government for funding, this category of funds will be termed internally generated revenue (IGR) in this dissertation. Bamiro (2012) listed some innovations in program offerings which have helped universities boost their revenue considerably. These include establishment of part-time programs to consultancy outfits as the Federal Government expects federal universities to generate 10 percent of their total annual allocation (2012). To meet these requirements, some universities offer evening and weekend degree programs at
undergraduate and postgraduate levels, some by establishing satellite campuses in major cities. While such programs generate revenue for the university, it is not sufficient to improve significantly the funding shortfall experienced by these universities (Akinyemi, 2012).

As a means of finding solution to the unending financial problems in the nation’s universities, and the mandate that each federal university need to generate at least 10 percent of its total revenue, universities have expanded the scope of their internally generated revenue to include student fees, grants, private contributors, tertiary education trust fund (ETF), commercial ventures, alumni relations associations, and undertaking research and consultancy services (Akinyemi, 2012). Each of these funding source will be discussed briefly to provide a context for the statement of the problem. Famurewa (2014) reported that universities should seek for alternate funding to supplement government funding, through internally generated revenue and there should be adequate monitoring of how allocated funds are used and areas where they are applied. This should reduce the number of academic staff union of universities (ASUU) strikes in Nigerian universities

**Student fees.** Even though federal and state higher education institutions are not allowed to charge tuition fees, they can charge the students for the provision of services. These include providing residence halls, sports facilities, and laboratory supplies in science-based programs. A limited fee is charged to meet the cost of municipal services (Bamiro, 2012). Private institutions on the other hand are autonomous and depend largely on fees paid by students for their sustenance. Tuitions are very high in these schools and thus, students from low and middle-income families are deprived of the opportunity to go to those schools due to high cost. In his study Bamiro (2012) explained that there is a disconnect in setting the budget for universities between the Federal Government and the university management; as a result, there is lack of
funding to meet the established requirements. Any attempt by universities to increase fees results in student protest and crises. Okojie (2013) highlighted that some tertiary institutions have done well in their drive for substantial IGR and have used it to positively change the landscape of the institutions while some were yet to catch up with the vision.

In a study, which surveyed Nigerian university student curriculums and degree programs, Adeyemi and Osunde (2005) conclude that universities have cherry picked disciplines in which they have introduced the part time programs. These programs are offered more often in disciplines such as education, business, and law. This is because these fields are more popular, and attract more students, and through the process, more revenue. Students find these courses easy to get into unlike medicine, pharmacy, and engineering just to name a few. These programs generate revenue to the university which help in solving some of the underfunding problems.

**Endowment funds and donations.** Many universities have established endowment funds where rich citizens assist in the development of quality education (Akinyemi, 2012). Prominent citizens donate money and infrastructure assets, in their honor.

**Grants.** Many federal universities receive foreign grants in form of aids to support academic programs and staff development from agencies such as John D. and Catherine T. MacArthur Foundation; Ford Foundation, World Health Organization (WHO); Carnegie foundations (Akinyemi, 2012). For example, between 2000 to 2010, the MacArthur Foundation supported four universities in Nigeria namely University of Ibadan, Ibadan, Ahmadu Bello University, Zaria, University of Port Harcourt, Port-Harcourt, and Bayero University, Kano in staff development, and ICT infrastructure (Ogbogu, 2011). The MacArthur Foundation, since its inception in 1989 has awarded more than $91 million in grants to different institutions and courses in Nigeria (Bamiro, 2012). Federal universities compete with other state, and private
Universities for these funds. Universities supported by the MacArthur Foundation have established University Advancement Centers, through which they have been exposed to professional fund raising. The Carnegie Foundation has also given substantial financial support to Ahmadu Bello University, Obafemi Awolowo University and University of Jos.

**Private contributors.** Big firms, and investors such as Julius Berger, Chevron, etc. contribute towards the infrastructure of Nigerian universities. They do this through free will donations to these universities. Some of the donations are done annually while some are one time donation. Organizations such as Rotary Club and Lions Club also donate buildings, books and money to Nigerian universities (Akinyemi, 2012). The Petroleum Technology Development Fund (PTDF) in 1973 established professional chairs in six universities, namely ABU, University of Ibadan, University of Port-Harcourt, University of Nigeria, Nsukka, Uthman Dan Fodio University, Sokoto, and University of Maiduguri, to undertake research relevant to capacity building in the oil and gas industry. The institutions where PTDF was established have benefitted from annual allocations ranging from 14 million naira to 20 million naira per institution per year to support the professional chairs (Bamiro & Adedeji, 2010).

**Tertiary Education Trust Fund (ETF).** The fund was established by the Education Tax Decree of 1993, in response to the recommendations of policy making groups which identified that the private sector must share in the burden of financing higher education since it is the primary beneficiary. The decree requires private sector to pay two percent of their profits to education Trust Fund, which is disbursed among education institutions in Nigeria (Akinyemi, 2012). The purpose of introducing ETF was to fund educational projects, and University management, with the goal of improving the quality of education in Nigeria (Agunbaide, 2006). Resources collected through these funds are disbursed to federal and state tertiary institutions for
the provision and maintenance of essential physical infrastructure for teaching and learning, institutional material and equipment, research and publication and academic staff, training and development (Omopupa & Abdulraheem, 2013).

The effectiveness of ETFs and TET funds was discussed in a study by Omopupa & Abdulraheem (2013). They explained that government instituted Educational Trust Fund (ETF) and Tertiary Education Trust Fund (TET Fund) created high expectation that the resource shortfall in universities would be addressed; however due to misplaced priorities in University administration, the effect on institutions was not significant. Yet, the authors pointed that without ETF intervention in Nigeria, the higher education system would have been in serious problems.

**Commercial ventures.** Nigerian universities are now exploring commercial ventures such as built up shops for rent, gas stations, cybercafés, hotels, transportation companies, bookstores, and supermarkets to generate additional funds (Akinyemi, 2012). Each federal University in Nigeria realizes funds from different ventures ranging between 4.7 million naira and 82.9 million naira annually (Ogbogu, 2011). University of Ibadan which is the oldest Nigerian federal University was the first to develop insights into commercial ventures, and the money collected from these ventures are used for University expansion and improvement of staff working conditions. Ofoegbu1 & Along, 2016 in their study on Internally Generated Revenue (IGR) and effectiveness of University administration identified that commercial ventures were among the main sources of IGR. In their study, they stated that proceeds from IGR were used for services including staff welfare, maintenance of facilities and beautification of the University premises. According to Idialu & Idialu, (2012) underfunding of universities is the most significant reason for lack of maintenance of existing infrastructure and improving the quality of education in Nigerian universities.
**Alumni relations and associations.** Alumni relations are maintained through a database through which universities keep in touch with its alumni. This has resulted in a sense of belonging in the alumni, and has increased alumni representation in University’s events (Okojie, 2010). Alumni from public universities in Nigeria have demonstrated keen interest in providing for the needs of their alma mater. Through alumni support, universities have provided for projects such as construction of modern toilets on campus; provision of seating on campus for relaxation; and construction of lecture halls (Akinyemi, 2012).

**Endowment, gifts, and donations.** Universities engage in different forms of endowment such as professional chairs, scholarships for students, donations towards programs of interest to the donors (Bamiro, 2012).

**Research consulting.** Nigerian universities provide research consulting services to big organizations in the form of medium and small scale researches, collaborative research and development, providing the needed technological know-how to industries, capacity building services, organizing workshops, seminars and in-service training for government workers, and workers of private organizations; and management development services (Akinyemi, 2012).

**Manufacturing and processing.** Some universities in Nigeria engage in food processing; developing useable products from in-house research, and fabricating tools during the idle time for foundries to generate revenue (Okojie, 2010).

**Summary**

In a study by Kalama, Etebu, Martha, & John (2012) it was established that spending on recurrent expenditure such as the legislator salaries, and servicing domestic debts have contributed to the neglect of the higher education and other critical sectors of the economy. On
the other hand, studies document that Nigeria is currently experiencing increase in student enrollment without corresponding increase in funding because fund allocation does not match up with the enrolment increase (Udoh, 2008). Funding that is not commensurate with the increased enrollment has a negative impact on the quality of education because universities are always being shut down by various staff unions demanding various financial needs such as staff welfare, teaching facilities, laboratories, utilities, staff and student accommodations and library resources (Omopupa & Abdulraheem, 2013).

**Research Questions**

This study will examine the following central research question: What are the organizational and systemic factors in the Nigerian federal University system that impact funding management by University administrators?

Four sub questions will be explored as part of answering the central research question.

1. What role do University administrators play in resource acquisition?

2. How does the external environment affect University resource acquisition?

3. What are the alterative revenue generators explored by University administrators to overcome underfunding?

4. What is the experience of University administrators in a Nigerian federal University as they contend with the impact of underfunding by the Federal Government?
Significance of the Study

Researchers at the World Bank (1999) have noted, “Higher education is fundamental to the construction of a knowledge economy and society in all nations” (p. 1). The authors also contended that the financial problems interfere with the potential of Nigeria’s higher education system to participate in the global knowledge economy. In Nigeria, universities provide education and the high-level technical skills required to create the workforce needed for socioeconomic and sociopolitical development (Ekundayo & Ajayi, 2009; Ibukun, 1997; Odekunle, 2001). Adequate funding is crucial for universities to accomplish this goal. Considering the importance of University education, Ajayi and Ekundayo (2007) argued that funding higher education should not only be considered an expense, but also a long-term investment to benefit society by lowering unemployment and crime rates, and improving health. Erhagbe (2014) reported that the financial challenge facing university education in Nigeria is gross underfunding which is linked to reliance on the government for funds by university administrators. Similarly, in her study on Nigerian universities Shuara (2010) stated that due to underfunding, there is academic staff shortages across the board in Nigerian universities especially in critical areas of science and technology. She further stated that over 60 percent of academic staff in the Nigerian university system is in the category of lecturer 1 and below. These shortages are compounded by brain drain which affects the quality of teaching and learning.

Although there is some research on the underfunding of Nigerian universities (Udoh, 2008; Faniran & Akintayo, 2012), no research can be located on the impact of underfunding on administration of Nigerian federal universities. No research has examined how administrators cope with underfunding decisions and can keep the institution functioning.
This study is important because it could encourage Nigerian policy makers to reevaluate the funding pattern of federal universities, based on the input of administrators interviewed for this study. Findings from this study may serve as a guide to policy makers in formulating policies related to funding higher education. Adequate funding of universities would help university administrators, and educational planners, which in turn, could promote job satisfaction among administrators. Recommendations from this research could lead to providing working conditions conducive to a satisfying working environment, including work incentives, study leave, and allowances, as well as easy access to professional training for improving the commitment of their staff to providing quality education.

This study is significant because it will produce practical insights that will help ABU to determine its funding priorities in the context of external environmental factors such as competing organizations, alternate funding sources, and determine its perceived impact on University administration. The findings of this study may help both, the Federal Government of Nigeria, and ABU administrators to address the issue of underfunding. In this way, this research serves as a way that the researcher can give back to her homeland.

**Theoretical Framework**

This study explored the problem of underfunding in Nigerian federal universities, its effect on the university central administration, and its relationship with external actors. To understand underfunding, and its effects on University administration, resource dependency theory is presented as a framework. Resource dependency theory (RDT) is one of the most influential organizational theories that addresses strategic management, and deals with the
connection between environment, organization and organizational decisions or actions (Pfeffer & Salancik, 2003).

First articulated in Pfeffer and Salanick’s (1978) book, *The External Control of Organizations*, this theory states that dependence on critical and important resources influences the actions and decisions of organizations (Hillman, Withers, & Collins, 2009). The main tenets of the theory are that organizations depend on resources; these resources originate in the organization’s environment. The theory assumes that there are other organizations in the larger environment, and these organizations compete for the same resources. The organizations that control resources exert power in the environment. These resources are often expressed in terms of budgets and resource allocations (Mudambi & Navarra, 2004; Pfeffer & Moore, 1980). Organizations that exert power, i.e. control resources and organizations that depend on them are directly connected. Organizations that compete for resources, depend on each other.

Resource dependency theory associates power with management for coping and solving critical problems of any organization or institution that arise from its environment (Pfeffer & Salancik, 1977). Powers (2000) referred to resource dependency theory as “environmentally driven aspects of organizations,” (p. 6). An organization’s success depends on its ability to compete with its environment and those that fail to solve their critical problems or compete successfully, either fully cease to exist or function at sub optimal levels, not accomplishing their goals. This assertion is applicable to this dissertation because universities compete for resources and those that develop creative ideas to seek for resources gain flexibility in administering programs than those that depend on one source of funding.

Resource dependency theory is a current theoretical paradigm, and has been developed further by scholars to continue its use in literature (Casciaro & Piskorski, 2005; Davis & Cobb, 2010). This theory was tested by Vos and Schiele (2014) on five specific elements of theory development criteria namely, units, laws, boundaries, system status and why. The results confirmed that RDT contains all requirements related to conceptual theory development and it can be considered as an organizational theory possessing the minimum requirements for empirical testing and predicting. General empirical findings suggest the relevance of RDT for today’s research. It has been used to describe managerial activities and organizational behavior (Sheppard, 1995); in describing actions of organizations, striving to overcome dependencies and improve an organizational autonomy and legitimacy (Sharif & Yeoh, 2014), and organization actions to reduce uncertainty by acquiring resources from external resource providers in the environment (Delke, 2015).
A few criticisms of RDT have been voiced in the literature. Most criticisms originate from the view that the boundaries of RDT are not empirically testable (Mudambi & Pedersen, 2007), while others find it impossible to test all hypotheses from the theory (Nienhuser, 2008). In fact, Davis & Cobb, (2010), state that there is almost no empirical examination available. With such limitations, the theory has found much acceptance, but less examination, thus reducing it to a metaphorical statement about organizations (Pfeffer & Salancik, 2003).

In his study, Nienhuser (2008) reviewed Clegg & Rura-Polley (1998) who criticized resource dependency theory for being too narrow on the concept of power over controlling objective resources. Nienhuser (2008) agreed partly with the criticism stating that if RDT is interpreted solely as a materialistic or objective way, it will limit the understanding of the process of power. Further, Nienhuser (2008) stated that while the proposition of resource dependency may be empirically tested, the information content in the theory was low. For example, Pfeffer & Salanik (1977) state that changes in the amount or distribution of critical resources within the environment should lead to changes in the distribution of power, or may be actors are so powerful beyond their pure control of resources that they are able to withstand the changes. They did not state under which condition the changes can lead to the above scenario.

In literature, there is a widespread acceptance and agreement among researchers on the major tenets of resource dependency theory, while there are a few researchers, as the literature review has shown, who find the RDT amiss by not yielding testable hypothesis. However, the review of literature has shown that scholars agree with the basic premise of the theory (Davis & Cobb, 2010).
Resource dependency theory provides the framework on how University action can reduce uncertainty of inadequate funding, and provide more resources for effective management (Handfield, 1993). The theory can prove as a guide for administrators for managing the forces of external organizations. Some of the organizational assumptions of RDT are present in mainstream literature on organizational behavior (Drees & Heugens, 2013). The basic assumption commonly used in literature is that administrators try to ensure their University survival. Resource dependency theory has helped in explaining behaviors of the universities (Hillman, Withers, & Collins, 2009).

**Internal and External Resources and the Environment**

An important part in any organization’s strategic plan is to consider its environment and resources. Fehnel (2000), conducted a study on the Nigerian federal universities, and proposed that the best way for Nigerian universities to plan strategically would be to analyze their environment in an open, honest manner. Environment was defined by Fehnel (2000) as “the range of organizations that look to higher education to produce inputs (people and ideas) they need to carry out their mission. This includes the organization and sectors of society that universities look to for their inputs-resources-and with whom they compete for these resources” (p.2). The environment also includes ways in which organizations interact and provides incentives, or constraints to their pursuit of resources.

The key for any University to survive is being able to acquire, and maintain resources (Pfeffer & Salancik, 1978). Universities interact with each other in the environment and manager’s actions are based on their perceptions and interpretation of the environment. Overall organizational constraints govern the actions, rather than manager’s individual perceptions (Nienhuser, 2008).
According to AbouAssi (2013), organizational behaviors and decisions are rooted in the surrounding environment. This builds upon Powers’ (2000) assertion that “goals are not the driving force behind what organizations do” (p. 6); rather organizations change their goals to meet available resources. Both these observations are central to the resource dependency theory, and shape the administrators’ actions. For example, Salanick and Pfeffer (1978) showed that only 10 percent of an institution’s performance is determined by internal factors, where 90 percent is determined by external factors. Pfeffer and Salanick (1978) explained that in resource dependency theory, organizational behavior reflects the management of the organization’s dependence on external resources, and the ensuing demands of donors who control those resources. Federal universities in Nigeria are faced with the challenge of how to create commitment to observe, analyze, and understand the environmental forces, and to act in response to them. Adeniyi (2008) reported that there is a general reduction in efficiency and productivity of Nigerian universities because of inadequate funding.

Resource dependency theory states that an organization can manipulate its environment by addressing resource criticality through increasing output production with available input, identifying and increasing alternative input suitable for the existing output, and altering the output where possible (Cho & Gillespie, 2006; Pfeffer & Salanick, 1978). This strategy helps protect the core of the organization, as efficiency is key when controlling the resources needed in the production process (Thompson, 1967). The theory explains the important role other organizations play in what institutions do, and how institutions must depend heavily on other organizations for resources they do not have. As Powers (2000) noted, “Because organizations cannot generate all their needed resources, they must depend on their environment (other organizations) for resources” (p. 6).
Resource dependency theory asserts that an institution’s leaders are very important in the decision-making process regarding resource acquisition, and in determining responses to the environmental pressures. According to Davis and Cobb (2010), “The motivation of those running the organization is to ensure the organization’s survival and to enhance their own autonomy, while also maintaining stability in the organization’s exchange relations” (p. 5). Hillman, Nicholson, and Shropshire (2008) noted that administrators should have multiple identities of resource provision to understand when they will provide advice and counsel or use their external connections. Cho and Gillespie (2006) explain that availability of alternative sources increases an organization’s power and autonomy by decreasing its dependence upon other organizations.

Resource dependency theory suggests that units of an organization are valuable in dealing with problems from the environment. Units that control resources manages the relationships between firms and its environment to achieve power within the organization (Mudambi & Pedersen, 2007). The units represent University departments. Departments are very important in the universities because heads of departments control the resources allocated to their own unit, and manages the relationships between University, their RDT helps to understand the relationships between departments and central administration such as the bursary office, registrar’s office, vice chancellor’s office and the governing council. Fehnel (2000) proposed that proper strategic planning provides University stakeholders and managers with a clear picture of how a dynamic external environment shapes important University decisions, and how the external environment conditions the resources that the University might employ to execute its decisions. Fehnel (2000) noted that Nigerian federal universities are competing with newly emerged private and corporate universities with high talent training programs and resources. In
Nigeria, public universities continue to operate as they possess a national monopoly on higher education whereas majority of the private universities are supported with foreign financial support, and engage in new operating practices. Faced with this situation, Nigerian federal universities are forced to search for alternate funding sources so that they can integrate similar innovations in higher education. They are doing this by creating new programs, such as summer programs, online degrees, and satellite campuses to make University education less expensive and generate revenue. However, for some universities, following on Fehnel’s recommendation may be a difficult task, due to an organizational culture that excludes meaningful interaction with the environment. Fehnel (2000) reported that Nigerian federal universities do not include administrators in the strategic planning process.

The central question of this dissertation explored how administrators deal with the underfunding of university operations, and the role of external environment. The emphasis was on identifying the coping mechanisms of University administrators. This group of stakeholders were identified by Fehnel as the group that is often left out of the strategic planning process of the University, yet the University depends on these actors for the daily operations.

Resource dependency theory provided a framework to examine how ABU adjusted its mix of output (courses offered), with the available resources (government funding and alternative funding) to meet new environmental demands.

**Conclusion**

The issue of underfunding of Nigerian federal universities has led to nonpayment of staff salaries, lack of human resources and staff development, classroom and laboratory equipment, security, library facilities, quality of teaching and research. More federal universities are being
established without commensurate funding while existing ones are facing funding, accreditation and staff welfare problems. This study explored the problem of underfunding in Nigerian federal universities, and its effect on the university administration and its relationship with external actors. To study the effects of underfunding, this research study adopted an exploratory case study design and explored the central research issue in the context of Ahmadu Bello University Zaria (ABU). Chapter Two provides a literature review concerning Nigerian university funding issues. The methodology of the research and analysis of data are addressed in Chapter Three. Presentation of findings are discussed in Chapter Four, which includes: governance and organizational structure; financial profile, funding process; themes from the data analysis; the effects of underfunding on the University as an organization, students and staff; linkages with the external environmental factors and administrators’ recommendations. Conclusions and recommendations originating from the analysis, are detailed in Chapter Five, which includes the overview of the study; summary of findings; discussion of findings; limitations; implications for practice; recommendations for further studies and conclusion.
Chapter Two: Literature Review

This chapter presents literature on the higher education system in Nigeria. To provide the context to the problem of university underfunding in Nigeria, this review of literature included research on the history of university education system, and the funding process. Through this review, the researcher also proposed a potential formula for better university funding based on Resource Dependence Theory frameworks first established in Pfeffer and Salanick’s work (1978). The literature reviewed for this study includes peer-reviewed journal articles published within the last five years obtained from the Northeastern University Education Research Complete and Social Sciences Premium Database.

Higher Education in Nigeria

Nigerian National Education Policy (2004) noted that higher education in Nigeria is responsible for providing the labor and skills needed for the country’s socioeconomic development. According to a document published by the Federal Ministry of Education, (Brubacher, 2003), “the main purpose of establishing universities is to promote quality of life; improve the mind through intellectual inquiry; and generate, store, and transmit specialized knowledge, sophisticated expertise, and strong leadership” (p.10). In another opinion expressed by Fafunwa, (1995), “Nigerian education is important for the needs and aspirations of the child, the community, and the nation, and should be tailored toward the rediscovery of Nigerians’ cultural heritage” (p. 4). This could be accomplished through good leadership. According to Udey, Ebuara, Ekpoh, and Edet (2009), articulated benefits for higher education could also be accomplished through a) proper implementation of higher educational policy; b) supervision of educational activities; c) use of adequate technology, funding and prompt remuneration of staff;
and d) discipline, dedication and determination to improving the falling standard of education as to reinventing the Nigeria universities dream and the challenge of leadership. (p.3)

The Nigerian higher education system consists of universities, polytechnics, colleges of technology, and colleges of education affiliated with four-year graduate degree universities and other professional, specialized institutions. There are three levels of university education in Nigeria. Level 1 is comprised of a four-year, or six-year Bachelor’s degree program (the six-year program is for medicine). Level 2 includes Master’s degrees, which takes one or two years, and Level 3 includes doctoral degrees, which take two to three years after the completion of a Master’s degree. These levels are offered by both federal, state and privately owned universities in Nigeria irrespective of whether it is first, second or third generation. University education funding in Nigeria started since 1948 when the University College Ibadan (UCI) was established based on the Elliot commission’s recommendation in Nigeria. University of Ibadan was affiliated with the University of London, it was accorded university status in 1962 and named as University of Ibadan (UI) (Ukeje, 2002). Five more first generation universities were established between the years 1960 to 1970, namely University of Nigeria, Nsuka in 1960, Ahmadu Bello University, Zaria in 1962, University of Ife (now OAU) in 1962 and University of Benin, Benin-city in 1970. The fifth one which was University of Lagos was established in the year 1962 by the Federal Government of Nigeria (Fafunwa, 1974). All these five Universities plus University of Ibadan made six Universities in Nigeria as of the year 1975 and are regarded as the first-generation Universities, each of them have been funded by the Federal and Regional governments.

Ukeje (2002) informs that in Ahmadu Bello University from 1962 to 1975, there was no substantive difference each year between the amount requested by the University, and the
amount received from the Northern Regional Government. He further stated that there were some years in which the amount received was more than the amount requested for. Federal Government of Nigeria established seven more universities in 1975 to make it a total of 13 federal universities which started the problem of university underfunding in Nigeria (Onyeonoru, 2007). Similarly, Ukeje (2002) stated that after the 1975-1976 academic session at ABU, Zaria, a 20 percent shortfall in the budget amount was observed.

Due to an increasing demand for university education in Nigeria, the Federal Government established nine more universities between 1980 and 1990, and five additional universities between 1991 and 2009 (Shina, 2012). As these universities are established without commensurate funding, underfunding problems started get worse in the universities.

In the early 1960s, after gaining independence from Britain, the first-generation universities established were relatively small, generously funded, and equipped to a very high standard by the government of Nigeria and some international agencies (Muhammad, 2010). Nigerian higher education then was managed by many agencies including Federal, State, and local governments; missionaries; local communities; and individual private proprietors and sponsors (Ifedili, & Ojogwu, 2007). Little to no formal, uniform, or centralized control of the funding system was in place (Fafunwa, 1974). According to Dike (2006), Nigerian universities in the 1960s were better administered and discipline was better enforced; as a result, the quality of education was very high and the certificates students received were equivalent to those in the developed world. Between 1948 and 1988, the quality of the Nation’s university education was good. However, the University system “derailed because of myriads of problems, prominent ones being inadequate financing and erosion of University autonomy” (Oni, 2012, p. 170). In the 1970s, the Federal Government took control over education to establish a centralized, planned,
and well-organized system of education that would provide uniform standards, reward teachers equally, help in the direction of course content, enhance the process, and increase the high-quality output of the Nigerian education system (Ifedili & Ojogwu, 2007). However, in the late 1980s, Nigerian higher education grew neglected compromising the quality of graduates and affecting every part of society, and the NUC has yet to meet these goals. During the military regime, in 1970s funding for higher education was given a very low priority in Nigeria (Onwunli & Agho, 2004). The two Nigerian Military regimes started from year 1966 to 1979 and, again from year 1983 to 1998.

When the democratic Federal Government came into power in 1999, Nigerian leaders decided to tackle the issue of higher education (Saint, Hartnett, & Strassner, 2003). Their accomplishments included: the establishment of institutional audits of all universities and associated parastatal bodies, revocation of the vice-chancellors’ former privilege of selecting 10 percent of each year’s student intake, reconstitution of all university governing councils with broader representation, licensing of seven private universities, exemption of university staff from public service salary scales and regulations, and a 180 percent increase in funding of the University system (Saint, Hartnett, & Strassner, 2003). In addition to these achievements, the Federal Ministry of Education announced a new government policy on autonomy for universities on July 21, 2000 (Saint, Hartnett, & Strassner, 2003). This policy gave the University Council full responsibility for institutional governance, including the appointment of senior officers; restored grant funding to universities; reduced the powers of the NUC; vested university senates with the authority to decide on curricula; returned to the universities the right to set admissions criteria and select students; and laid the groundwork for new minimum academic standards (Saint, Hartnett, & Strassner, 2003). Although the Federal Ministry of Education is responsible
for Nigerian higher education, the Joint Admissions and Matriculation Board administers a national university entrance examination and informs universities of applicants’ scores.

A World Bank (1999) report stated that the economic and social development of any country depends on the advancement and application of acquired knowledge. However, higher education systems in developing countries are often disrupted by the inefficient management of finances and other resources (Saint, Hartnett, & Strassner, 2003). A report by World Bank (2010), stated that this problem is more acute in Africa, than in the rest of the world. According to Ifedili and Ojogwu (2007), “Nigerian education policy formulation and implementation is vulnerable to governmental control, propaganda, political pressure, and public opinion” (p. 13). According to Ifedili and Ojogwu (2007), the budgetary allocation to education has consistently remained low and many educated Nigerians are worried about the future of the country’s educational system. Similarly, Adegbite (2007) documented inadequate funding as the primary challenge facing the management of Nigerian universities in general, and federal universities particularly. Dike (2006) explained that the six-month ASUU nation-wide strike in 2003 was a result of the Nigerian Federal Government’s failure to maintain its yearly contract with the University instructors. The strike caused many experienced Nigerian university instructors to flee overseas to obtain better work conditions.

Nigeria, a developing country, has a population of 170 million people, and is the most populous country in Africa, with 20 percent of the continent’s population. However, due to the poor funding of its tertiary educational system, Nigeria is lagging many other countries at the same level of development, in terms of the amount of people engaged in research and development (World Bank, 2002). With only 15 scientists and engineers engaged in research and development per one million persons, its scholarly activities fall behind countries such as
Ghana, Egypt, Libya, Brazil, China, India, and the United States (World Bank 2002). Comparatively, the World Bank report (2002) puts the figures of the following nations at 168 for Brazil, 459 for China, 158 for India, and 4,103 for the United States. Such figures confirm that Nigeria is facing a critical situation regarding its higher education that requires urgent attention.

Dike (2006) explicitly linked the quality of education in Nigeria to the quality of its leadership and the pace of its social and economic development of that country. He stated, “The culture of corruption has prevented Nigeria from providing good quality education to the youth to prepare them for the challenges of the 21st century economy” (p. 1).

There is some literature on the role of university administrators in Nigerian federal universities. The literature reports that administrators view the NUC’s supervisory role as encroaching on their financial, academic, and administrative sectors.

Okoroma (2007) noted,

The supervisory role of the NUC in the area of funding, ensuring minimum academic standards, and less political interference in the appointments of vice-chancellors and governing councils has been abused by NUC staff resulting in the delay of fund allocations and misappropriation. (p. 35)

The research has concluded that there is no accountability for the spending of public funds, and the government’s response to university needs is slow. In this context, there are two sets of actors who demonstrate a lack of trust in their interactions. On one hand is the federal universities, which are controlled by government, and are slow in responding to University needs, especially funding. While, university administrators on the other hand, do not appreciate any monitoring
from NUC and shun interference from external forces or government control (Divala & Waghid, 2008).

**Nigerian Education Policy**

The National Policy on Education in Nigeria includes a philosophy of education as well as the aims and objectives of the National Educational System. The education policy is designed to reflect the United Nations’ 1948 Charter on Education, which stated that everybody has the right to free and compulsory education at the primary school level; higher education should be available to all based on merit and affordability; and parents have the right to choose the type of schools their children will attend (Ifedili & Ojogwu, 2007). Even though this policy has undergone many changes, it has not been able to overcome the obstacles in achieving the outcomes, including poor policy implementation, inadequate funding, political instability, corruption, and dishonesty among institutional management (Ifedili & Ojogwu, 2007). A report by UNESCO (2010), based on documents from the Central Bank of Nigeria (2012), shows that the highest annual budget allocation to the education sector was 17.59 percent and this was in 1997. Every other allocation made to the sector from 1960 to 2013 had been below 14 percent. This implies that on the average Nigeria spent 5.7 percent yearly from 1960 to 2013 on education which is grossly below the benchmark of 26 percent of the annual budgetary allocation to education.

Nigerian policymakers instituted the quota system, to enforce equal tribal participation and equitable distribution of positions in higher education institutions. The quota system was set up with the intention of addressing the differences in socio-economic development of different parts of Nigeria. However, the quota system has led to discrimination against merit and the promotion of mediocrity, while suppressing excellence and diligence in the appointments and
promotions of personnel in public institutions (Ifedili & Ojogwu, 2007). While Diso and Njoku (2007) have argued that the current crises in Nigeria’s university education system are a result of inconsistent educational policies through frequent changes and poor implementation, and in many cases non-implementation of national educational policies.

In his study, Iwhiwhu (2005) reported that there are no record management programs or policies in the Nigerian university system to govern (for example, University records manual, records retention, or disposition schedule). There is also a lack of trained staff to manage records. Such records would assist university administration in solving potential financial problems and aid the decision-making process.

Muhammad (2012) proposed that the NUC should adhere strictly to existing financial policies, rules, and regulations; and ensure good management and accountability with university administrators concerning funds allocated to their institutions. He further argued that university education reform committees should consist of educational experts, academics, and other stakeholders in the diaspora to bring university education in Nigeria to life. Ifedili and Ojogwu (2007) reported that not all major stakeholders in education were involved in drawing up educational policies. The authors recommended that all stakeholders in education be part of educational policy formulation (Ifedili & Ojogwu, 2007).

**Higher Education Funding in Nigeria**

Research conducted by the National University Commission (NUC), the premier higher education policy making arm of the government, indicated that Nigerian universities were low in the world ranking of universities in all areas—especially in research—due to inadequate funding,
lack of equipment, and lack of time due to overloaded teaching and administration schedules (Makunjuola, 2008).

Nigerian federal universities are funded by the Federal Government; State universities are funded by State governments. Shuara (2010) identified three categories of funding sources for Nigerian public universities: the primary source of funding for universities is the government. The second category of funding is secured through internally generated revenue (fees, and other sundry charges). These are largely under-reported by universities. The third identifiable source of funding are donations, & endowments. This type of funding is not very significant due to the economic down turn experienced by the country.

Private universities are funded by individuals and organizations. There are more public than private universities in Nigeria. All government-funded higher education institutions in Nigeria, whether state or federal, are considered public universities, while the rest are private universities. Public university education in Nigeria is funded by grants provided from both Federal and State governments, as well as small contributions from students in the form of fees and levies (Ayo-Sobowale & Akinyemi, 2011).

The funding, supervision, and allocation of resources in public universities are controlled by the NUC. The policy of the Nigerian Federal Government is not to charge tuition in federal universities, while state governments charge tuition and room and board. Although tuition is free in federal universities, the Federal Government, through the NUC, has mandated that all federal universities must generate 10 percent of their total yearly funds internally through fund-raising programs (Odebiyi & Aina, 1999). As such, all federal universities receive 95 percent of their funding from the Federal Government through the NUC, and universities must adhere to the
NUC’s budgeting and expenditure formula of 60 percent for total academic expenditure, 39 percent for administrative budgets, and one percent for pensions and benefits (Hartnett, 2000).

In the examination of sources of funding in Nigerian federal universities, Ogunlade (1989) reported four main funding streams; (a) support from Federal and State governments (98 percent of recurrent costs and 100 percent of capital costs), (b) student contributions towards living expenses on campuses (less than one percent of total costs), (c) private contributions (i.e., grants) by commercial organizations, and (d) interest earnings on short-term bank deposits and University rental properties (p. 523). Esenwa, (2011) reported that funding formula for allocating funds to Nigerian universities has been reviewed based on several factors such as year of establishment, number of degree students admitted, number of academic and non-academic staff, and ratio of science and humanities based disciplines. Due to these factors, the funding formula keeps on changing. Since the year 1974, the funding formula for Nigeria Universities has been revisited twice, in years 1982 and 1989.

Nigerian public universities have adopted several cost-sharing measures, such as student contributions, private sector contributions, and student loans (Ajayi & Alani, 1996). Student contributions involve fees for tuition, acceptance, registration and certification, caution or security deposits, sports, identity cards, late registration, examinations, transcripts, and use of the laboratory and medical center. These fees vary in amount, depending on the University (Ajayi & Alani, 1996) and are less than one percent of the total operating cost of the University (Ogunlade, 1989). Private sector contributions come from endowment of prizes, professional and academic chairs, and voluntary donations.

Underfunding of Nigerian federal universities has adversely affected the quality of teaching and research in Nigeria (Faniran & Akintayo, 2012). Many of the pedagogical practices
and curricula in Nigerian universities do not meet academic standards and are outdated due to a lack of funding (Ikoya & Onoyase, 2008). Olayiwola (2012) noted that research funds are irregular, inadequate, and difficult to access. This has contributed to a decline in research activities as a means of attaining sustainable development in Nigeria.

Nigerian government, through the NUC, has requested all federal universities to explore ways of generating revenues internally to enable University managements solve some of their financial problems, instead of relying on the government. Nigerian federal universities are required to generate minimum of 10 percent of their total annual sources from IGR (Okojie, 2009).

A recent study by Omopupa and Abdulraheem (2013) on Nigerian universities established that misplaced and misapplication of necessary fund allocated to the University is a problem. For example, funds allocated to universities are hardly accessible to library staff to attend refresher training and workshops (Omopupa & Abdulraheem, 2013). Funds allocated to University libraries for development purposes are sometimes diverted to non-library purposes; as a result, the staff does not have any opportunity for skill development. Most importantly, there is minimal or no access to online information and knowledge tools, such as the integration of modern information and communication technology system (ICTS) in academic and research activities (Ani & Edem, 2010). Limitations in accessing ICT tools may adversely impact higher education outcomes.

In Nigeria, universities are responsible for preparing a budget that reflects the projected income and expenses to meet its goals. In a study by Bamiro (2012), it was reported that often universities do not prepare appropriate budgets due to unpredictability in handling finances at the
institutional level, beyond the regular payment of salaries and wages. Bamiro (2012) documented that between 2005 and 2008, Federal Government started “envelope” system of fund allocation, which does not take the institution’s projected budget into account, and therefore universities have stopped engaging in a detailed process for preparing budgets (p.14).

According to Dike (2006), funding for the Nigerian higher education sector is not commensurate with the demand for higher education, and the percentage of the federal budget allocated to education has decreased. For example, it was 7.2 percent in 1995 and only 4.5 percent in 2004. Dike (2006) further highlighted that the portion of Nigeria’s gross national product allotted to education is troubling when compared to less affluent African nations. For example, Côte d’Ivoire allocates 5 percent of its gross national product to education and Kenya allocates 6.5 percent, compared to Nigeria’s 0.76 percent allocation. Dike (2006) linked the acute shortage of qualified teachers and the falling standards of University education to the lack of teaching tools, and poor remuneration, as well as the government’s inability to show how University funds are being managed. Dike (2006) described this lack of government supervision as “corruption and mismanagement of funds” (p. 2). The author also noted that inadequate University funding has resulted in cheating during examinations, which has led to the production of low-standard graduates, unemployment, and poverty in Nigeria.

According to Ajayi and Haastrup (2006), the Nigerian government considers funds allocated to higher education an ordinary expense rather than a long-term investment useful for society. Ebuara, Udida, Ekpiken, & Bassey (2009) noted that Nigerian universities have lagged for years in contributing to the economic development of the nation in the areas of teaching, research, capacity building, and community service due to the dynamics of leadership and the political and economic environment of the institution.
Odia and Omofonmwan (2007) documented that in 1998, the United Nations Education, Scientific, and Cultural Organization (UNESCO) recommended that 26 percent of a nation’s total budget be allocated to education. Ajayi and Ekundayo (2007) reported that the Nigerian government has not been keeping up with UNESCO’s recommendation and, for this reason the Nigerian government is the major contributing factor to the problem of underfunded universities. The budgetary allocation to education in Nigeria has never exceeded 10 percent (Odia & Omofonmwan, 2007).

Underfunding of Higher Education Quality in Nigeria

Nigerian universities have lagged for years in contributing to the economic development of the nation in the areas of teaching, research, capacity building, and community service due to the dynamics of leadership and the political and economic environment of the institution (Ebuara, Udida, Ekpiken, and Bassey, 2009). Inadequate funding is a major factor that affects the quality of higher education in Nigeria (Ekpo, 2002; Arikewuyo, 2010; Ayo-Sobowale & Akinyemi, 2011). Federal universities in Nigeria lack the financial resources to maintain quality education with recent increases in student enrollment (Babalola, 2002; Samuel, 2003). Okojie (2010) reported that student enrollment has increased from 104 in 1948 to 40,000 in 1976 to over 950,000 in 2010. When universities are inadequately funded in any country, the institution’s foundation is financially weak, and students’ educational foundation is intellectually weak (Nwangwu, 2005). Nigerian universities produce poor quality graduates because of poor physical facilities (Ajayi & Ekundayo, 2008).

Per Chikwem (2006), many reputable corporations in Nigeria such as Shell, Mobil, Chevron, and Texaco prefer to hire from elsewhere in the world, due to a lack of trust and confidence in Nigerian higher education system. Chikwem (2006) reported that companies pay
expatriates more than they pay Nigerian graduates, and justify this by claiming that they spend more money training Nigerian graduates on things they should have learned in school. Chikwem (2006) also explained that poor University funding in Nigeria impacts students’ general performance because students often go to school hungry, have no clean water to drink, and live in poor sanitary conditions. A presidential panel looked into the operations of all federal universities between 1999 and 2003 and reported that the academic and physical facilities at the universities were in deplorable state with insufficient lecture theatres/halls, textbooks and other teaching resources, and technological equipment (National Universities Commission, 2006). Students had no option but to learn in dilapidated buildings and environments that is not conducive to learning.

Dike (2006) further noted that Nigerian universities are offering programs but do not have the resources to run them effectively. For example, universities in Nigeria award degrees in medicine and engineering without equipped libraries and laboratories. Ayo-Sobowale and Akinyemi (2011) argued that globalization has made it more difficult for leaders in the Nigerian University system to compromise the quality of education given to the students and get away with the adverse consequences. Low-quality education will prevent Nigerian graduates from competing effectively in the global economy, especially given the increased integration of economies through trade, financial flows, the exchange of technology and information, and the movement of people. Okoroma (2007) noted that higher education in Nigeria is under severe pressure and stress due to the lack of trained administrators and instructors, facilities, and equipment. Ololube, Eke, Uzorka, Ekpenyong, and Nte (2009) noted that there is a significant relationship between the impact of instructional technology, the use of instructional technology, and students’ academic achievement. The authors contended that the education system’s
shortcomings are a result of a lack of information; a lack of communication, technological, and instructional materials; ineffective policy implementation; and a lack of other resources (e.g., infrastructure) that support teaching and learning. Ofulue (2011) noted that technological issues are a big problem facing higher education in Nigeria. Such issues include low internet connectivity, unreliable bandwidth infrastructures, and a lack of reliable electricity.

In their discussion of internal and external factors that affect the quality of Nigerian University education, Ayo-Sobowale and Akinyemi (2011) listed internal factors as lack of employee motivation, poor remuneration, poor accountability for educational performance, and management incompetency. The external factors included underfunding, teacher shortages, corruption, and embezzlement. Adeyemi and Osunde (2005) established that economic conditions have forced government leaders to ask University leaders to seek additional funding for the degree programs offered by their institutions.

In a study of the funding of Nigerian university education, Onuka (2004) included various stakeholders in the education sector, which included parents, university management, administrators, students, academic staff, taxpayers, and company executives. The main findings indicate that as the funding is insufficient, the burden of funding universities is borne by the government and parents. However, as the study reported, most of these parents live below the poverty line, and struggle to pay any money towards student fees. The study also showed that corporate bodies are more interested in funding sports and other shows that attract high publicity (e.g., gambling), and suggested that corporate leaders in Nigeria should invest in education funding to ensure the continuous production of quality graduates for hire. Ezekwesili (2006) explained that the underfunding is a recurring theme because fund allocation to the education
sector does not meet sectorial and sub sectorial needs. This means that fund allocation to the education sector is never enough.

The Nigerian government, in an effort to address the problem of underfunding experienced by universities, has made a series of policy changes including: (a) reconstituting all university councils to incorporate broader stakeholder representation, (b) according greater autonomy to university councils and managers in an effort to promote institutional responsiveness, and (c) adopting a formula-based block grant resource allocation procedure that facilitates strategic planning and rewards institutional performance (Saint, Hartnett, & Strassner, 2003). The Government also established reference points for quality improvements and began to develop academic benchmarks based on demonstrated student competencies (Saint, Hartnett, & Strassner, 2003). Despite these efforts by the Government, little attention has been given to institutional operations such as funding graduate and research output, detaching annual budget reviews from University management performance, the quality of academic outputs and research contributions, and the Government’s budget review of the overall education sector (Saint, Hartnett, & Strassner, 2003). Saint, Hartnett, and Strassner (2004) argued it was unlikely that the NUC could provide national leadership to develop a vision for the future of the system, or play a useful role in anticipating and analyzing important issues of higher education policy. Saint, Hartnett, and Strassner (2004) argued that the Federal Ministry of Education and senior university officers need to develop a political will and broad-based leadership for the reform package to be successful.

**Annual Expenditure on Education**

From research that has examined the outlay on higher education, it can be concluded that the Nigerian government allocated less than 10 percent of its annual budget to education, despite
UNESCO’s recommendation that nations spend 25 percent on education (Fagbamiye, 2003; Arikewuyo, 2010). Between years 1987 and 1997, the government’s average expenditure on education was 5.1 percent of the annual budget or 1.1 percent of the country’s gross domestic product (Ibukun, 2004). Since the adoption of democracy in 1999, funding of education decreased from 11.12 to 1.8 percent in 2003 (Arikewuyo, 2004). This is less than other comparable African countries. For example, on average Ghana spends 3.6 percent of its annual budget on education, Kenya spends 6.2 percent, and Zimbabwe spends 9.5 percent (UNESCO, 2000). Table 2 details the data from UNESCO’s (2000) report (as cited in Fagbamiye, 2003). In 2001, the government of Nigeria and the ASUU, in accordance with UNESCO’s guidelines, promised to allocate a minimum of 26 percent of their annual budgets to education. However, the government did not deliver on its plan (Arikewuyo, 2010). As long as the government continues to be the major source of funding for these universities, funding issues will continue. This is especially true due to the rapid increase of new universities, which further reduce the government’s capacity to fund existing universities (Olorunsola, 2000).

There has been a rapid increase in the number of Nigerian higher education institutions and student enrollment since 1960 (Faniran & Akintayo, 2012). Between 1990 and 1997, the value of government allocations for higher education declined by 27 percent, even with a 79 percent increase in student enrollment (Saint, Hartnett, & Strassner, 2003). Adeyemi and Ajayi (2006) established that some of the inadequate funding is caused by student wastage due to spillover, which is usually high because some students cannot graduate in their scheduled graduation year due to strikes and, therefore, take additional time to repeat classes they did not perform well in which uses extra public funds. Nigerian universities have an irregular academic calendar due to the different crises in the University system (Ajayi & Ekundayo, 2008). For
example, the four-month ASUU strike in 2013, which asked for curriculum support, equipment, and facilities, shows how inadequate funding is impacting Nigerian universities (Ayo-Sobowale & Akinyemi, 2011). Adeyemi and Ajayi (2006) further documented that this spillover is caused by an unstable school calendar, poor funding, and poor working conditions for instructors that lead to poor working attitudes.

Table 2
*Comparison of Gross Domestic Product and Annual Education Budget in African Countries*

<table>
<thead>
<tr>
<th>Country</th>
<th>Gross domestic product (%)</th>
<th>Annual budget on education (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesotho</td>
<td>13.20</td>
<td>25.5</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>10.12</td>
<td>17.6</td>
</tr>
<tr>
<td>South Africa</td>
<td>6.00</td>
<td>24.0</td>
</tr>
<tr>
<td>Namibia</td>
<td>9.10</td>
<td>22.5</td>
</tr>
<tr>
<td>Nigeria</td>
<td>5.31</td>
<td>9.9</td>
</tr>
</tbody>
</table>


When government funding for universities becomes insufficient, universities seek alternative funding sources to supplement their budgets to maintain institutional performance in teaching and research (Hartnett, 2000). The funding secured by alternative sources, may contribute an average of 15 percent of University revenues in Nigeria though it differs from one institution to another, with some universities reporting a low of four percent and a high of 37 percent (Hartnett, 2000). Although the Nigerian government encourages universities to seek
alternative funding, universities may have reached their maximum capacity to generate revenue in this way (Hartnett, 2000). Ebuara, Udida, Ekpiken, and Bassey (2009) state that policymakers overestimate government capacity to fund such University expansions, which results in “inefficiency, ineffectiveness, and poor quality of education and calls for a total overhaul and restructuring of the universities to improve their standard and performance” (p.7).

Bamiro (2012) also presented the Federal Government allocation to federal higher education institutions in Nigerian from 2006-2008 based on personnel cost, goods, non-personnel services, and capital projects, for 25 federal universities, 21 federal polytechnics, and 21 federal colleges of education during the period. The total allocation to these schools during the period was 392.9 billion naira. Of this amount, 68.1 percent was allocated to all the federal universities; 18.9 percent to federal polytechnics; and 13.0 percent to federal colleges of education. He further stated that 84.7 percent of the allocation to these institutions went to personnel cost; while goods and services was 4.6 percent and Capital Projects 10.7 percent.

Table 3

*Allocation to select federal universities, colleges, and polytechnics*

<table>
<thead>
<tr>
<th>Year</th>
<th>Federal Universities</th>
<th>Federal Polytechnics</th>
<th>Federal Colleges of Education</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>70,600,358,870</td>
<td>19,443,972,823</td>
<td>11,401,898,534</td>
<td>101,446,230,227</td>
</tr>
<tr>
<td>2008</td>
<td>86,078,825,055</td>
<td>22,024,993,58</td>
<td>14,088,802,102</td>
<td>122,192,620,215</td>
</tr>
</tbody>
</table>

*Note: Adapted from “Sustainable financing of higher education in Nigeria: Funding models” by O.A. Bamiro, 2012. Evaluation Research, 1(5), 63-71.*
Table 3 shows three years’ allocation from the Federal Government of Nigeria to three different federal higher education institutions in Nigeria. The table also shows that the allocation slightly increased every year for the three different types of federal higher education institutions stated above. Table 4 presents Federal Government allocation to federal universities from year 1990 through 2008, as published by Bamiro (2012). It shows the budgeted amount, the appropriation amount, and the actual amount released. In addition, this table also shows that the budgeted amount was never met in all the years represented on the table and the appropriation amount is in many instances less than the amount released. The data from 2005 to 2008 the budget was not available.
### Table 4

Federal Government allocation to federal universities 1990-2008

<table>
<thead>
<tr>
<th>Year</th>
<th>Budget (Naira Million)</th>
<th>Appropriation (Naira, Million)</th>
<th>Released (Naira, million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>1,216.6</td>
<td>748.3</td>
<td>734.8</td>
</tr>
<tr>
<td>1991</td>
<td>1,453.3</td>
<td>779.3</td>
<td>783.8</td>
</tr>
<tr>
<td>1992</td>
<td>3,663.2</td>
<td>2,989.0</td>
<td>2,985.2</td>
</tr>
<tr>
<td>1993</td>
<td>5,075.9</td>
<td>4,532.2</td>
<td>3,801.5</td>
</tr>
<tr>
<td>1994</td>
<td>7,342.9</td>
<td>5,469.3</td>
<td>4,370.9</td>
</tr>
<tr>
<td>1995</td>
<td>11,328.5</td>
<td>6,392.6</td>
<td>6,056.8</td>
</tr>
<tr>
<td>1996</td>
<td>12,442.7</td>
<td>7,535.6</td>
<td>7,535.6</td>
</tr>
<tr>
<td>1997</td>
<td>15,820.2</td>
<td>7,059.2</td>
<td>5,348.2</td>
</tr>
<tr>
<td>1998</td>
<td>22,767.5</td>
<td>8,196.5</td>
<td>9,798.4</td>
</tr>
<tr>
<td>1999</td>
<td>40,884.1</td>
<td>10,507.4</td>
<td>11,831.9</td>
</tr>
<tr>
<td>2000</td>
<td>65,580.0</td>
<td>33,788.9</td>
<td>30,143.0</td>
</tr>
<tr>
<td>2001</td>
<td>68,911.8</td>
<td>31,844.3</td>
<td>32,646.4</td>
</tr>
<tr>
<td>2002</td>
<td>62,155.5</td>
<td>33,778.5</td>
<td>30,351.5</td>
</tr>
<tr>
<td>2003</td>
<td>78,762.1</td>
<td>34,411.3</td>
<td>34,203.1</td>
</tr>
<tr>
<td>2004</td>
<td>216,622.7</td>
<td>53,024.6</td>
<td>53,466.3</td>
</tr>
<tr>
<td>2005</td>
<td>—</td>
<td>62,215.6</td>
<td>58,276.0</td>
</tr>
<tr>
<td>2006</td>
<td>—</td>
<td>82,376.7</td>
<td>82,376.7</td>
</tr>
<tr>
<td>2007</td>
<td>—</td>
<td>90,565.30</td>
<td>90,565.3</td>
</tr>
<tr>
<td>2008</td>
<td>—</td>
<td>105,751.7</td>
<td>105,751.7</td>
</tr>
</tbody>
</table>

*Note. Adapted from “Sustainable financing of higher education in Nigeria: Funding models” by O.A. Bamiro, 2012.*

*Evaluation Research, 1(5), 63-71.*

Figure 2 presents the annual appropriated funds, and released funds by appropriated funds for each year. Please note that the budgeted amount for years 2005-2008 is not available. Bamiro (2012) reported that from year 2005 to 2008, the Federal Government of Nigeria applied the “Envelope” system of fund allocation, which is a system of allocation that does not account for the universities’ actual budget. This led the federal institutions to stop bothering about preparing proper budget (p. 14). He also noted that the government because of several protests by the staff unions for increased funding have been increasing the fund steadily but it is still not enough. The 2012 budget allocation to education sector was 400.15 billion naira, which is 8.43 percent of the total budget despite the increase. Out of this allocation, security took 308 billion
out of the total allocation to education in 2012. This shows that there are security issues in Nigeria.

**Higher Education Leadership and Decision-making in Nigeria**

There are two levels of leadership in Nigerian universities: internal and external (Ajayi & Ekundayo, 2008). Internal leadership is comprised of University administrators, while the external level is the Federal Government (i.e., the NUC), who have the responsibility to coordinate University leadership in Nigeria. At the helm of external leadership is the President of Nigeria for federal universities, and state governors for state universities. These individuals usually visit institutions during commencements to seize the opportunity to interact with the academic community, and to address any outstanding academic issues (Adegbite, 2007). The university chancellor is the head of the institution, and is responsible for presiding at all meetings held for awarding degrees during commencement. According to Muhammad (2012), the internal management of each university is represented by an organogram.

At the top of the leadership structure of Nigerian universities is the Governing Council, which is led by the chairman/prochancellor, whose administrative responsibilities include goal setting, policy formulation, staff development, general discipline, budget approval, and liaison activities with the government (Ajayi & Ekundayo, 2007). The Senate regulates internal academic activities following the guidelines established by the NUC, with the university vice-chancellor as the head and the registrar as the secretary (Ibukun, 1997). Nigerian university leadership makes use of a committee system for such areas as finance, general purpose, development, appointment and promotions, admissions, academic planning, deans, and research grants. These committees are responsible to the Council or the Senate (Mgbekem, 2004).
The University Council is the highest policymaking body in the Nigerian university system (Faniran & Akintayo, 2012). It is charged with the responsibilities of the governing council, and has general control over the policy and management of the university, with directives from the government and minister of education. The decisions made by the university council affects the entire university. The governing council is important for the efficient functioning of the system (Faniran & Akintayo, 2012). Next in the hierarchy of the university structure is university management, which includes the vice-chancellor, deputy vice chancellor, registrar, bursar, and librarian (Faniran & Akintayo, 2012). This team is led by the vice-chancellor, who is responsible for the daily administration of each university. The vice-chancellor is also the university’s chief executive, its academic and administrative head, a member of the governing council, and the chair of the university senate. The vice chancellor is expected to demonstrate excellent leadership qualities required from a chief executive, and to take advice in the efficient running of the university. Everyone in the management team has a specific responsibility that helps to facilitate the performance of the vice-chancellor as the chief executive. It is the responsibility of all individuals in management positions in the university, including the vice-chancellor, to understand that teamwork is important for effective leadership (Faniran & Akintayo, 2012).

Research studies a lack of application of professional management techniques and training in university management. Management information systems vary widely in their use, and their development is also limited. Strategic planning is also in its infancy, institutional communications with internal and external audiences are weakly developed, and management innovation does not seem to be a conscious pursuit (Saint, Hartnett, & Strassner, 2003). Another problem affecting underfunding in Nigerian universities is corruption, and the misappropriation
of funds by officials. In the study by Chikwem (2006) it was reported that some vice-chancellors, state governors, and top government officials have secured loans from the International Monetary Fund, and have used the funds for private use rather than the intended University projects.

**The Creation of the National Universities Commission**

The National Universities Commission (NUC) was created in 1962, and reconstituted in 1974 to govern the University grants commission, advise the government on policy issues, define norms for quality assurance, channel block grants from government to the universities, and ensure the system is properly developed and coordinated (Saint, Hartnett, & Strassner, 2003). Since that time, the NUC has grown to become involved in all spheres of University endeavors. The NUC micromanages institutions’ finances using predetermined expenditure guidelines, and participates in the selection of institutional leadership and members of the governing councils. The NUC also provides approvals for all University course offerings, and oversees the physical development of each institution and the negotiation of staff salaries (Saint, Hartnett, & Strassner, 2003). Additional responsibilities of NUC include: proper course accreditation, approval of courses and programs, maintenance of minimum academic standards (Ibukun, 1997), monitoring of universities, promulgating guidelines for setting up new universities, monitoring private universities, providing sanctions, and preventing the establishment of unapproved or substandard University campuses (Okojie, 2007). One of the main functions of NUC is to review the parameters for allocating funds to universities based on federally-approved policies (Esenwa, 2011).

In 2001, the NUC began promoting professional institutional management by encouraging strategic planning, organizing annual two-week management training workshops for
senior administrators, and establishing a uniform accounting code for the University system. However, increases in efficient and responsiveness within management have been slow (Saint, Hartnett, & Strassner, 2003).

**Political Interference in University Leadership in Nigeria**

University management in Nigeria faces another challenge in the political interference exerted by external actors (Ajayi & Ekundayo, 2007). Political interventions from several military governments imposed constraints on the higher education system’s development (Saint, Hartnett, & Strassner, 2003). By the 1980s, Nigeria had established a high standard of higher education system and was globally recognized for research in tropical health and agriculture. However, this reputation diminished in the latter part of the 1980s and early 1990s due to changes in the military government and increased government interference in university affairs, including the direct appointment of vice-chancellors and military sole administrators. The government’s removal of university autonomy led to the disappearance of incentives and rewards for research productivity, teaching excellence, and associated innovation, which resulted in a decrease in research output, educational quality, and the rigid management structure (Saint, Hartnett, & Strassner, 2003). Political interference has also been linked to other problems in the management of Nigerian universities, including: (a) the continuous rise in the cost of University education (Ajayi & Ayodele, 2002), (b) increased social demand for admission (Saint, Hartnett, & Strassner, 2003), and (c) examination malpractice (Odia & Omofonmwan, 2007).

Udey, Ebuara, Ekpoh, and Edet, (2009) state that “University administrators of today are facing political pressures as many universities in Nigeria started on the platform of politics” (p. 5). Due to pressures from politicians, many university leaders admit students into universities without increased resources to meet students’ needs. According to Udey, Ebuara, Ekpoh, and
Edet (2009), “The most formidable task confronting Nigerian university governance is to articulate the triple relationship between the mission of the universities and the specific needs of the University’s political, social, economic, and cultural environment” (p. 6). Nigerian university administrators believe the university system cannot function without government assistance and, often, the vision of these leaders is limited to their pecuniary interests. These university leaders are simply unable to regulate their academic activities to enhance service delivery (Udey, Ebuara, Ekpoh, & Edet, 2009). University administrators may also believe they have no authority or democratic control over their university administration. They may be too sensitive to criticism, which may affect their ability to face challenges in the education system in an effective and efficient manner, and lead them to lack the vision to successfully manage the university (Udey, Ebuara, Ekpoh, & Edet, 2009).

Additional problems in the implementation of educational policies in Nigeria are the lack of political will, lack of continuity of programs, and corruption (Okoroma, 2006). Onwunli and Agho (2004) contended that academic staff believes that their participation in nonacademic matters is limited, as the academic decisions concerning admissions criteria and accreditation standards are made by external bodies. Onwunli and Agho (2004) also explained that university administrators make decisions with very little input from academic staff, and indicated the need for improving the consultation process including increased involvement of academic staff in governance decisions (e.g., the selection and appointment of administrators, including the vice-chancellors).

Some authors trace the failure of Nigerian University mandate to provide quality education to the absence of leaders who promote new directions, direct the affairs of the University system effectively, and make good strategic decisions (Nwagwu, 2006).
Motivation of Educators

According to Dike (2006), the Nigerian government must motivate educators by increasing their level of “psychological satisfaction” (p. 2), which will inspire them to work harder and encourage more people to enter the teaching profession. Nigerian universities need adequate funding from the government to rehabilitate their facilities and attract more qualified professionals (Ochuba, 2001). Facilities and equipment in universities should be sufficient to care for the increasing number of students admitted every year and give university leaders the opportunity and motivation to perform their duties effectively. Adequate funding of the universities will motivate university leaders to consider curriculum reform in content and methodology to focus on inquiry, discovery and experimentation instead of rote learning (Ajayi & Ayodele, 2004).

Conclusion

The literature review has shown that Nigerian universities face many problems due to underfunding which affects their ability to produce quality education. These problems include inadequate financial support, poor educational infrastructure, brain drain, and a lack of autonomy within University administration. Although related studies exist on the underfunding of Nigerian universities in general, none of the studies reviewed is about Nigerian federal University underfunding, and its impact on the administration and relationship with external actors. This review has provided the evolution of Nigerian higher education systems and the various sets of actors which impact the functioning of the University. In the next chapter, a detailed research design is presented which was used for this study.
Chapter Three: Research Design

A research design is the “logic that links data to be collected (and the conclusions to be drawn) to the initial questions of the study” (Yin, 2009, p. 24). Whereas a quantitative method helps researchers to measure a phenomenon, a qualitative approach helps to understand it (Patton, 1990). Most qualitative research questions are “how” or “what” questions geared toward complex processes, exploration, and discovery (Meister, 2010). The qualitative method provides the flexibility needed to make changes, and necessary adjustments during the research and interviews. A qualitative method of inquiry is natural and does not require operational variables and hypotheses prior to conducting the interview or finalizing the instruments (Patton, 1990). Schram (2006) described qualitative research as “contested work in progress” (p. 15), and the qualitative predisposition as “embracing complexity, uncovering and challenging taken-for-granted assumptions” (p. 7) and being “comfortable with uncertainty” (p. 6).

Qualitative Research Approach

In social research, three prominent paradigms are used to examine any issue, they include: positivist, constructivist and critical theory. While the positivist paradigm is exclusively based on empirical data and estimation, constructivist and critical theory studies rely on a mix of qualitative and quantitative data. In this research, a constructivist interpretivist paradigm was adopted, which is a predominant paradigm of social research that delves into exploring social phenomenon from the viewpoint of the respondent (Creswell, 2003, p.8). The paradigm traces its roots to the philosophy that supports phenomenological inquiry and hermeneutics (McKenzie & Knipe, 2006). As an educational researcher, this researcher subscribes to the constructivist paradigm because reality is socially constructed and emerges from people’s social practices (Mertens, 2005). Researchers in constructivist paradigm rely on qualitative information, which is
collected through field work and by direct interaction with the participants; which gives the participants a chance to create the truth that is reported by the study. In some cases, researchers operating in this paradigm may rely on supplementary quantitative information, which results in a mixed methods research design. Common qualitative designs include case study, phenomenology, ethnography, narrative, and mixed-methods designs (Mack, et al, 2005). A case study design is similar to the other research methods in the constructivist paradigm (McKenzie & Knipe, 2006), such as phenomenology and ethnography. The difference between ethnography and case study is that latter relies solely on interviews and deals with lived experiences. An ethnographic approach is also like a case study, but focuses on everyday life and relies on participant observation as well as interviewing for data collection (Moustaka, 1994).

A case study is a qualitative research approach that focuses on a single person, or entity using an extensive variety of data. Yin (2003) explained that, “A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident” (p. 13). Researchers have used case study approach in different disciplines including education, social sciences, policy, and public administration. Merriam (1998) stated that case study design is useful to study educational innovations, evaluate programs, and inform policy. Stake (1995) expressed the belief that constructivism and existentialism should be the epistemologies that orient and inform the qualitative case study.

Case studies help to describe real-life context in a causal chain, illustrate specific constructs, and illuminate a situation when outcomes are not clear (Yin, 2009). Yin viewed a case study researcher is like a historian who interprets history and builds a logical argument around an explanation, as opposed to a chronicler of history, who describes only the facts (2009).
A case study approach is not focused on generalizing conclusions, but in constructing an account of events, or a story. The story is often full of rich narrative detail, and may offer insights about complex processes, which may not be possible with the simplistic rating scales used in a large survey. In this research a case study research design is adopted to explore the issue of underfunding of Nigerian higher education institutions.

Yin and Stake are well-known case study methodologists and have provided guidelines for conducting a case study research (Creswell, Hanson, Plano, and Morales, 2007). In a review of Yin and Stake’s advocated method of conducting a case study, Yazan (2015) detailed that Yin’s perspective of case study centers on “social sciences as a legitimate methodology to conduct inquiries into a theoretical proposition” (p.136). While Stake described a case study as a “naturalistic, holistic, ethnographic, phenomenological, and biographic research method” (Stake, 1995, p.x1). Yin proposed that a case study researcher should “maximize four conditions related to design quality: construct validity, internal validity, external validity, and reliability. How investigators deal with these aspects of quality control “is very important in a case study research (Yin, 2002, p.19). On the other hand, Stake suggested that “how case study researchers should contribute to reader experience depends on their notions of knowledge and reality” (Stake, 1995, p. 100). Stake expressed the belief that constructivism and existentialism should be the epistemologies that orient and inform the qualitative case study.

Similar to Yin, Stake also identified four characteristics of qualitative research which are applicable for case study method namely: “holistic”, “empirical” “interpretive”, and “emphatic.” Holistic means that researchers should consider the interrelationship between the phenomenon and its contexts which is like Yin’s definition of case; empirical means that researchers base the study on their observations in the field; Interpretive means that researchers rest upon their
intuition and see research basically as a researcher-subject interaction; and lastly empathic means that researchers reflect the experiences of the subjects in an emic perspective (Yazan, 2015).

Per Stake “most contemporary qualitative researchers hold that knowledge is constructed rather than discovered” and views qualitative case study researchers as interpreters and gatherers of information, which requires them to report the knowledge they gather through investigation (Stake, 1995, p.99). This study embraced the instrumentality of the sets of strategies, guidelines, and tools suggested by Yin. Stake’s constructivist idea was also used in this study. Guidelines and criteria articulated by Yin and Stake’s were assets to conceptualizing, designing and conducting a “disciplined inquiry” (Shulman, 1988).

**Exploratory Case Study**

According to Yin (1984), as cited by Zainal (2007), there are three types of case study designs namely: exploratory, descriptive and explanatory case studies. Descriptive and explanatory case studies are focused on either describing or explaining the phenomenon being researched. Exploratory case study is only concerned with uncovering the various components of a social phenomenon being examined.

This study made use of exploratory case study because the intention was to delve into the phenomenon of how University officials deal with the chronic underfunding of Nigerian federal universities. According to Yin (1984), as cited in Zainal (2007) “exploratory case studies …explore any phenomenon in the data which serves as a point of interest to the researcher,” (p. 3). The point of interest to the researcher was chronic underfunding of Ahmadu Bello University Zaria, which is the second largest university in Africa, and the largest university in Nigeria. The approach of exploratory case study helped the researcher to improve knowledge and
understanding of how University administrators are coping with the underfunding problem, and explore the institutional factors that compound the problem of underfunding.

The use of qualitative research, stemming from the constructivist paradigm shaped the type of research design and data collection tools used in this study. Typically, the constructivist paradigm relies on qualitative data, and does accommodate the analysis of quantitative data as part of a mixed methods research design. In this dissertation, a case study research design was implemented which included the following data collection instruments. The case study data was collected by 1) identifying and reviewing of publicly available documents pertaining to the funding of Federal universities in general, and ABU in particular; 2) Interviews were conducted with ten administrators from ABU, and finally 3) researcher took notes during the interviews which were used for analysis.

Exploratory case study, using semi structured interviews, involves the respondents in a discussion of the problem being explored, rather than requiring a mere yes or no answer; this allows for a personalized and valid response, which can be analyzed across cases to yield insights, and draw inferences. In keeping with the research design of exploratory case study, the interview questions articulated for this study were exploratory in nature, with appropriate probes used by the researcher to collect required and complete information. Open ended interview questions, granted flexibility to the respondents to offer their opinions without any restrictions, which yielded valid information for the study. Probing questions allowed the researcher to steer respondent so that the interviews retain the context of the study, and the responses would be relevant to the interview questions. Open-ended questions yielded a lot of qualitative data, which allowed the researcher to gather a lot of relevant information, from a small pool of respondents who were administrators at ABU.
Being open ended, the interview questions offered participants the freedom to discuss issues not included in the interview guide, and to add information as they deemed necessary. The questions in the interview guide were used as lead questions, to get the respondents talking on relevant issues. The researcher asked probing questions, during the interview which yielded a better, richer data, and steered the conversation, rather than a strict format that allows for no digressions (Patton, 2005; Denzin & Lincoln, 2008). After the interviews, the researcher directed follow up questions to participants for clarification, which gave the participants the opportunity to expand on their previous answers. This was done by the researcher to ensure that accurate information is analyzed, and also use this opportunity for member checking, which is a validity enhancing measure in qualitative methodology.

Participants

This research was a case study of Ahmadu Bello University (ABU), a Nigerian federal university located in an urban area of Kaduna State, Nigeria. The central research question posed in this study was: What are the organizational and systemic factors in the Nigerian federal university system that impact funding management by university administrators? Accordingly, the case study sought to collect information from ABU administrators who were the main set of actors, of interest to this case study.

Sampling

A purposive sampling method was used for the recruitment of ten participants for this study. Purposeful sampling is commonly used in qualitative research and involves selecting research participants according to the needs of the study (Glaser & Strauss; Morse, 1991). Operating under purposive sampling, the researcher seeks participants who will provide a richness of information that is suitable for detailed research (Patton, 1980). This means less
emphasis is placed on generalizing from sample to population, and greater attention is paid to a sample “purposively” selected to collect data from rich information sources (Patton, 2002, p. 40).

The following decision criteria was used for selecting participants in this study: Any university administrator with more than five years of administrative experience at ABU. This decision criteria enabled the selection of participants who would have, in their tenure of more than 5 years, accumulated experience and knowledge of how the institution works, and would be able to provide information on how the University is funded as well as the underfunding issues in the school. There is no exact way or “right answer” in determining sample size in qualitative research like the power calculation used to determine sample size in quantitative research.

According to Morse (2000) sample size depends on consideration of a number of factors including: the quality of data; scope of the study; nature of the topic; amount of useful information obtained from each participant; number of interviews per participant; use of shadowed data and the qualitative method and study design used. (p. 3)

The sample size for this study was based on the consideration outlined by Morse (2000), and a total of 10 interviews were deemed sufficient to provide a comprehensive account of the experiences of the number of administrators in the University. The study excluded students, and non-management staff in the University, as these populations may not know detailed information about underfunding and its impact on ABU administration. All participants were experienced administrators at ABU, and held a PhD degree.

The description of the participants in this study includes participant’s name, gender, educational background, years of experience in ABU, campus, religion, ethnicity, and the date of the interview. The participant’s years of experience working in ABU ranges from 15 to 35 years,
and participants are between the age of 54 and 70 years. Each participant was given a pseudonym to protect their identity and ensure confidentiality.

Participant 1: Mosi was a 60-year-old STEM classified administrator, in the Pharmacy Department. He was married with five children, and resided in a housing unit provided by the University, with his family. He had represented ABU at many seminars and conferences internationally, and had been on sabbatical in many countries where he was offered an opportunity to teach.

Participant 2: Nadira was a 62-year old administrator in the Veterinary Medicine Department. He was also residing in a University provided building with his family, which included his 4 children. In his career, he had attended several conferences overseas including United States and been on sabbatical in several countries where he got an opportunity to teach.

Participant 3: Keanjaho was a 70 year old male administrator in the Faculty of Education. He was married with two grown kids, young adults. He lived in a staff residence provided by ABU in Samaru area. Keanjaho received his PhD from ABU, and had worked in different administrative capacities in the University.

Participant 4: Adiya was a 66-year old female administrator in the Mathematics Department. She was married, and lived with her husband in a staff residence provided by ABU. Adiya had 27 years administrative experience with ABU.

Participant 5: Jafari was a 68-year old male administrator in the Faculty of Medicine, and received his PhD from ABU. He was married and did not live in the staff residence provided by ABU. Jafari had held different administrative positions in ABU.
Participant 6: Elewa was a 59-year old female academic administrator whose office was in the Senate Building of the University where all the decisions concerning the University are made. She is married with six children and lived with her family, in Zaria town outside the staff quarters.

Participant 7: Abdalla was a 66-year old male administrator in the Accounting and Budget Department who also received his PhD from Ahmadu Bello University. He was a native of Kaduna State and resided in Zaria town with his wife and children.

Participant 8: Hadiya was a 69-year old female administrator in the Pension Department. She has been with Ahmadu Bello University for 29 years. Hadiya was married with children and lived with her family at the Ahmadu Bello University staff quarters.

Participant 9: Habib was a 64-year old male administrator in the Liberal Arts Department. He received his PhD from Ahmadu Bello University. He was married with four grown up children and lived with his family at the University’s staff quarters. He had held different administrative positions such as dean, head of department at the University.

Participant 10: Lindana was a 69-year old male in the Engineering Department who had been an administrator with Ahmadu Bello University for 30 years. He received his PhD from Ahmadu Bello University and lived in the University staff quarters.
Table 5

Summary of participants interviewed

<table>
<thead>
<tr>
<th>Participant</th>
<th>Gender</th>
<th>Ethnicity/Language</th>
<th>Religion</th>
<th>Experience working in ABU</th>
<th>Campus</th>
<th>Education</th>
<th>Date Interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mosi</td>
<td>Male</td>
<td>Igbo</td>
<td>Christian</td>
<td>35</td>
<td>Samaru</td>
<td>PhD</td>
<td>05-16</td>
</tr>
<tr>
<td>Nadira</td>
<td>Female</td>
<td>Yoruba</td>
<td>Christian</td>
<td>28</td>
<td>Samaru</td>
<td>PhD</td>
<td>05-17</td>
</tr>
<tr>
<td>Keanjaho</td>
<td>Male</td>
<td>Yoruba</td>
<td>Moslem</td>
<td>32</td>
<td>Samaru</td>
<td>PhD</td>
<td>05-18</td>
</tr>
<tr>
<td>Adiya</td>
<td>Female</td>
<td>Igbo</td>
<td>Christian</td>
<td>27</td>
<td>Samaru</td>
<td>PhD</td>
<td>05-28</td>
</tr>
<tr>
<td>Jafari</td>
<td>Male</td>
<td>Housa</td>
<td>Moslem</td>
<td>25</td>
<td>Samaru</td>
<td>PhD</td>
<td>05-20</td>
</tr>
<tr>
<td>Elewa</td>
<td>Female</td>
<td>Igbo</td>
<td>Christian</td>
<td>18</td>
<td>Samaru</td>
<td>PhD</td>
<td>05-23</td>
</tr>
<tr>
<td>Abdalla</td>
<td>Male</td>
<td>Housa</td>
<td>Moslem</td>
<td>30</td>
<td>Samaru</td>
<td>PhD</td>
<td>05-24</td>
</tr>
<tr>
<td>Hadiya</td>
<td>Female</td>
<td>Housa</td>
<td>Moslem</td>
<td>29</td>
<td>Samaru</td>
<td>PhD</td>
<td>05-26</td>
</tr>
<tr>
<td>Habib</td>
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<td>Housa</td>
<td>Moslem</td>
<td>17</td>
<td>Samaru</td>
<td>PhD</td>
<td>05-27</td>
</tr>
<tr>
<td>Lindana</td>
<td>Male</td>
<td>Yoruba</td>
<td>Moslem</td>
<td>30</td>
<td>Samaru</td>
<td>PhD</td>
<td>05-28</td>
</tr>
</tbody>
</table>


**Procedures**

The central research question guiding this research was: What are the organizational and systemic factors in the Nigerian federal University system that impact funding management by University administrators? In relation to the above identified central question, the following sub questions were addressed through the case study methodology:

1. What role do University administrators play in resource acquisition?

2. How does the external environment affect University resource acquisition?
3. What are the alternative revenue generators explored by University administrators to overcome underfunding?

4. What is the experience of University administrators in a Nigerian federal university as they contend with the impact of underfunding by the Federal Government?

Questions one through three focused on the pathways of resource acquisition, whereas questions four was focused on gathering administrator experiences while dealing with underfunding. IRB approval for this study was obtained in January and February 2016. After the IRB approval, interview data was collected between March and December, 2016.

This exploratory case study research used three sources of data. This research relied on information collected through document review of publicly available budgetary and fiscal documents. Interviews with administrators at ABU were the second, and most important source of data in this study. The third source of data considered in the study was observation data gathered during the interviews. This data relates to researcher’s notes on participant reactions, and non-verbal language expressed by the participants during the interviews. In this section, a detailed step-by-step description of how data collection was conducted by the researcher is presented.

Documents. Before proceeding to the interviews, the researcher collected all publicly available documents concerning the funding of Nigerian federal universities, which included ABU. The motivation for collecting information on all federal universities was to construct a financial profile of ABU in comparison with other federal universities in the country. As this research adopted a resource dependency theoretical framework, the researcher needed to not only consider the financial flows received by the universities, but also the number and type of
competing organizations (federal universities) who could be seeking to increase their share of federally allocated funding.

Financial information for all 40 federal universities in Nigeria were examined for the past 10 years. This allowed the researcher to assess how ABU fared in comparison with other universities. It also allowed the researcher to identify the universities who are direct competitors of the funding received by ABU. The criteria chosen for identifying which universities could be competing for the same resources included: the size of the budget, the number of enrolled students and the percentage share of ETD, TET in the budget. As a result of applying this decision criteria, the researcher was able to identify four federal universities, as direct resource competitors. These were University of Nigeria Nsukka, University of Ife, University of Lagos, and University of Ibadan, and all publicly available funding information for those five institutions was collected. The researcher collected information from the government ministries that are responsible for setting higher education policy in Nigeria, and accessed documents which prescribe funding levels. The researcher searched for audit documents for the universities but was not able to access any document publicly.

**Interview Data.** To help create a healthy relationship with the participants, the researcher sent an introductory letter to the vice-chancellor of ABU stating the research intentions, and institutional benefits for the University through participating in this research. This built trust in the data collection phase with the participants and provided them a description of how they could benefit from the results of the study. The interview plan and protocol was made available before time to enable participants to know what to expect, minimize risk, and help participants feel comfortable to answer questions. Participants received small gifts as a thank you for their time such as key chains, pens, and watches.
Recruitment and Access

For participant recruitment and access for the interviews, the researcher used Stake’s process in terms of data gathering procedures, and borrowed Yin’s principle to concentrate on the link between data collection and the research questions and theoretical propositions presented at the beginning of this study. This approach promoted data validation and holistic coherence of the inquiry (Yazan, 2015). The researcher was assisted by one “gate-keeper” in coordinating the interviews with the participants and distributing the free give away (gifts).

Yin (2009) recommended that the researcher find the right contacts to get a foothold in the case organization, and suggested having more than one contact person in the organization when conducting qualitative research. The introductory letter to the vice-chancellor with explanation of the study to be conducted included a request for at least two contact persons and their phone numbers or email address for follow up. An introductory letter to ABU’s vice-chancellor, clearly stated the study’s intent, specified the target population, and indicated the help needed to set up the interviews. The letter was followed up with a phone call to discuss the research, and ask for help with the coordination of the interview process. Selected interviewees were contacted via e-mail and by phone. A copy of the interview protocol was sent to participants via e-mail, and a consent form was given to participants prior to the interview. The researcher obtained IRB approval for the consent form and interview protocol. Please refer to Appendix B for the consent letter, Appendix C for the introductory letter, and Appendix D for the letter to the participants. Each participant signed the consent form. The identities of the participants have been kept confidential to maintain the validity of the data, which is a vital part of ethical consideration (Denzin & Lincoln, 2000). Walford (1994), termed researching up to
indicate, researching the leadership in education policy. This study followed a research up approach, because only administrators, and those in key management positions were interviewed.

The collection of interview data was preceded by a pilot study to test the designed interview protocol. The pilot study was conducted with five administrators who met the participant selection criteria of the study. After conducting the pilot interviews, the researcher evaluated the information, and it was decided that no changes to the interview protocol was required. The interviews yielded a good description of the underfunding at ABU. For the remaining five interviews that were conducted for the study, the researcher tried to schedule the interview at the school sites, in the participant’s office, however this was not possible for three participants, who agreed to be interviewed over the phone. Although ABU has three campuses, participants were included from all three campuses because funding decisions are made centralized—at the Main campus in Samaru—and affect all three campuses equally. The interview was conducted during two weeks from May 16 to 28th, 2016. Each interview lasted approximately an hour. Case study participants included administrators from various disciplines within the University. For comparison, administrators from STEM and non-STEM disciplines in the University were included in the study. This differentiation enabled the researcher to uncover and compare strategies that administrators from different disciplines use to overcome the limitations posed by underfunding. A total of 10 interviews, including five pilot interviews were conducted for this study following a semi structured interview protocol. The interview protocol was designed based on the research questions explored in the study.

**Description of Collected Data**

This study used multiple data sources (Yin, 2003). This allowed the study to create and maintain validity and reliability of the conclusions drawn from the study. A case study approach
necessitates that researchers use more than one form of data collection, which helps reduce the risk of error from one method alone (Merriam, 1998). The different sources of data included interviews, observations, and document review of publications by NUC, Federal Ministry of Education (FME), and previous studies published on ABU. Various sources of data allowed the researcher to answer the research questions. Each of the data sources, along with its strengths and weaknesses is discussed in the following paragraphs.

**Documents.** Details of allocations made to Nigerian federal universities is found in the Federal Government of Nigeria annual budget for all ministries, departments, and agencies. This annual budget was one of the main documents analyzed in this study. In this research study, annual allocations from 2006 till 2016 were included in the document review. Other documents included in the study were, NUC report on the performance of Federal University System as cited in Saint, Hartnett, & Strassner (2004). Also, reports on grants made to the universities, and local income reported by universities were reviewed.

Documents on the funding analysis of ABU and the rest of the federal universities in Nigeria for the past 10 years was reviewed to see the trend. The researcher chose five federal universities that are at par with ABU in the country in terms of student enrollment and annual operational budget, and reviewed the funding documents. The researcher also visited NUC office to get the funding mandate documents, and documents from the Federal Ministry of Education and Office of Statistics. Related existing research documents, Budget and allocation documents at ABU, and ABU financial reports were used. ABU’s past budgets were reviewed which included the budgeted amount, and the amount released by the government. The items covered in the budgets included the costs, personnel, overheads, capital and pensions.
One of the advantages of document review is that it helped the researcher to obtain a large sample size of information at once. The funding information retrieved from the documents helped in the data analysis. A drawback of document review is that it is time consuming.

**Observations.** The researcher observed participants during interviews and prepared notes on how the participants conducted themselves. The most important advantage of this method of data is that it allows the researcher to identify the information that is not easily accessible; for example, the informal rules of the organization, culture and power dynamics. These observations helped the researcher to uncover that some of the participants were not comfortable answering some questions. For example, most participants were uncomfortable while answering the question about the role they play in securing funds for their department. One of the drawbacks of using this information is that it is highly subjective. It is possible for the interviewer to misconstrue something in the body language or information conversation as a source of data. The subjectivity of this source of data, is its biggest drawback, as the chances of error are very high.

**Interviews.** Interviews were conducted with 10 high level administrators at Ahmadu Bello University – Zaria (ABU). Each interviewee was an administration official within the University who had good knowledge about how University is funded and managed, along with their own unique perspective of the effects of underfunding.

These interview questions were divided into three parts, namely:

1. Role played by administrators to secure resources;
2. Role played by external environment;
3. Innovations in University administration.
Information received from interviews were per the interview protocol (Appendix A). The researcher conducted interviews both in person, at the institution’s site, and through the telephone. As mentioned earlier, the participants had an extensive knowledge of how the University functions due to having over 20 years of administrative experience in the University. The on-site interviews contributed depth and insight into the campus culture of the institution. Interview guide question were used as lead questions, to get the respondents talking on relevant issues. The researcher asked probing questions, during the interview which yielded a better, richer data, and steered the conversation, rather than a strict format that allows for no digressions. After the interviews, the researcher directed follow up questions to participants for clarification, which gave the participants the opportunity to expand on their previous answers. This was a form of member checking that was done by the researcher to build validity in the methodology.

This study made use of a case study database as suggested by Yin (2003) and this helped to keep research evidence for validity and reliability. The researcher and the transcriptionist were the only ones with access to the stored or taped information. Before and after transcription, the tapes were locked in a secured place. All telephone calls, e-mails, follow-up interviews, and notes from the interview remain confidential. All information collected during interviews was kept confidential, and stored on the qualitative software. After the dissertation is successfully completed, the tapes will be kept safe under lock and key, and used for potential data audit accompanying any future publications from this research. After a period of seven years, the data files will be destroyed. All telephone calls, e-mails, follow-up interviews, and notes from the interview will remain confidential.
Table 6 presents the data sources that were used for the case study. It lists data sources, types of document collected, and their source. It also discusses the strength and weakness of the data source and the content of information received.

Table 6

<table>
<thead>
<tr>
<th>Document sources: Strengths and weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sources of Data</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Interviews-Face to Face</td>
</tr>
<tr>
<td>Telephone interview</td>
</tr>
<tr>
<td>Observation</td>
</tr>
<tr>
<td>Document Review</td>
</tr>
</tbody>
</table>

*Note*. Sources of data. Dimunah, V., 2016.
This table shows types of data collected, sources of data, its description and limitations. The study relied on three sources of data which were used to construct the case study on underfunding experienced by federal universities in Nigeria.

**Positionality Statement**

I am a Christian Nigerian with Igbo ancestry. My family has had the greatest influence on my values for education. During my early years of schooling, I was driven and always wanted to learn more, work harder, and achieve a level of success greater than those around me. The drive to strive for more was instilled in me by my teachers’ and my father’s love for education. My father, His Royal Highness Eze B. E. Obi, the Igwe of Ubulu-ihejiofor in Imo State, Nigeria, has a great love for education and wanted all of his children to be well educated. He is a king, and accomplished a lot during his lifetime with his level of education. He was a proprietor of a large boarding high school and elementary school in my town. He was also elected to the Eastern House of Representatives on two consecutive terms representing Orlu Province, shortly after Nigerian independence was gained in 1960. While he was in the Eastern House of Representatives, my father set up a three-man committee that created Imo State in the Eastern Region in the 1960s. He was also an oil merchant and had an oil company (Depot) established for him by British engineers in Port Harcourt, Eastern Nigeria.

My father believed in women’s ability to achieve academic accomplishments. He taught us the value of hard work and perseverance. My father believed that education is a great equalizer and transformer, and can be achieved through hard work. Due to his love for education, my father took the responsibility of sponsoring many students from low-income families to go to school in Nigeria and overseas. My mother is a kind-hearted woman, whose
duty was to stay home and raise her children well. I repeat my father’s beliefs to my children today.

Education is crucial for a person’s cognitive and affective development. I believe that education gives people the knowledge and experience required to solve problems within everyday context, and for that purpose education should be adequately funded. Having good educators during the early years of schooling also helped me to succeed in school and have high aspirations. I would like to see federal universities in Nigeria, especially ABU, funded properly so students can receive the quality education they deserve to compete globally in increasingly complex and competitive environments.

I chose to conduct this research in response to the pressing situation concerning Nigerian University funding. I received my Bachelor’s degree from ABU and learned firsthand how underfunded the University is while I was a student there. For example, the only computers available then were for students majoring in computer science, and many books in the ABU library were outdated.

Therefore, my goals for entering the Doctor of Education program at Northeastern University are to become an effective higher education leader and administrator, and to lead staff to develop programs and curricula by advocating for the adequate funding of federal universities in Nigeria and encourage universities to look at their external environment to identify alternate funding sources, and strategies to win over their competing organizations. I also hope to assist in the assessment and development of acceptable school budgets. My dream is to become a member of local, regional, state, and federal education organizations in Nigeria.
Data Analysis

The study produced a large amount of interview data which required organization and management for a detailed and thorough analysis. Yin’s (2002) definition of analysis “consists of examining, categorizing, tabulating, testing, or otherwise recombining both quantitative and qualitative evidence to address the initial propositions of a study” (p.109), which is compatible with his opposition to the bifurcation between quantitative and qualitative research. The researcher made use of holistic designs as recommended by Yin (2003), which is based on single unit of analysis.

Stake (1995) defined analysis as “a matter of giving meaning to first impressions as well as to final compilation” (p.71). In a Stakian view, “analysis essentially means taking our impressions, our observations apart” (p. 71). Stake placed much emphasis on their epistemic commitments as qualitative researcher, and did not consider quantitative data sources as legitimate ways of gleaning data for the case study. Yin’s views laid emphasis on the enhancement of validity and reliability in every phase of the research process and suggested six tools for triangulation, which impacts validity namely: documentation, archival records, interviews, direct observations, participant observation and physical artifacts, each of which has its own strengths and weaknesses (Yazan, 2015). Making use of multiple data gathering tools (triangulation) helped to compare and solidify the quality of data collected from different sources. Yin (2003) noted, “The main idea is to triangulate or establish converging lines of evidence to make your findings as robust as possible. And triangulation occurs when two or more independent sources all point to the same set of events or facts” (p.386).

The study made use of direct interpretation, which, was defined by Stake (1995), as one of the strategies to analyze case study data. According to Stake “Two strategic ways that
researchers reach new meanings about cases are through direct interpretation of the individual instance and through aggregation of instances until something can be said about them as a class,” (p. 74). Following this method, the data analysis examined the general statements about relationships and gathered similar statements (instances) into themes. The analysis reflects the study framework, and examined the data for themes that emerged from interview text.

Audio recorded data collected through interviews was transcribed by a professional transcriptionist from Dissertation Editors. The recordings enhanced the understanding of dialogue for transcription purposes. The researcher transcribed the in-person interviews, observation and data collected from document review into electronic format to combine participant responses with the data collected through document review. After the interview was transcribed, it was sent to the participants for review. The participants received the interview transcript for accuracy of their responses. Participants were also contacted via phone, for clarification or to address follow-up questions.

Document analysis enabled the researcher to compare funding documents between military and civilian regime, thereby comparing the two forms of government and their impact on higher education in Nigeria. The rationale behind this strategy was that regime is a very big influencing factor which needs to be acknowledged as it is part of the external environment in the dissertation. Reviewing documents from NUC, Ministry of Education, Office of Statistics and other competing federal universities will enable the researcher to compare the information from interview with information from document review (i.e. perform triangulation). Executing a document analysis will allow the researcher to build validity and reliability in the study as the researcher will be able to triangulate information collected from interviews with documentary evidence. Data was collected from government offices, public studies, checked for instances and
missing data, graphed and observed the distribution of budgets by universities. The researcher did the trend analysis and the change in the budget by percentages.

As this was an exploratory qualitative study, the analysis of data progressed through iterative steps of reading, coding, and consolidating codes to identify themes which answer the research questions. Upon completion of all interviews, audio recordings were carefully transcribed line-by-line by the researcher in written format using Microsoft Word. Computer-assisted qualitative data analysis software (NVIVO) was used for coding data, and identifying common themes in the interviews. In this software, emerging concepts, categories and themes can be easily coded, recorded or edited throughout the entire process. The researcher is still the main tool for analysis because software cannot read the meaning of the data collected (Weitzman, 2000).

Coding

This study made use of three types of coding process. Initial coding was utilized to examine, compare and search for similarities and differences throughout the data. Open coding provided a basis for explaining major themes found in the data. Commonalities were identified throughout each coding method (Stake, 1995). Alternatively termed as thematic analysis, Boyatzis (1998), defined it as a process of “encoding qualitative information” (p. vii). The researcher developed codes for words, or phrases that serve as labels for sections of data. Coding involves sorting data into categories and segments. This approach helps to summarize and reconstruct data to capture important concepts within the data set. Once codes were categorized, they were compared to one another. The process of open coding and sorting was led by inductive logic where commonality in content led to textual data being tagged similarly. After completing this process, the deductive qualitative analysis was employed making use of axial
coding. This process was utilized to analyze the coding structure arrived at from the first two stages, and discover how the new categories and sub-categories interrelated with one another (Saldana, 2015), and adhered to the theoretical framework outlined by the resource dependency theory. Finally, new emergences, findings, were written as they relate to the implications of the study.

Specifically, Folkestad (2008) compiled a step-by-step process for analyzing interview data collected as part of case study research. The following steps, specifically for interview data, were applied to the interview data in this study.

1. A preliminary coding scheme was developed by the researcher with guidance from the resource dependency theory, as well as the set of supplemental questions included in this study. This is part of selective coding.

2. Open coding was conducted to describe the phenomenon. During this process, the researcher revised the preliminary coding scheme. The coding scheme was revised according to the following steps

   a. Researcher read through each transcript without applying codes to understand the data.

   b. The transcript was re-read and researcher applied codes based on the preliminary coding scheme.

   c. The researcher read through the transcript again, and noted commonly occurring ideas, different responses to interview questions and coded them into open code categories. Open coding is defined when codes are derived from the textual data to develop the final coding scheme. In this case, open codes were merged with selected codes.
The process of coding text using open codes was continued.

As new codes emerged, existing coding scheme was revised to group text with common themes together as appropriate.

Begin searching for patterns or themes in responses.

At completion of open coding, researcher re-read text to identify and code themes (axial coding).

At completion of axial coding, researcher started generating larger, theoretical themes.

Table 7 presents the coding scheme applied to analyze the qualitative data. It includes 18 specific codes, that were generated to tag the data, which were subsequently aggregated into the following main code: identifying the scope of administrator’s roles and responsibilities related to University resource acquisition and management processes; external environmental factors that relate to University resource acquisition; detailed funding allocation processes; action, administration and revenue generation innovations; effect of underfunding and administrator recommendations. Table 7 also provides the definitions that were operationalized for each code category. From the coding scheme, the following themes were developed: administrator’s capacity, entrepreneurship, consequences, empowerment, connection, and role and responsibility. These themes will be detailed in the subsequent sections. First, a detailed overview of ABU organizational structure is provided along with a historical trend analysis of University underfunding, which was the focus of this research study.
### Table 7

**Coding Scheme and Definitions**

<table>
<thead>
<tr>
<th>Code Category</th>
<th>Code</th>
<th>Definition</th>
<th>Key Words</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role of Personnel:</td>
<td>Personnel Role</td>
<td>Administration personnel role and responsibilities related to University resource acquisition including management processes</td>
<td>Dealing, responsibility, appealing, planning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Personnel – Perception</td>
<td>Administration perceptions about funding that affect allocation processes</td>
<td>Attitudes, feelings, perceptions related to funding, responsibilities, and processes</td>
<td></td>
</tr>
<tr>
<td>Environmental Factors</td>
<td>Env - Private Sector</td>
<td>External environmental factors that relate to University resource acquisition</td>
<td>Private Sector</td>
<td>Few responses beyond NO or positive effects</td>
</tr>
<tr>
<td></td>
<td>Env – University</td>
<td>External environmental factors that relate to University resource acquisition</td>
<td>Federal universities</td>
<td>Few responses beyond NO or positive effects</td>
</tr>
<tr>
<td></td>
<td>Env – International</td>
<td>External environmental factors that relate to University resource acquisition</td>
<td>International</td>
<td>Few responses beyond NO or positive effects</td>
</tr>
<tr>
<td>Funding/Allocation</td>
<td>Funding/Allocation</td>
<td>Funding or resource allocation processes and how they relate to coping with budget shortfalls, filling in funding gaps, and source of budget shortfalls</td>
<td>Text describing the process of fund allocation and including delays in allocation</td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td>Funding Sources</td>
<td>Sources of revenue and how they relate to coping with budget</td>
<td>Text describing sources of funds, IGR, private,</td>
<td></td>
</tr>
</tbody>
</table>
Table 7

**Coding Scheme and Definitions**

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<tr>
<th>Code Category</th>
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<th>Definition</th>
<th>Key Words</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovations - Administrators</td>
<td>Innovations – Action</td>
<td>Action-oriented innovations implemented to overcome resource barriers</td>
<td>Negotiation, bargaining, strike, communication with stakeholders</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Innovations - Administration/ Management</td>
<td>Management-oriented innovations implemented to overcome resource barriers</td>
<td>Needs assessment committee, staying within limits, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Innovations - Revenue Generation</td>
<td>Revenue generation-oriented innovations implemented to overcome resource barriers</td>
<td>Acquisition of funds from other sources etc.</td>
<td></td>
</tr>
<tr>
<td>Underfunding Effects</td>
<td>Effects – Employees</td>
<td>The effects of underfunding on three key University stakeholders</td>
<td>Salary, morale</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Effects – Organization</td>
<td>The effects of underfunding on the organization</td>
<td>Operations, mission</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Effects – Students</td>
<td>The effects of underfunding on students</td>
<td>Readiness, skills,</td>
<td></td>
</tr>
<tr>
<td>Administrator Recommendations</td>
<td>Recommend - Financial Management</td>
<td>Improvement to financial management and budgeting strategies and processes</td>
<td>Management of funds, allocation of resources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recommend - Entrepreneurial</td>
<td>Engage in and promote entrepreneurial behavior to increase revenue</td>
<td>Entrepreneurial</td>
<td></td>
</tr>
</tbody>
</table>
### Table 7

*Coding Scheme and Definitions*

<table>
<thead>
<tr>
<th>Code Category</th>
<th>Code</th>
<th>Definition</th>
<th>Key Words</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommend - Administrative Capacity</td>
<td></td>
<td>The development of administrator skills and competencies and ability to effectively manage and source alternative revenue during periods of insufficient funding</td>
<td>Training, Values, motivations</td>
<td></td>
</tr>
<tr>
<td>Recommend – Program</td>
<td></td>
<td>The development of existing and new programs to help adjust to funding shortfalls</td>
<td>Alumni program</td>
<td></td>
</tr>
<tr>
<td>Recommend – Research</td>
<td></td>
<td>Developing research agendas and strategies that encourage external stakeholder investment or sponsorship</td>
<td>Sponsored research, Can also be viewed as entrepreneurial, but only coded RESEARCH when administrators specifically stated recommendations related to research behavior</td>
<td></td>
</tr>
</tbody>
</table>

Ethical Considerations

Ethical considerations involving the researcher’s role as outsider to the participants was considered, including handling sensitive issues; establishing supportive, respectful relationships without stereotyping and using labels that participants do not embrace; acknowledging whose voices are being represented in the study; and reflecting on the identity of the researcher as well as the individuals involved in this study. In addition, as summarized by Hatch (2002), researchers need to be sensitive to vulnerable populations, imbalanced power relations, and placing participants at risk was also referenced. The researcher obtained permissions to gather data between March and December of 2016, and gatekeeper who is the University staff assisted in this endeavor. The gatekeepers also assisted the researcher in officially gaining access to University data. The collected data was kept confidential and secured in a disk which was locked up in a drawer. The purpose of the study and consent form disclosed to the participants informed them that their participation in the study was voluntary, and did not place them at undue risk. In addition, the researcher was careful regarding any cultural, religious, gender, or other differences in the participants and the sites that need to be respected. Recent qualitative writings have informed researchers of this issue, especially concerning indigenous populations (LaFrance & Crazy Bull, 2009). The researcher was sensitive to potential issues that may arise in collecting data, especially through interviews and observations.

Trustworthiness

This study made use of participant checks, peer evaluation and triangulation, to establish validity, reliability and trustworthiness. This is because compared to the quantitative methodology, qualitative research does not provide empirical information to draw conclusions.
Therefore, the validity of concepts and reliability of conclusions is often questioned in qualitative research and is recognized as one of the limitations of the methodology.

In a qualitative study, it is always good to establish rapport with the respondents. If the participants do not trust the researcher, they will not open and describe their true feelings, thoughts, and intentions. Rapport is established over time as people get to know and trust one another. Yin (2009) has suggested that interview questions in a qualitative study should be framed and asked in a way that helps the respondent to feel he or she can talk freely. The researcher created a research environment designed to instill trust and give participants a sense that they will benefit from the results of the study. In this manner, establishing a healthy relationship removed negative interfere and bias in the study. The ideal kind of relationship is one that will promote the validity of the data. Coming from Nigeria, the researcher is familiar with the way of life of people, their likes and dislike and the culture of the institution. This helped the researcher create familiarity and a positive relationship.

According to Merriam (2009), “There is almost no consistency across writers in how the philosophical aspect of qualitative research is discussed” (p. 8). Merriam further stated that, in true qualitative fashion, each writer makes sense of the field in a personal, socially constructed way. The researcher paid attention to both verbal and nonverbal messages, and was flexible in rephrasing questions. The researcher used clear and meaningful words, and asked questions so that the participant understood what was being asked. Above all, the researcher aspired to be a good listener.

Guba et al. (1985) proposed four criteria that should be considered by qualitative researchers in pursuit of a trustworthy study: credibility, transferability, dependability, and
confirmability. To ensure credibility the researcher made sure the study measures what it intends to study. Open-ended interview questions helped the researcher to spend sufficient discussion time with the participants. This helped the researcher, and the participant to fully understand the study, as well as to establish a relationship of trust between the researcher and the participant. The fact that participation was voluntary ensured that participants agreed to participate out of their free will. The use of member checks, helped to check for the accuracy of the data during the interview (Guba & Lincoln, 1985). This process helped the researcher to clarify any ambiguities in the interview transcript, and allowed the participants the opportunity to confirm the opinions expressed in the interviews. The use of audiotape helped to transcribe the interviews correctly, and contributed towards building credibility in the research study. The use of rich, thick description of the phenomenon under scrutiny promoted credibility.

**Limitations**

There were a few limitations of this research; these can be classified into methodological, and pertaining to the research design. The disadvantages of case study design include a lack of rigor. Yin (1984 as cited in Zainal, 2007) states “too many [case study researchers] ha[ve] been sloppy, and ha[ve] allowed equivocal or biased views to influence the direction of the findings and conclusion” (p.21). Another disadvantage of case study method is that it limits biases for scientific generalization because of the use of small number of participants (Zainal, 2007). Additionally, the data collected and presented in the case study may be too long and cumbersome for policymakers and educators to read (Hall, 2000), i.e. it is too time intensive for quick comprehension, which limits usefulness of case study insights, in a fast pace policy setting circles.
For any qualitative researcher, the burden of conducting a case study research is significant. Case studies are time and resource intensive, which make it difficult, and less appealing to researchers. Finally, since case studies depend on one case exploration, it makes it harder to generalize the conclusions (Tellis, 1997 as cited in Zainal, 2007). However, there is intrinsic value in the conclusions drawn from the case study, as they may provide information on the workings, organization culture and stakeholder interactions, which are worth the investigation without the onus of generalization to other contexts (Pawlyshyn, 2013).

Methodologically, exploratory case studies lack rigor that is commonly observed in quantitative studies because biases in the study field as well as the researcher may affect the interpretation of results. Yin (1984), as cited in Zainal, (2007), states “too many [researchers] have been sloppy, and ha [ve] allowed equivocal or biased views to influence the direction of the findings and conclusion” (p.21). Second, exploratory case study approach limits biases for scientific generalization because of the use of small number of participants (Zainal, 2007). Third, exploratory case study takes comparatively more time and resources compared to other form or methods of data collection such as surveys or focus groups. Fourth, exploratory case study depends on one case exploration which makes it harder to generalize conclusions (Tellis, 1997 as cited in Zainal, 2007).

A major limitation of this study was the number of participants who could be identified to interview. This was primarily because of resource constraint. Second, there was no information available that could corroborate the information supplied by the participants regarding the generation of IGR. Third, there was no audit report that was publicly available for the University or from NUC. Fourth, the researcher’s own bias may have influenced the interpretation of results. This researcher has never been an administrator, and cannot sympathize with the
administrators interviewed. This researcher may have consciously or subconsciously been affected by Nigerian education system, and that created some bias. To reduce the bias, this researcher articulated a very important assumption in this study. This assumption was that the Federal Government through NUC has not been allocating adequate resources to the universities. This assumption was grounded in prior literature published by journals and through UN organizations publications. The research questions were articulated based on prior literature (Chapter Two) which concluded that there has been a negative impact on Nigerian education system due to underfunding. Due to underfunding, some administrators are being more creative, looking for alternative funding sources, but there is a lack of published literature on the same. The primary goal of this research was to get new information, and gain new knowledge of the underfunding problems in Nigerian federal universities and not to pass judgement on an institution (Rajendran, 2001). Researcher avoided bias in the planning and execution of the study, and the analysis of data. Starting with participant recruitment, which was voluntary, all views expressed in the interviews were accounted for while conducting the analysis. Member checking, in addition to triangulation was implemented to minimize error and increase the reliability of the conclusions drawn from interviews. All interviews were given equal consideration while conducting analysis. These measures also aided in reduction of researcher bias. Participants trusted the researcher with the information they provided because they believed that as a product of the University, I am conducting the study with the interest of the University at heart, and the result of the study may help to improve the underfunding problem not only in ABU but in other federal universities in Nigeria.
Chapter Four: Data Analysis and Findings

Findings from the analysis of the data collection are presented in this chapter. The data for this study were drawn from interviews conducted with 10 high level administrators at Ahmadu Bello University – Zaria (ABU), document reviews, and observation of participants. The interview, document and observation data, were collected and analyzed to answer the overarching question and four sub-questions as detailed below:

What are the organizational and systemic factors in the Nigeria federal university system that impact funding management by University administrators?

Sub-questions:

1. What role do University administrators play in resource acquisition?
2. How does the external environment affect University resource acquisition?
3. What are the alternative revenue generators explored by University administrators to overcome underfunding?
4. What is the experience of University administrators in a Nigerian federal University as they contend with the impact of underfunding by the Federal Government?

This chapter will cover the following: presentation of findings, the case study institution, governance and organizational structure, financial profile, the funding process, themes from the data analysis, linkages to other factors, the effects of underfunding and administrator’s recommendations.
The Case Study Institution

Ahmadu Bello University (ABU) Zaria is one of the largest and most extensive universities in Sub-Saharan Africa. The University covers a land area of about 7000 hectares. The University is named after the Sardauna of, Alhaji Sir Ahmadu Bello, the first premier of Northern Nigeria. ABU is a Federal Government research University and was founded on October 4, 1962, as the University of Northern Nigeria. ABU is in the urban setting of the city of Zaria, Kaduna province, and has a population of 1,000,000-5,000,000 residents. ABU is a large co-educational federal University, with a student enrollment 35,000 students in both degree and sub-degree programs. ABU admitted 11,229 students for 2015-16 academic year (ABU Journal, 2015).

These students come from every state of the federation, Africa and the world at large. The University has about 1,400 academic and research staff as well as 5,000 support staff and over 6000 non-teaching, senior and junior administrative staff. ABU has about twenty-one scholarly journals published in the school where academic and research staff are expected to conduct and publish their research works. The University has twelve faculties, a postgraduate school, and 84 academic departments, each department is managed by a University administrator. ABU also has five research institutes, six specialized research centers, and a Division of Agricultural College (ABU, 2015; 2016).

The University operates two campuses: Samaru and Kongo in Zaria. There is also pre-degree School located in Funtua few kilometers away from main campus owned by the University. The Samaru campus houses the administrative offices, faculties of: sciences, social-sciences, arts and languages, education, environmental design, engineering, medical sciences, agricultural sciences and research facilities. The Kongo campus hosts the faculties of law and
administration. The Faculty of Administration consists of Accounting, Business Administration, Local Government and Development Studies and Public Administration departments. Additionally, the University is responsible for a variety of other institutions and programs at other locations. The University runs a wide variety of undergraduate and graduate programs. The University has a large medical program with its own ABU teaching hospital, one of the largest teaching hospitals in Nigeria and Africa. Selective admission policy based on entrance examinations and students' past academic record and grades. The admission rate range is 90 to 100 percent, making this Nigerian higher education organization a least selective institution. International applicants are eligible to apply for enrollment. ABU also provides several academic and non-academic facilities and services to students including a library, housing, sport facilities and/or activities, financial aids and/or scholarships, study abroad and exchange programs, as well as administrative services (University Reviews and Ranking, 2016).

**Governance and Organizational Structure**

ABU has the largest student enrollment in Nigeria. Students from all over Nigeria come to ABU. Being a federal university, ABU is funded by the Federal Government through the National University Commission (NUC). However, the funds from NUC are strictly for the undergraduate program. Post-graduate program and diplomas are funded through school fees, other student charges, special research and consultancy fees, and donations from private and
public organizations.

Figure 3. ABU organogram. Reprinted from “Strategic Plan of Ahmadu Bello University, Zaria”, ABU, 2011.

The University vice chancellor is the ceremonial head of the University, and its chief executive and academic officer. The vice chancellor is appointed for a five-year non-renewable term. The 14th and current vice chancellor took office on May 1, 2015. The University is governed by a committee instituted by the Federal Government known as a University board, which is headed by pro-chancellor as the chairman. This board has authority over policy, the NUC, and Federal Government directives. The vice-chancellor, being the chief executive of the University, executes policy through principal officers, such as the registrar on administrative
matters, the bursar on financial matters, and the librarian on library matters. Administrators oversee various departments. The administrative structure is hierarchical in nature. As illustrated in Figure 3, ABU organogram shows the policy flows from the hierarchical ranks at the top to the administrators and down (top down approach). The flow of authority starts with the president of Nigeria at the helm, who is also the visitor to the Federal Ministry of Education and other federal ministries concerned. Authority also flows from Federal Ministry of Education to NUC, University governing council, and from the federal ministries concerned to the board of governors, to institutes and centers. NUC oversees the vice-chancellor, governing council, convocation, congregation, and University senate.

The flow of funds to ABU is initiated by the office of the President of Nigeria. The flow of funds is directed to the Federal Ministry of Education, from where it also reaches the National Universities Commission (NUC). Next, the flow of funds is directed to the vice-chancellor’s office, faculties, institutes and centers. From there funding is disbursed to departments. Funds also flow from the vice-chancellor’s office to the registry, bursary, library, directorate of academic planning, student’s affairs office, internal audit, estate, security and University health services.

This discussion is drawn extensively on the report by Muller, et al, (2012), who examined the organizational structure of ABU and generated recommendations on improving the management structure and process flow. In ABU, the general administrative tasks of the University are the responsibilities of the Office of the vice chancellor, registry department, and bursary department. These responsibilities include secretarial tasks, finance management and accounting, budgeting, management of staff and student. These offices are also responsible for coordinating the provision and sustenance of various services such as electricity, security,
accommodation, information, and communication. The senior administrator of the University is the Vice-Chancellor who is supported in his work by two Deputy Vice-Chancellors, a Bursar, a head Librarian, the Registrar, the Dean of Students, and the Director of the DAPM. Deans are the faculty level administrators, who work with heads of department. The centers and institutes are managed by directors appointed by the Vice-Chancellor.

Governing Council is ABU’s highest governing authority consisting of 7 external and 9 internal members. The composition, and the agenda of the Governing Council (GC) are regulated by Nigerian federal law. The Council is responsible for policy issues, the monitoring of assets and liabilities of the University, and liaising with government and non-governmental organizations (NGOs) on behalf of the University. The University Senate (US) has 400 members, who are leading officials of the academic staff and administration. The Senate is responsible for all academic affairs within the framework given by the GC. Besides the governing council and University senate, there is a separate Board of Governors, chaired by the vice chancellor, for institutes and centers composed of respective directors and some internal University members. This Board of Governors deals with all affairs of the institutes/centers. The institutes/centers operate and report to the Board of Governors; furthermore, some institutes/centers are affiliated to the various government ministries which were responsible for creating them and report to such ministries. Governing Council, Senate and Board of Governors meet on a regular basis and have an annual plan of activities that inform the agendas of meetings.

The situation of having more than one governing body within a University, even if one is subordinate to the other, creates a situation where there are dual responsibilities, and reporting lines for subordinates. This parallel reporting and management structure causes increased bureaucracy that leads to inefficiencies. For instance, the important matter of auditing
and financial reporting for institutes/centers to central University management takes place in a limited capacity, and to a limited pool of University administrators. Reporting lines for such matters should be clear and University management should receive complete information on centers and institutes (as indeed for all University entities) to ensure that planning and decision making can take full account of the entire spectrum of University activities.

**Financial Profile**

Per the participants, the funding received by ABU from NUC is strictly for the undergraduate programs. The funding of the postgraduate program and diplomas is internally generated from school fees, other charges from students, special research and consultancy fees, and donations from private and public organizations. The University generates funds from consultancy, research, business establishment like social centers and probably from Northern state governments. ABU also has some revenue generating projects. These projects include ABU Press, ABU Farms, and Kongo Conference Hotel. ABU has a University press limited publishers and printers that was established in 1973 and incorporated as a limited liability company on January 30, 1978 with the mandate of promoting academic excellence through scholarly publishing. This press limited was established and solely owned by ABU to diversify its sources of revenue. The publishers charge nonrefundable fee for peer review articles submitted regardless of if it will be published or not. They also charge publication fees for articles accepted for publishing to cover the cost of production. ABU has produced numerous prominent people, and Nigerian leaders including many former state governors and ministers.

It was also learned that some of these projects do yield profit and others do not. However, no financial records on any independent revenue generating projects were available for the
researcher to verify whether such projects have yielded profit, or made a significant contribution to the financial resources at the federal universities.

**Historical Context**

Politically, Nigeria has experienced few regime changes. Most importantly, the British colonization in the early 20th century, followed by decades of military rule have influenced how higher education infrastructure was set up in the country. Democracy was established in 1999, and since then Nigeria has functioned as an independent democratic nation.

Figure 4 represents the total capital allocation to universities from 1980-2013. The vertical line indicates the change in regime (from military to civilian) that occurred in 1999. The figure provides evidence of the pattern of funding in the country. Observing the trend line in the graph, from 1980 shows that the funding has fluctuated in the early period, but it does show an impressive growth in the allocation. From 1996 onwards, the fluctuations have been pronounced, namely in 1997, 2004 and 2009. In military era, power to universities was eroded because they were considered as threats to the military regime (WENR, 2004). The overall trend, when considering the regime change, shows more stability in funding during the military regime, than the democratic set up.

One reason for that could be the growth in the number of students enrolled in federal universities. The post-secondary student enrollment grew from 59,000 in 1974-75 to 146,000 in 1980-81 and 213,000 in 1984-85. The enrollment grew by 12 percent in the 1990s. Second, all federal universities were declared tuition free in 1983 (Prince, 1997). This caused the funding for federal universities to become vulnerable, and directly affected by the economic well-being of the Federal Government. Due to the increased pace in enrollment, and devaluation of currency, the allocation per student was halved from $610.00 in 1990 to $360 in 1999 (Saint, Theresa & Straussner, 2003). The Federal Government assumed the responsibility of providing higher education, and could not keep up with the pace of increased enrollments, even when the economy was relatively healthy. According to an assessment reported by Ahmad (2015), the higher education institutions are witnessing unprecedented demand for higher education. The annual enrollment demand in higher education institutes is 1,579,176 while the institutions can only admit, 234, 526 annually. This results in 14 percent of all applicants being admitted into
universities. Consequently, there are a large number of students who cannot access higher education in Nigeria (p.67).

Table 7 presents the funding levels of top five federal universities in Nigeria from year 2009 to 2013. The top five universities, in terms of student enrollment are: Ahmadu Bello University, University of Ibadan, University of Lagos, University of Ife, and University of Nigeria Nsuka. Table 7 provides the context to the levels of allocation received by federal universities in Nigeria for the specified years. Funding allocation among the top five universities in the country show comparable yearly allocation. After the allocation in 2009, the allocations for years 2010-13 show a comparatively smaller number. This table shows that the fluctuations in funding are similar for all universities, and that fluctuations are the norm in Nigerian higher education, rather than exception.

Table 8

Funding Trend – Top Five Universities (in N billion)

<table>
<thead>
<tr>
<th>University</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahmadu Bello</td>
<td>11.26</td>
<td>0.13</td>
<td>0.084</td>
<td>0.36</td>
<td>0.045</td>
</tr>
<tr>
<td>Ibadan</td>
<td>13.19</td>
<td>0.17</td>
<td>0.073</td>
<td>0.37</td>
<td>0.045</td>
</tr>
<tr>
<td>Lagos</td>
<td>11.09</td>
<td>0.11</td>
<td>0.052</td>
<td>0.67</td>
<td>0.045</td>
</tr>
<tr>
<td>Ife</td>
<td>10.03</td>
<td>0.11</td>
<td>0.052</td>
<td>0.37</td>
<td>0.045</td>
</tr>
<tr>
<td>Nigeria Nsuka</td>
<td>12.01</td>
<td>0.13</td>
<td>0.082</td>
<td>0.72</td>
<td>0.045</td>
</tr>
</tbody>
</table>

Note. Funding allocation for top 5 federal universities. Adapted from “Funding higher education in Nigeria” by F. O., Afolayan, 2015, IOSR Journal of Research and Method in Education, 5(1), 63-68.

Another conclusion that can be drawn from this table is that budgetary outlay for ABU was not always the highest, which is surprising because it is the largest University in the country.
Participant Adiya, one of the respondents, who holds long experience with ABU commented,

This is the first time I am witnessing this level of underfunding in the University since I began my career as a University administrator nearly 30 years ago. When I joined the University way back in 1984, everything was there for the asking. Things began to change when Nigerian economy began to experience problems which affected the funding of the University. The problem has reached to a point where we are encouraged to make do with what is available.

Participant Abdalla explained the budget process and funding groups,

Funding was formerly based on budgets submitted by the universities which is no longer the case today, but did not know the criteria being used by the Federal Government to fund the institutions. The allocation of funds through NUC, is quarterly. Capital expenditure, however, has been a source of concern to the University because government does not respond promptly, which was one of the reasons the academic and nonacademic staff of all federal universities in Nigeria went on strike, with academic strike lasting almost five months.

The researcher learned through the interviews, that a recent capital grant allocated to the University was so small that it was used to renovate only one student hostel out of 10 hostels in ABU (dormitory for students). Participant Nadira, who is from the veterinary medicine department, was able to summarize several experiences that had occurred because of underfunding:

ABU has experienced some difficulties in getting budgetary expenditure information on projects. Sometimes information is received but not submitted until up to a year after it is due. The process of reporting budgetary non-compliance goes through many committees
and boards from the department in question to the senate to the vice chancellor who can advise the Bursar to take remedial action.

The financial profile of ABU can be partly reconstructed by examining the financial report for year 2013 and 2015.

Table 9

*ABU’s Budget, 2013-2015*

<table>
<thead>
<tr>
<th>Budget</th>
<th>Amount Budgeted (billion)</th>
<th>Amount Released (billion)</th>
<th>Resource Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>N13.70</td>
<td>N13.45</td>
<td>1%</td>
</tr>
<tr>
<td>2014</td>
<td>N14.57</td>
<td>N14.30</td>
<td>1%</td>
</tr>
<tr>
<td>2015</td>
<td>N15.94</td>
<td>N1.15</td>
<td>7.2%</td>
</tr>
</tbody>
</table>

*Note.* The items covered in the budgets included the following costs: personnel, overhead, capital, and pensions. Adapted from “ABU financial report 2013-2015” by ABU, Zaria.

Through the financial reports that were obtained from the ABU office of Bursary, table 8 reflected funding allocation for ABU from year 2013 to 2015. In year 2013 ABU's budget was 13,701,057,796.00 and amount released was 13,459,905,430.00. In 2014, the amount budgeted was 14,573,298,614.00; amount released was 14,304,198,056.86. The amount budgeted in 2015 was 15,949,510,305.00; and amount released 1,152,855,928.63, which was significantly less than what was required by the University. The items covered in the budgets included the personnel, overheads, capital, and pensions. In 2013 and 2014, the budgetary outlay sanctioned, is less, but not too far removed from what was budgeted by the University. However, in 2015, there is evidence of significant underfunding. The resource gap in 2015 was seven percent compared to one percent in previous two years. This extreme fluctuation in funding gap, can impair the functioning of administrative staff, because they would have to adjust the functioning of programs and facilities based on the allocation. Year to year, these kinds of fluctuations are not good for the University (administrators) because the any amount of institutional strategic
planning rests is developed on the basis of increased annual allocation or sustained allocation. In the most recent federal allocation for 2017 budget, ABU received N14 billion for recurrent expenditure, and N219 million was budgeted for capital expenditure (Olawoyin, 2016).

The lack of steady committed funding from Federal Government, for these universities may be linked to responses received from some administrators when they said that the Federal Government has less focus on education and health.

Participant Abdalla believes that,

The Federal Government has always done well in the area of funding personnel costs as shortfalls were not regularly experienced as in the past. This is not applicable to overhead funding and capital because ABU engage in some revenue drive to augment government funding. Thus, the attention of management is always geared towards how to sustain the day to day running of the institution and had to seriously look into capital development for critical infrastructural needs for academic excellence.

**Funding Process**

Since the Federal Government is the main source of funding for federal universities, the universities, including ABU, depend on them. Uncertainty and fluctuations in funding, affects University operations. Universities depend on internally generated resources (henceforth IGR), private donations, endowments, foundations to fill in the funding gaps from budget shortfalls. Participant Mosi states, “Sometimes we may have to fall back to the IGR or other sources of revenue pending the release of fund from the Government.”

Participant Mosi, an administrator from pharmacy department with the longest experience working in ABU among the participants, offered a rich and detailed description of ABU’s budget structure. According to Participant Mosi, the budget is divided into three main
areas. First is external budgeting, which involves funds from the Federal Government that are allocated for staff salaries, overhead costs, and capital expenditure. Each year ABU submits a budget for overhead cost and capital grants, and receives less than the real costs incurred for overhead expenses. Additionally, the amount received for capital development is inadequate, and hardly covers the maintenance cost of existing infrastructure. The second area is the participatory budgeting process in which all the department heads submit, and defend their budgets to cover staffing, capital, and overhead. A senate estimates committee reviews all budget proposals, and a budget is assigned to each department. The third area is the operational budgetary process. This process deals with how the actual funds from the government, and from internal University sources are allocated.

**Data Analysis Themes**

In this research study, that explored the effects of underfunding on the University, the discussion of the results is presented via four common themes which are described below. These themes were derived through the qualitative coding process that was completed in NVIVO, which is a qualitative textual data analysis software.

The process of coding and development of themes were detailed in Chapter Three of this dissertation. Codes were developed based on seven different code categories that were identified as part of the data analysis exercise presented as well as definitions and keywords that were identified within the codes. Themes that were derived from the coding process, to address the research questions, were also discussed in the previous chapter. They are briefly presented in this section before reporting results.
The first theme, *administrator capacity*, reflects the need for training for administrators to understand consequences of funding processes. It was also observed, through the interview data, that administrators need to realize the consequences of funding shortfall, and manage the department during periods of underfunding. The effectiveness of responses, ability to be innovative, etc. depends on the skills and knowledge (capacity) of administrators.

The second theme, *entrepreneurship* describes how development of entrepreneurial practices and training are useful to create new revenue sources to fill gaps in funding. This theme describes how lack of entrepreneurship only deepens existing financial gaps.

The third theme is labeled *consequences*. The effects of insufficient funding are multiple, and far reaching and impact all levels of the organization, its employees, students, and industry. Many of these consequences are rooted in the funding allocation process, and lack effective responses by administration due to lack of capacity and entrepreneurial behavior.

The fourth theme is *empowerment*, which discusses the discretion authority of administrators at ABU. Administrators do not appear to be empowered to employ innovative strategies to maximize resources. This could be attributed to:

1. The culture of higher education in Nigeria;
2. Lack of motivation and sense of responsibility to grant more autonomy to administrators;
3. The lack of capacity (knowledge, skills, training, etc.) to employ such strategies by the administrators. Lack of empowerment appeared to be exacerbating the negative fiscal condition.
The final theme in the study was *connection*, which refereed to the interlinkages of ABU with other universities and organizations in the country. Administrators appeared least informed about the connection with, and impact of other universities, international actors/private on them directly and the University particularly. Although they respond that generally, there are positive or no effects, they did not make connections about how conditions in the external environment relate to resource allocation or the availability of resources for the University.

**Theme I: Administrator Capacity**

Overall, the interviews revealed that administrators did not understand or were unaware of their role and responsibilities as it pertains to potential opportunities for maximizing resource allocation. Partly, this was due to the complicated organization structure of the University, and the precedent of operating in a budgetary shortfall. The understanding of the importance of adequate funding, and the impact of underfunding was consistent during the administrators’ interviews. The work of an administrator largely depends on the availability of funds. Where there are no funds or when there is a delay in releasing the funds, the duties of an administrator are affected, in that the administrator cannot purchase essential goods and services needed for running the University. Underfunding thus affects the operational capacity of the administration of the University.

According to Participant Abdalla, ABU has created some internal generated revenue to cover the area of budget shortfall. “For instance, in some universities the monthly overhead can only be used to pay 20 percent electricity cost for one month. Hence, the 80 percent balance is normally sourced/paid using IGR.

Respondents at ABU displayed a clear and concise understanding of the underfunding challenges and the effects on the University. At the management level, a clear and concise
picture emerged regarding the role administrators played in securing resources. While explaining the process of creating budgets the participants explained that when asked some of the issues administrators face while preparing budgets, Participant Abdalla explained that administrators face the issue of staff crises, strike and boycott of lectures as a result of underfunding. He further stated that administrator face the issue of adhering to some strict government policies such as the 60:40 ratio in terms of student admission in favor of science academics versus non-science academic, expenditure should be 70:30 in favor of science academic expenditure. The administrators are required to demonstrate being able to generate at least 10 percent of the total income on IGR.

Participant Keanjaho reported that,

Administrators have to plan for materials needed for teaching, research and learning in the year such as chemicals and reagents, stationery, renovations of classrooms, offices, and student hostels and suggested attention be given to staff refresher trainings, security.

Participant Adiya stated, “Administrators have to know the formula needed to calculate the necessary facets of the budget.”

Participant Nadira stated, “Administrators have to prepare for the issues of coping with the Unions demands, unrest among the workers and strikes by employees as a result of inadequate budget funding.” When asked how administrators deal with the uncertainty in funding provided by the Federal Government agency, Participant Hadiya expressed her strong belief that ABU administrators are well experienced and full of initiatives to handle their financial problems or the uncertainty in funding provided by the federal agency. The funding for salaries and wages by government has been regular and reliable. However, funding of overhead
cost has been unstable for many years. The University uses funds from its internally generated revenue to bridge the gap.

Participant Keanjaho, expressed awareness of the underfunding problem they face at the University but when asked to share their work responsibilities with respect to securing fund in addition to the allocation received from the government he was reluctant in assuming any responsibility for that, stating that it was purview of the bursary department. Similarly, Participant Jafari stated,

The administrator’s efforts to secure additional funding is the responsibility of the vice chancellor who can seek the help of other principal officers of the University.

Organizational structure is not the problem, rather the attitude of some individuals in mismanaging the funds is the problem.

Participant Abdalla expressed the feeling that his responsibility is in budget preparation, annual defense at the National Assembly (both home and Senate), and participate in the implementation of funds allocated by the Federal Government to the University. He did not recognize any responsibility in the act of securing additional funding for this department. During the interview, some participants expressed the feeling that some administrators think the government money allocated to the University is theirs and should not be applied to the projects for which it is meant.

Participant Elewa expressed much the same sentiment, but added that “the organizational structure is not responsible for the underfunding…. rather the abandonment of the guidelines and the processes…for some time, the budgetary system is no more in place. What we witness nowadays is that funds are allocated without budget.” Participant Elewa further explained that the most serious problem facing the University system in Nigeria, and ABU in particular, is the
under-utilization of available funds. There are instances when the University could not use up funds provided in a financial year which is linked to problem of accountability.

On the other hand, Participant Adiya, who was a female administrator from the Math Department and had 27 years of service in ABU, was adamant about her role in securing more funds and mitigating the underfunding problem in her department. Participant Abdalla provided a clear example as to what administrators have done recently to secure more funds for the University:

Recently, the administrators of the University presented its programs to the National Universities Commission (NUC) for accreditation of the programs. Representations are made to the government showing the state of affairs in the University administration. The workers’ unions join the administrators in appealing to the government for better funding. When all efforts fail, the workers will embark on strike.

Participant Elewa provided a clear example as to prepare themselves to get additional funding:

Administrators prepare themselves on how to get additional revenue to supplement whatever they received from the government as the funds are always below the budgeted amount.

Participant Adiya responded, “I am dealing with the uncertainty by being frugal with the little that the department gets.” Participant Hadiya summarized the process of fund allocation by the government and national University commission and how it affects the administrators’ ability to perform their duties in two ways: positively and negatively:

It is positive if the government and NUC strictly complies with the terms under reference and release the approved funds when due to meet up the University financial obligation.
The negative effect is when the Federal Government and NUC were not completely adherent to the terms of the fund allocation process such as delay to release funds.

When asked how the demands from student groups, teacher’s groups, civil society activists affect the goals and functions of ABU, Participant Hadiya summarized several experiences that had occurred during interaction with staff due to underfunding and stated that she is always uncomfortable in carrying out some of her responsibilities because the aged pensioners will come from time to time to find out whether their claims are matured. Unfavorable results always lead to confrontation and frustration among the pensioners. She further explained that underfunding affects how the administrative staff from different groups interact or collaborate with each other. University staff feels they have been denied of their financial benefits due to underfunding and this could lead being violent, disruptive or even collaborate with each other to cause confusion in the school. Example, because of underfunding, the administrative staff are denied of attending workshops, professional development, and other incentives and benefit. Staff can go on seat strike, which is a situation where staff are present in the office, not ready to work and not ready to take directives from their superior officers. These answers are showing that administrators are facing some financial issues in running their departments due to underfunding.

In summary, it can be stated that ABU administrators did not appear to understand, be aware of, or take ownership of their role as it pertains to potential opportunities in maximizing resource generation. They did mention different approaches and contingency plans for allocation of resources, which was constrained by underfunding. Some federal universities get more funding than others, as can be viewed from the information presented in Table 3 on page 52, and administrators did not know the criteria used for allocating more funds to some universities.
ABU has experienced some difficulties in getting budgetary expenditure information on projects. Sometimes information is received but submitted until up to a year after it is due. The process of reporting budgetary non-compliance goes through many committees and boards from the department in question to the Senate to the Vice Chancellor who can advise the Bursar to take remedial action. There may be a more efficient way for action to be taken through the Senate. Only serious cases of non-reporting and lack of accountability for funds received need to be escalated to this level. ABU does not consider research and project based budgets as well as the budgets of centers and institutes in these three budgetary aspects mentioned above.

**Theme II: Entrepreneurship**

While asking about underfunding, administrators talked about their own skills and capacity to change things in the organization. From the analysis of interview data, it can be concluded that the development of entrepreneurial practices and administrator training are useful to seek funding. Lack of entrepreneurship on part of administrators, exacerbates the existing financial gaps.

In this dissertation, innovative behaviors in overcoming resource barriers were explored as a way of understanding how administrators sustain University functioning despite budgetary cuts. Table 10 presents a description of three innovative strategies or coping mechanisms that administrators articulated during the interviews. These include:

1. **Revenue generation** – Activity related to creating, sourcing, accessing, or utilizing alternative sources of revenue to meet operational needs during periods of inadequate funding.
2. **Administration/management** – Activity related to altering existing or creating new organizational processes to cope or adapt to inadequate funding.

3. **Action** – Activity including strikes, negotiating and bargaining, increased communication with staff because of inadequate funding.

In addition to the above, Table 10 also distinguishes the participants by their departmental affiliations into STEM and non-STEM. The possibility of observing an association between different types of coping mechanisms and departmental affiliation (STEM vs Non-STEM), could give an insight into whether STEM departments are more amenable to alternative revenue generation than others.

Table 10

*Administrator coping strategy*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Discipline</th>
<th>Action</th>
<th>Administration and Management</th>
<th>Revenue Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Non-STEM</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Non-STEM</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Non-STEM</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>Non-STEM</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Mathematics</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Medicine</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>7</td>
<td>Engineering</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>8</td>
<td>Computer Science</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Vet Medicine</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Pharmacy</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>20%</td>
<td>50%</td>
</tr>
</tbody>
</table>
Table 10 shows, 50 percent of the innovative strategies fell into the bracket of administration and management, which reveals that these administrators mostly focused on their parameters, and stressed on altering organizational processes to meet the shortfalls in funding. Interestingly, the second majority strategy was alternative revenue generation, and 40 percent of responses indicated that there was some initiative on part of the administrators in that direction.

Revenue generation. The frequency of revenue generation strategy being reported by STEM disciplines of engineering, medicine and pharmacy indicate that they produce intellectual property for which third party funding exists, either through marketing of the intellectual property or through research projects. Only 1 non-STEM administrator, reported engaging in alternative revenue generation. Overall, the results from the interview adhere to the notion that departments, which can create services and goods through their intellectual property, have an additional source of funding at their disposal. The interview responses establish that there is a potential for exploring this revenue option at ABU, however, it does not provide us with a clear picture of how many departments are currently engaging in this, and how successful have they been in generating additional funding that can be funneled back into the department.

Actions. There are some action-oriented innovations implemented by the University to overcome resource barriers. Participant Jafari reported:

ABU has a governing council that negotiates for funds. This council may visit the president of Nigeria or the senate to present their case or pressing issue. The University has different unions that are also used to negotiate for funds with the Federal Government. When all efforts fail, the workers will embark on strike.
Participant Hadiya stated:

The University will seek for approval from the Federal Government to increase student’s admission quota because the number of students admitted into the University will determine the funding needed from the government.

One of the action-oriented innovations implemented to overcome resource underfunding barrier was the recent ASUU strike mentioned earlier in this chapter which put all the functions of the University on hold. Participant Elewa reasoned that although the funds provided because of the strike were not enough,

A lot of structures such as buildings for lectures and dormitory have been put up in some departments throughout the University as a result of the funds received. Some direct intervention projects from the government have been very helpful, such as the current water project, draining of the dam to ensure constant water supply at the University.

Another action oriented innovation implemented to overcome resource underfunding barrier is having a meeting with the campus stakeholders to discuss the issues of underfunding as stated by Participant Mosi earlier in this chapter. Participant Adiya stated that ABU administrators are appealing to the Federal Government to increase the budget allocation to the ministry of education.

**Administration and management.** Half of the innovations reported by participants fell in to this category of management-oriented innovations to overcome resource barriers, including establishment of a needs assessment committee, and staying within the limits of available financial resources as stated earlier in this chapter by participants Participant Mosi and Participant Elewa.
Participant Abdalla reported,

Administrators prepare for issues that arise as a result of underfunding of the universities such as staff crises and strike and boycott of lectures in response to budgetary allocations from the Federal Government.

Heads of departments at ABU, have also developed some effective strategies to maximize resource allocation, such as maintenance of departmental vote books, observance of spending limit, and pre-auditing of pay vouchers. Department heads send the needs of their departments to the vice chancellor who approves funds for that need. Requests for financial assistance are also channeled to the vice chancellor who will address the needs according to financial resources available.

Participant Hadiya stated that, “The funding for salaries and wages by government has been regular and reliable. However, funding of overhead cost has rather been unstable for some years now.” To cover the overhead costs, University officials have been relying on IGR funds that are annually determined, and difficult to approximate, as they depend on student enrollment each year. However, these resources have been useful in bridging the funding gap.

Participant Adiya stated,

I deal with the uncertainty by being frugal with the little that the department gets. Some of the University administrators in the STEM discipline such as medicine and public health, sometimes deep hands into their pockets to fund some lab work and provision of other resources in their departments.

Participant Adiya further explained that sometimes University management increase the budget estimates to get increased resource allocation. Sometimes they lobby members of the National Assembly to increase the allocation.
Theme III: Consequences

The administrators interviewed for this study identified the following three stakeholders that are affected by insufficient funding:

1. University or Organization – the effects of the lack of funding on organizational processes, administration, infrastructure, and mission.

2. Employees – the effects of the lack of funding on employee morale, attitudes, compensation/incentives, and career development.

3. Students – the effects of the lack of funding on student access to courses, achievement, and quality of education students are receiving from the University.

This is important because students need these courses to acquire required skills and knowledge to compete effectively in the job market upon graduation.

The Effects of Underfunding on the University

The underfunding at ABU adversely affects every functional area of the University administration. Participant Keanjaho was certain that underfunding affects the administration, in handling of daily or monthly transactions. Prolonged underfunding has also resulted in decayed infrastructure and a decline in the quality of teaching, research, and learning. Participant Abdalla pointed to the issue of inadequate allocation towards electricity for the University, which affects all functions, programs, and activities in the University even teaching resources or material and equipment, and funding capital projects. Participant Habib stated that stagnant academic and research activities frustrate the University administration and there are extreme cases when there are no funds at all for administrators to manage the school or to cover most of the University expenses.
Participant Abdalla reported that,

Underfunding affects the University’s ability to recruit qualified staff, procure required equipment, equip its libraries, maintain its facilities, and pay contractors….for the contractors, there are delays in payment of services rendered.

Alumni are asked to come to the rescue of the University. As an institution, ABU cannot provide the tools and resources required for academic work because the quarterly allocation to every department is grossly underfunded.

Participant Hadiya shared two financial challenges the University has faced since he became an administrator and how they were resolved. The first of these was the issue of shortfall of staff monthly salaries. For example, staff salaries were underfunded for the month. The University decided to source for funds in order to make up the total amount for the payment of staff salary. The other issue related to the payment of electricity bill from overhead accounts. For the month in question, the number of bills sent for settlement was more than the balance recorded in the overhead accounts. The University experienced financial challenges, since the amount available for settlement of electricity bill was not sufficient. The University therefore, decided to source for fund to make up the amount for the settlement of the electricity bill.

Participant Hadiya shared, “Sometimes the University administrators summon a meeting of campus stakeholders and issues of underfunding will be discussed. The administrators explain to the campus stakeholders, the amount budgeted and amount approved which resulted to shortfall.”

Another administrator felt that the challenges facing the administration of the University, along with underfunding are a lack of compromise and unstable policy execution.
Participant Nadira shared,

When admission of students has been completed following laid down rules, all of a sudden it would be cancelled and new list emerged, probably to benefit individual groups at the expense of merit. At times, employment may be done by one single person without passing through the committee constituted for this purpose thereby bringing acrimony and mistrust within policy executors.

This means that some ABU administrators are not following the University policies.

Participant Nadira further explained that the issue of underfunding challenges in the University administration will be difficult to address unless sincere and honest leaders are appointed free of religious bias and ethnicity.

Underfunding can be attributed to non-adherence to budget proposals or laid down rules and the government insistence on certain admissions percentages. For example, admission of candidates should be 60 percent science and 40 percent non-science courses. The University has not been able to adopt that policy because of a mass failure (low student performance) in science subjects particularly mathematics coupled with the inadequate allocation of funds by the government. Economic, cultural, social, and political issues also affect the funding of the University in the sense that the stability of the country may affect the revenue, which in turn would affect the funding of the universities.

The University administrator's experience with underfunding affects the daily management of the institution. Participant Jafari stated that without adequate funding, administrators cannot succeed in carrying out their daily responsibilities and be proud of their jobs, or have job satisfaction and this affects the activities and functions of the University.
Similarly, Participant Mosi argued that underfunding affects the operational capacity of the administration of the University. For example, the library of the University could not afford to buy all the daily newspapers, thereby denying the students and the readers in general of having a balanced opinion on the day to day events in the country and the world. The prolonged underfunding by Federal Government has affected University activities in many ways such as decreased maintenance of roads, water and building, electricity supply, research, teaching materials. The government money allocated to the University is theirs and should not be applied to the projects for which it is meant.

Participant Mosi further argued that,

Prolonged underfunding has forced the University to cut its cloth according to size.

In other words, expansion, in terms of introduction of new programs and expansion of existing ones, has been made difficult. The University cannot also increase its presence carrying capacity due to lack of the necessary infrastructure.

As a result of underfunding it is difficult for ABU to carry out its plans and activities.

Participant Abdalla referenced underfunding as the reason for the recent ASUU strike that lasted for seven months and put all the functions of the University on hold and stated:

The strike partially improved the underfunding situation in the federal universities including ABU because some of their demands were met, although the funds were not adequate to finance or facilitate the University projects. This issues of earned allowances were partially paid to all unions of the University. Teaching and research suffer the underfunding more than other functions of the University.

Participant Keanjaho argued that, the demand from student groups, teacher groups, and civil
society activists have affected the goals and functions of the University in different ways such as demonstration, riots, and strike. This happens when the group’s demands are not being met or when the groups are unhappy with some decisions made at the University.

Nigeria has a democracy that respects fundamental human rights, which include freedom of speech and freedom of association. Therefore, demands from these groups affect the goals and functions of the University. For instance, in ABU, students, worker’s groups, and civil society groups are represented in many decision-making organs of the University, and whenever there are important decisions to be made, they are consulted. Failure to consult them, or failure to get their opinions affect the goals and functions of the University.

**The Effects of Underfunding on the Employee**

Participant Keanjaho reported that the underfunding at ABU affects staff most in nonpayment of salaries. Salaries are delayed and necessary materials are not provided. Participant Abdalla elaborated that, “the funds allocated to the staff salary are always inadequate at the end of each year and as a result universities look for better funds on their own to make up for staff salary.”

According to Participant Hadiya, underfunding affects how the administrative different groups interact, relate, and collaborate with each other. If underfunding is noticed by different groups in the University, they become disruptive because they have been denied of their financial benefits as mentioned earlier in this chapter. For example, because of underfunding, the administrative staff may be denied of workshops to attend, professional development, and other incentives they need to grow in the profession and perform their daily responsibilities. They can also collaborate with each other negatively to cause confusion in the University administration as earlier mentioned. Underfunding has also impacted negatively on the role academics play as some of
the instructors’ sell handouts, and exam marks to make ends meet. This is a grave negative consequence that could potentially mar the reputation of ABU, and the value of education that students earn from ABU. In the long run, it may affect the enrollment of students, as the credibility of education earned from the University decreases in the private and government sectors.

Underfunding also affects staff collaboration with each other, such as conferences workshops, seminars, meetings, and through staff exchange programs such as sabbatical appointments, visiting, and students’ academic trips. Inability to fund such activities leads to dissensions, strikes and ultimately loss of resources.

Participant Habib stated,

ABU has faced some financial challenge since I became an administrator such as dilapidated residential living areas for staff; lack of adequate funding for the day to day running of their departments; some projects are suffering such as roads, water supply, and teaching materials; staff welfare, lack of recreational facilities, staff children schools (primary and secondary) and other staff incentives.

The same participant expressed more sentiments, and added that due to underfunding the head of a department sometimes take their own money to offset some expenses with the hope that they will be reimbursed accordingly when the allocation comes. These expenses include gas for the department car for students to go on academic trips; purchase of lab equipment and materials. This kind of underfunding affects student’s graduation time. Sometimes the allocation rarely comes, and the head of departments end up not being reimbursed.
Participant Habib stated,

Stakeholders are fully aware of lack of staff welfare, lack of water, lack of timeliness in executing the program due to lack of funds, untimely payment of teacher's salary which end up affecting the attitude in which staff work, lack of staff motivation which lead to increased staff turnover. It has become a tradition to do what you can and forget the rest. Underfunding also affects the caliber of staff employed at the University.

Participant Habib further opined that,

Individuals have different thresholds of endurance or patience. It aggravates and generates a lot of attitude when requests are made and it is not forthcoming especially when the staff has dependents they feed and cannot feed them because of nonpayment of salary. This problem makes staff to start exhibiting improper behaviors and attitudes such as banging on the doors and using abusive words on the administrators.

Participant Hadiya stated that sometimes she is very uncomfortable in carrying out her duties because the aged pensioners will come from time to time to find out whether their claims have matured. Some will be confrontational and frustrated for not seeing positive result in regards to their outstanding claims. The participant further summarized several underfunding experiences that had occurred:

Payment of gratuity entitlement of the retired staff is grossly underfunded. Some retirees were paid while others were not. Payment of pensioner’s increase of monthly allowances is also underfunded. Payment of death benefit to the deceased next of kin also experience underfunding.
Participant Hadiya explained that without adequate funding, one cannot perform to earn positive result. For one to succeed there is the need for adequate fund to run the administration smoothly and attain job satisfaction.

Participant Keanjaho reported that these are pensioners who retired as of June 2004, and they are retired with gratuity. When they fulfill all requirements, they will be placed on pension and currently this is not being done due to underfunding. The University has resorted to making partial payments to these pensioners instead of full payments. The University recently paid these pensioners for five out of fifty-three months. Also, death benefits are not being paid to the beneficiaries.

Echoing the effects of underfunding on administrator functions as mentioned earlier in the chapter, Participant Nadira states,

Underfunding of the University affects my role as an administrator in various ways. First I don't feel comfortable giving negative response to staff due to underfunding. Some of the staff confronts me openly creating an embarrassing situation and this leads to frustration and dislike of being an administrator.

Administrators want to know why there is no allocation for staff training and professional development to better prepare the University to face the problem of underfunding. Participant Elewa in the STEM program stated:

Underfunding of the University has made me to deep hands into my pocket to fund some lab work and provision of other resources in my department. Most of the times funding provided for the resources are not enough, sometimes not funded at all.
University administrators address this underfunding challenges within the limits of the available financial resources. Administrators must prepare for issues of coping with the union demands, unrest among the workers and strikes by employees as a result of inadequate funding.

**The Effects of Underfunding on Students**

According to Participant Abdalla, “one of the effects of underfunding has to do with the production of what is termed “half baked” graduates, who are unfit for the labor market because of lack of instruction.”

The underfunding at ABU also affects students in the area of equipment, facilities, and accommodation (dormitories). Underfunding affects students when they are made to pay more than expected. Additional fees are also introduced, and some basic materials and equipment are not provided. These problems can lead to student demonstration. Participant Jafari stated,

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Student teaching and research at undergraduate level are most sensitive to the problem of underfunding. Students have a specified period to graduate and the problem of finance affects the graduation time as well as quality of teaching and certificate they receive. If the University is underfunded, students will be affected in area of maintenance of dormitories and teaching equipment. There is no doubt that the problem of underfunding facing the University would affect the quality of the products of the University.
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**Theme IV: Empowerment**

Revenue generation-oriented innovations implemented by ABU to overcome resource barriers include the acquisition of funds from other sources such as internally generated funds (IGRs) through fees and levies; alumni donations; and donations from the public sector and
international organizations. This has helped ABU to offset some of its expenses. The uncertainty in government funding allocation is dealt with by using IGR to supplement/augment Government shortfalls in funding University operations over the years, as explained by one of the administrators.

Participant Abdalla expressed the feeling that the Federal Government has always done well in funding personnel costs, unlike the overhead funding and capital, as mentioned earlier which has made ABU administrators to seek for outside funding from both private and public organizations.

The University Directorate of Advancement is collaborating with departments and agencies within and outside the University with the purpose of increasing resources within the departments. This collaboration includes technology transfer offices, and corporate partners-internship projects.

Participant Mosi reported that ABU has benefited from funds provided by donor agencies, organizations, and individuals. ABU have also provided sponsorship for staff training within and outside the country. ABU had approached alumni, individual in the society, private sectors, such as banks, corporate bodies, and philanthropists.

Participant Keanjaho reported,

ABU has been able to acquire alternative funds by: 1) application to TET Fund, which accounts for over 70 percent of such funds; 2) endowment funds, which yield little; 3) the University's alumni association, which for now is an insignificant donor. These funds help in improving the existing infrastructure, and research equipment, as well as acquiring new equipment.
Some of the University administrators solicit funds through direct personal contacts, contact to mutual friends, contact to alumni, and endowments. Participant Nadira provided an example of how administrators step in, in their individual capacity and provide financial help since the University could not provide funds for such linkages due to underfunding. The administrator funded his trip to US in March 2016 for an international conference in Nevada, pursue a linkage program with North Carolina State University college of Veterinary Medicine and at Atlanta Georgia where students can have the opportunity of training at a Veterinary Specialist Hospital.

Through the interview data, it became apparent that administrators did not feel empowered to employ innovative strategies to maximize resources. Based on the information collected, it was not clear whether it is due to a) the culture of higher education in Nigeria, which is steeped in post-colonial approach towards affairs of state, and reliance on bureaucracy which is bogged down with red tape, b) lack of motivation on part of the administrators, or sense of responsibility to employ such strategies or, c) lack of administrative capacity (knowledge, skills, training, etc.) to employ such strategies. Lack of empowerment appears to be exacerbating the fiscal condition.

**Theme V: Connection**

In this section, interview data regarding participants’ knowledge about external environment, interactional and private actors are presented. Through the interview data, it was observed that administrators appear not to know about the connection with and impact of other universities, international actors/private on them directly and the University. Although they respond that generally, there are positive or no effects, they do not make connections about how conditions in the external environment relate to resource allocation or the availability of resources for the University.
To properly answer the research questions on this study, administrators were asked how they make linkages with other factors such as the external environment, international actors, and other federal universities and private sector and the effects of the external environmental factors on ABU. The administrators who were interviewed appeared to be unclear about the connection with, and impact of other universities on the functioning of their University. In addition, administrators also appeared to be less cognizant of the role played by international actors in higher education, be it private or nonprofit agencies, and how they can affect them directly and the functioning of the University at large. Although the majority respondents agreed that there are positive or no effects, they do not make connections about how conditions in the external environment relate to resource allocation or the availability of resources for the University. In other words, the University functioning, funding and resource allocation is conducted in a vacuum, where external environment does not provide any stimulus for change.

**International Actors**

There are some external environmental actors that relate to University resource acquisition such as the private sector, other federal universities, and international actors. Adiya summarized the donations from international actors to ABU:

International actors such as Fulbright, and the Bill and Melinda Gates Foundation have provided ABU with donations. All foreign allocations for the University are channeled directly to the universities directly, and not through the government.

Adiya explained that ABU has enjoyed some patronage from foreign foundations, but there are always strict conditions attached to the funds and once the conditions are met the funds will be released. A mechanism has also been put in place to ensure that the funds are used for the intended purpose.
According to the participants, the international actors effect on the allocation of resources targeted to ABU is very minimal. These donations are more often the result of University or department efforts to secure research funds from the organizations.

**Other Federal Universities**

Interviews with some of the participants regarding whether other federal universities affect the allocation from Federal Government and resource flow from the private sector to ABU revealed a different understanding. While these participants knew about the underfunding problem, and were aware of the funding mechanism, they were not aware how other universities could affect the allocation of resource allocation to ABU from the Federal Government.

Participant Mosi stated, “Obviously yes, presently Nigeria has a total 125 universities: 40 federal universities; 38 state universities; and 47 Private Universities. Each of these universities wants to have a share of what is described as ‘national cake’.”

Participant Elewa stated that,

Establishment of more federal universities no doubt affected the allocation of funds from the Federal Government, and resource flow from private sector to ABU as well as poor financial management and misappropriation of funds. The establishment of more federal universities, without commensurate funding affects the funding of ABU.

Participant Jafari argued,

The rapid expansion of the University system in terms of the numbers of institutions and enrollment of students since the 1960s created significant financial burden on the management of Nigerian federal universities because this rate of expansion has been accompanied by a corresponding increase in the number of academic, administrative and technical staff employed, as well as the expansion in the number of programs offered.
Participant Jafari further stated that the decline in funding adversely affected the quality of teaching and research in the universities, and the working conditions of employees of the universities.

A predominant notion, expressed by participants was that of assurance, that the Federal Government has everything figured out, and they operate on a basis which may be skewed but does not affect ABU negatively.

Participant Abdalla stated,

The Federal Government has a way of allocating funds to the various universities, as it is not really clear to see if other universities are having any effect in the way the Federal government allocates funds to ABU except that the funding sometimes may be skewed towards first and second generation universities of which ABU is a beneficiary.

Participant Habib expressed something of an opposing viewpoint:

The effect of other federal universities in the allocation from the Federal Government, and resource flow from private sector to ABU depends on the administrative skills of different vice chancellors.

Participant Habib farther explained that some vice chancellors discuss distribution of funds and any problem they are having in the University with stakeholders, while some vice chancellors will hide the process… “Finally, obviously other federal universities affect the allocation from the Federal Government and resource flow from the private sector to ABU but I cannot ascertain to what extent.”
Participant Keanjaho argued,

Apart from other federal universities affecting the allocation from the Federal Government, and resource flow from private sector to ABU, the economic crises facing the country, corruption, and lack of accountability play some roles in the allocation of funds to ABU.

**Private Sector**

According to Participant Abdalla, the Nigerian private sector has been made to contribute to the funding of universities. Some respondents reported that private sector funding is minimal and does not affect the funding received from the government or University functions. Participant Abdalla was adamant when asked how the demands from private sector affects the University funding he stated, “Demands from private sector does not affect University funding received and its array of functions.”

Participant Mosi stated,

The graduates of the University are utilized not only by the government but also by the private sector and some of the programs run by the University are tailored to suit the needs of private sectors, and research activities are sometimes targeted for the private sector. For example, the University even with inadequate funding prepares its curriculum based on the knowledge and skills private sectors are looking for when they hire graduates to work for them. This enables the graduates to be more marketable. ABU sometimes submits research proposal to the private sector for sponsorship or invite private sector for special project sponsorship such as building of student dormitory due to scarcity of student accommodation.
Linkages to Other Factors

In terms of linkages to other factors, the respondents answered questions which provided information on how they interact with internal and external sources of actors that have bearing on resources received by the University.

Through interview data, it can be said that respondents did not identify the external environment to have any negative impact on the University functioning. Respondents revealed that the University has received support from international agencies, primarily donor agencies. While, this has helped the University in terms of supporting programs that would not have been supported otherwise, the function comes with tight accounting requirements which does little to help the University deal with any shortfalls in funding.

While participants knew about the underfunding problem, and were aware of the funding mechanism, they were not aware how other universities could affect the allocation of resources allocation to ABU from the Federal Government. A predominant notion, expressed by participants was that of assurance, that the Federal Government has everything figured out, and they operate on a basis which may be skewed but does not affect ABU negatively.

ABU has had to engage in the rigorous revenue drive to augment government funding in these areas. The University has acquired outside funds from many organizations both private and public. Participants held the opinion that private sector funding is minimal and does not affect the funding received from the government or University.

The Effects of Underfunding

The effects of insufficient funding are multiple, far reaching, and impact all levels of the organization, its employees, students, and industry. Many of these consequences are rooted in the
funding allocation process, and lack of effective responses by administration due to lack of capacity and entrepreneurial behavior. With a population of over 50,000 students and staff, ABU has faced serious challenges in its efforts to satisfy stakeholders. The students, civil society, and teachers demand a learning environment that is peaceful and secured.

**Effects of underfunding on the University.** Participants mentioned that underfunding causes and impedes the working of the University, because there is not enough allocation to run the programs and meet the goals of the University. This causes the University to not pay for basic operations such as staff salaries and utilities bills. This causes student demonstrations, strikes by staff, etc. A strike leads to a more confusing state because “staff will come to work every morning but will not teach and will not take instructions from their superiors.” (Participant Abdalla).

**Effects of underfunding on employees.** Participants mentioned how lack of funding has affected them because they are not able to devote resources towards basic employee functions such as in-service trainings and pension. This has contributed to a very low morale and a feeling of helplessness among the administrators.

**Effect of underfunding on students.** According to the participants, student suffer a lot because their time, and government’s resources are not being spent efficiently.

**Administrator’s Recommendation to Solve Funding Issues**

The interview guide contained a question on recommendations from the administrators on how the University can resolve the funding crisis. This question was asked to gather opinions on a few key areas of interest to the researcher. First, in context of the resource dependency theory, the researcher wanted to explore the autonomy that the administrators realize that they
have over their department. This aspect ties into the power dynamics predicted by the resource dependency theory, which stated that those who have resources command power. Second, the researcher was keen on exploring the universe of feasible strategies that administrators have gathered over time, but those that have not been reported in literature.

The following question was asked during the interview: What administrators think the University can do differently to attract more funding from both government and private sources.

Administrators offered the following recommendations which are summarized in this section. The responses from interviews can be categorized under the following recommendation areas:

1. **Financial Management** – Improvement to financial management and budgeting strategies and processes.
2. **Program Development** – The development of existing and new programs to help adjust to funding shortfalls.
3. **Research Agenda** – Developing research agendas and strategies that encourage external stakeholder investment or sponsorship.
4. **Entrepreneurship** – Engage in and promote entrepreneurial behavior to increase revenue.
5. **Administrative Capacity** – Promote training, collaboration, skill development effectively manages and source alternative revenue during periods of funding shortfalls.

**Financial Management**

Administrators recommended improvement to financial management and budgeting strategies, and processes such as the management of funds and the allocation of resources. One administrator recommended professional development training for administrators on how to manage funds and create alternate funding sources.

Participant Habib stated:
The resources and experts the University has are barely utilized the way it should. The management of funds in the federal universities depends on the vice chancellor’s administrative skills and ability to manage the University as stated earlier in this chapter.

Participant Hadiya spoke in that direction and stated that the University should learn to be prudent and accountable in the management of resources at its disposal. They should also learn to prioritize in the face of dwindling funding of the University. “The problem in our universities is not funding per say but the management of the funds.”

According to Participant Elewa, ABU administrators need to make a special appeal to increase their annual funding budget to the Federal Government with supporting evidence to the Federal Government. The University may invite the government to take up sponsorship of special projects and private sector to build student hostel as suggested by Participant Mosi earlier in this chapter. According to one of the participants, the University should be operated as a profit oriented entity for it to survive the future.

Participant Abdalla stated, apart from drawing the attention of stakeholders to its funding problems, the University should do the following:

1. Expand its internally-generated revenue (IGR) base by engaging in revenue-yielding ventures.

2. Empower the Alumni Association towards mobilizing funds for the University.

3. Focus its research activities on areas of need of the society particularly the industrial sector of the economy.
4. Approach entrepreneurs, industries, and other organizations (government inclusive) to sponsor research in relevant areas.

5. Engage in more commercial ventures.

**Entrepreneurship**

Administrators recommended the University to engage in and promote entrepreneurial behavior to increase revenue. There is a need for some training in entrepreneurial ventures, which will help to manage underfunding problem because it will encourage administrators seek different directions ways to raise funds, as well as to showcase and publicize its programs, activities, and research results.

One of the participants stated,

Although it is noted that entrepreneurship training is now being advocated/established on our campuses, universities must do business like any businessman/woman being a legal entity, it must live up to its reputation to patent some of its research works, to also engage in bakery, bottled water using the logo of the University and the University community is a large market to draw from.

Participant Habib stated,

On the other hand, the University should increase its internally generated funds such as getting more research funds from organizations globally. Utilize its experts in different areas by getting involved in engineering contracts from big companies that students can use for projects. The University should get more
involved in the agricultural systems so students can practicalize what they have learned.

**Administrative Capacity**

Administrators recommended development of administrator skills and competencies and ability to effectively manage and source alternative revenue during periods of insufficient funding. According to Participant Jafari,

Organizing more frequent staff training and professional development will help better prepare the University administrators to face the problem of underfunding in the institution through knowledge acquired and become more efficient.

At the administrative level, a clear and concise picture emerged as to what the University can do differently to attract more funding from both the government and private sector. The importance of adequate funding and the impact of underfunding among administrators were also consistent during these administrative interviews:

To attract more funding from both government and private sources, Participant Hadiya suggested the following measures:

1. The University could seek for approval to increase their yearly student's admission quotas. The number of students admitted into the University determines the amount of funds needed from the government.

2. Private sources: seek for funds from well-established organizations such as NNPC, Dangote Company and many others. The school should intensify its revenue drive by engaging in more commercial ventures. It should also commercialize some of its services. Currently some of its services especially those rendered to students are rendered free of charge. Where fees are charged, they are highly subsidized.
Participant Adiya stated,

The University can attract more funding from both government and private sector by encouraging staff to attend international conferences. This will help staff to establish linkages with other universities and make contacts with other colleagues they meet in those conferences. However, international and national conferences involve registration, lodging and travel expenses. It is an expensive option for the staff to network with other professionals in their field.

Although two administrators knew about the issues the University is having and were aware of the funding mechanism, they clearly were not as positive about what to do differently to attract more funding from both the Federal Government and private sector. Another respondent held the view that there is a limit to what government can do. Individual companies can also invest in universities by sponsoring projects, and donations, however universities should take the lead. For example, construction of roads where engineering students can engage in practical experience; building of hospitals where students can conduct medical research.

**Program Development**

Some administrators recommended:

1. Development of existing and new programs to help adjust to funding shortfalls. To improve their financial condition, University can introduce non-degree courses for continuous education. These are not funded by the Federal Government and have the potential to generate more funds.

2. Apart from the normal budgetary allocations, the University can also package special projects to the Government for sponsorship.
3. Introduction of part-time program such as LVT (Long Vocational Training). This program is introduced to enable teachers from secondary schools, and colleges to acquire their degrees through part-time training. These attract a lot of funds through payment of school fees and other charges and will help to facilitate different financial commitments. In similar vein, other postgraduate programs can also be introduced part time.

**Research Agenda**

Administrators recommended developing research agendas and strategies that encourage external stakeholder investment or sponsorship. Participant Mosi stated, “There are so many problems in the country. The University may submit research proposals to the Government or private sector for sponsorship.” ABU should focus its research activities on areas of need of the society particularly the industrial sector of the economy says another administrator. Other administrators were of the opinion that the University should approach entrepreneurs, industries and other organizations, government inclusive, to sponsor research in relevant areas. ABU should also engage in more commercial ventures, as well as seek for research funds from organizations globally. One administrator reported that the stagnation of academic and research activities frustrates the University administration.

**Conclusion**

The data for this exploratory case study research was collected through interviews, document review and observation. The analysis of data was done with the help of computer aided qualitative software, NVIVO, which yielded five themes to describe the experiences of central administrators at ABU. The analysis of data has highlighted the problem of underfunding,
and its role in limiting administrative functions. The lack of awareness of administrators in resource acquisition, contributed to lack of funding in the University. Lack of proper management of funds allocated to ABU was also a factor in how underfunding affected University functions. Additionally, from an institutional perspective, the delayed release in funding allocation by NUC was problematic. ABU has benefited from external actors especially international actors, which have invested in the development of University programs and facilities. Administrators through the underfunding experience have learned to manage what they have. Analysis of data performed in this chapter, informs the conclusions and recommendations which will be presented in the next chapter. Additionally, the next chapter contains a summary and discussion of findings, limitations, implications for practice, and recommendations for future research.
Chapter Five: Conclusions and Recommendations

This problem of underfunding of Nigerian higher education has been researched in the literature (Afolayan, 2015; Muhammad, 2010). However, the problem of how underfunding affects University central administration has not been examined.

This study was conducted to gather evidence of how underfunding in Nigerian federal universities affects the University central administration. The study was guided by the central question: What are the organizational and systemic factors in the Nigerian Federal University system that impact funding management by University administrators? Four specific research sub questions were considered for examination and its relationship with external actors. This study involved the collection of data through numerous mechanisms including open-ended interviews, document reviews, first-hand observation, and extensive review of the literature.

1. What role do University administrators play in resource acquisition?
2. How does the external environment affect University resource acquisition?
3. What are the alternative revenue generators explored by University administrators to overcome underfunding?
4. What is the experience of University administrators in a Nigerian federal University as they contend with the impact of underfunding by the Federal Government?

The case of underfunding of higher education institutions in Nigeria is not an exception. This is a reality that university administrators contend with in most developing countries in Africa, and other continents (Saint, Hartnett, & Strassner, 2003). Even though the case study has focused on Nigeria, the implications for practice can be generalized to other countries facing similar impediments in funding. It can be argued that conclusions from one case study, in one
country cannot be generalized to the continent, that it is difficult to paint the entire continent of Africa with a broad brush. Yet earlier research on education conditions across the continent of Africa has led the researcher to argue that there are commonalities in the education systems across countries (Teferra & Altbachl, 2004), which will imply that the conclusions from this research may be applicable to other countries. A United Nations University Report (2009), which has published country specific research across the continent of Africa, pointed to insufficient education support starting from elementary school level to higher education institutions (UNU, 2009). The report by UN University states that higher education institutions across Africa are plagued by high levels of inefficiencies. In this context, the present study is useful to identify the constraints faced by institutional stakeholders, their experiences, and factors that contribute to observed inefficiencies. Similarly, the findings from this research and implications for practice may be customized for adoption by similar stakeholders in other countries within the continent of Africa.

**Summary of Findings**

The exploratory case study analysis revealed major findings that are tied to the overarching research question, the four sub-questions, as well the theoretical framework and literature review. This study looked at underfunding from the organization and institutional perspective, and not the student perspective. This is a departure from the existing literature that focuses solely on the demand side imbalance in resource allocation, which is caused by the growing number of student enrollments. While this conclusion in literature is not debatable, it is also required to examine how administrators, on the organizational end, redistribute the funds per University priorities. This case study research is a unique contribution to Nigerian higher education, as it relies on the interviews conducted with the administrators in addition to the
documents reviewed. In the review of literature for this study, another study of this nature was not located that explores the experience of administrators in an environment of underfunded priorities. Specifically, this is the only research effort, at this date in time, undertaken to collect administrator’s views on underfunding and how it affects day-to-day operations in the University.

The central question posed in this research explored the organizational and systemic factors that impact funding management by University administrators. The findings revealed a systemic dissatisfaction with the way the Nigerian Federal Government has allocated funds to the federal universities. The case study also revealed that there was an expectation that the government needs to provide the funding for all operations, without any sense of entrepreneurship among the administrators. Not only that, the administrators who were the participants in this case study were not empowered or seemed ignorant about the discretion with which they may be able to attract more resources to the University.

The following specific conclusions can be drawn from the analysis undertaken in this research.

**Conclusion 1:** University administrators do not play a central role in resource acquisition apart from preparing annual budgetary documents and devising ways of boosting internally generated revenue (IGR), which is used to bridge the financial gap. There is no policy, or directive in the employee protocol that promotes or restricts the administrators from resource generation functions. In other words, it’s an area that has not been highlighted for administrators to act. Most respondents seem to be unaware of a role that they can play towards resource acquisition. This unawareness has led to low fund raising efforts by administrators. Similarly, administrators did not appear to be empowered to employ innovative strategies to maximize
resources. It is not clear whether this is due to (a) the culture of higher education in Nigeria; (b) lack of motivation/sense of responsibility to employ such strategies; or (c) the lack of capacity to employ such strategies.

**Conclusion 2:** Lack of empowerment appears to be exacerbating the fiscal condition. Furthermore, the participants did not know about the connection with, and impact of other universities, private / international actors on them directly and the University in general. Although the respondents replied that generally, there are positive or no effects, they do not make connections about how conditions in the external environment related to the resource allocation or the availability of resources for the University. Overall, the administrators do not appear to understand or be aware of their role as it pertains to potential opportunities maximizing resource allocation. According to Participant Lindana, administrative personnel present reports to the government regarding the state of University administration. Another view was offered by Participant Abdalla, which is fairly common in Nigeria: The workers’ unions joins the administrators in appealing to the government for better funding and when all efforts fail, the workers embark on a work strike.

One respondent traced the responsibility of management of funds in any federal universities to the administrative skill of the vice chancellor. The administrator’s role in resource acquisition depends on the administrative skills of different Vice Chancellors because some vice chancellors choose not to discuss the distribution of funds and problems they are experiencing with the stakeholders. The openness and transparency of the vice chancellors helps in addressing the underfunding issues and facilitating resource acquisition.

**Conclusion 3:** Three types of innovative activities were identified based on the responses from administrators about inadequate funding:
1. Revenue generation. Activity related to creating, sourcing, accessing, or utilizing alternative sources of revenue to meet operational needs during periods of inadequate funding.

2. Administration and management. Activity related to altering existing or creating new organizational processes to cope or adapt to inadequate funding.

3. Action. Activity including strikes, negotiating and bargaining, increased communication with staff because of inadequate funding.

Participant Keanjaho stated that ABU administrators also make use of internally generated revenue such as money realized from student fees and charges as well as seek for alternate funding sources from corporations, alumni and international organizations and foundations.

Conclusion 4. In Nigeria, the private sector has been made to contribute in the funding of universities, hence, the demand by the private sector is to be seen from the positive angle. For instance, TET Fund is of great importance to the universities as it is the major fund provider for executing capital projects in the universities. International actors have affected the University positively because ABU has received funding from some international foundations. International actors such as Bill and Melinda Gates Foundation, and the Fulbright organization, have made research contributions to ABU several times, in addition to the Federal Government funds received in the University. While ABU has enjoyed patronage from foreign foundations, respondents revealed that these grants are accompanied by strict conditions.

Once funds are received on behalf of the University they are loaded into the appropriate account and all the receiving books of accounts are maintained. There is no doubt that federal universities affect the allocation from the Federal Government and resource flow from corporate
sector to ABU because of many more federal universities have been established without commensurate funding.

Rapid expansion of the University system in terms of the number of universities, enrolment of students since the 1960s, has caused a lot of funding problems in the management of Nigerian federal universities. This expansion is accompanied by a corresponding increase in the number of academic, administrative and technical staff employed, as well as increase in the number of programs offered in the federal universities, as stated earlier in Chapter Four. The increase in federally funded universities has decreased the share of the budgetary pie that goes towards ABU.

The three main findings of this research study are:

1. The administrative staff, although required to play a role in resource generation, are not aware of those opportunities or how to go about implementing them. This lack of awareness, and consequent inaction exacerbates the consequences of lack of funding in the University.

2. The administrative practices by the administrators include their reluctance to go on strike, which is usually the norm when demands of any stakeholders are not met. A second practice which was highlighted in this research study was a conserving funding, i.e. to make do with what is available.

3. The University has benefitted from external actors, primarily international donor agencies in acquiring resources for higher level education. Investing in international engagement of University personnel will increase this funding engagement opportunity.
Discussion of the Findings

The findings of this research study create a profile of ABU administrators who consider themselves as very skillful and highly innovative managers of scarce resources. They have learnt to make do with what is available to them to achieve the same results. Findings show that the role of administrators in resource generation requires clarification. There is a need for training of administrators which will benefit the University, as shown from the interview responses. Administrators feel they are lacking training. Several innovative strategies of resource management in underfunded situations have been identified through this research, which is a valuable contribution to Nigerian higher education literature, and to the broader literature on organization theory and practice, particularly to literature on contingency theory.

Resource dependency theory helps to explain the findings of this study. It states that an organization’s internal, as well as external environments, are responsible for its decision making. In the case of University administrators, the decision making about performing certain activities, or not performing them reflects that there is a resources gap that is further reinforced by the internal environment. Similarly, the ability of administrators to engage with external donors and foundations for addressing the resource gap is indicative of their power or their understanding of their ‘discretion’, that is reflected in an organization’s internal environment. This theory explains the important role other organizations play in what institutions do, and how institutions must depend heavily on other organizations for resources they do not have. As Powers (2000) noted, “Because organizations cannot generate all their needed resources, they must depend on their environment (other organizations) for resources,” (p. 6). Hillman, Nicholson, and Shropshire (2008) noted that administrators should have multiple identities of resource provision to understand when they will provide advice and counsel or use their external connections.
This study confirmed findings from similar research carried out in the past which concluded that in Nigeria, underfunding of universities have led to overcrowded classrooms, deteriorating physical facilities, and a lack of resources such as textbooks, teaching materials, and laboratory equipment (Faniran & Akintayo, 2012; Ekundayo & Ajayi, 2009). The deteriorating infrastructure and resource shortage has contributed to campus unrest and strikes by both students and staff, resulting in the unscheduled closure of universities for months (Faniran & Akintayo, 2012).

Further, Muhammad (2010) established that the low funding of federal universities, including ABU, affects University management negatively as inadequate funding jeopardizes the ability of universities to meet their operating costs, which constitute expenses such as salaries and learning resources.

Limitations

There were a few limitations of this research particularly regarding methodology and research design. The exploratory case study method of conducting research has some limitations as detailed below:

Methodologically, exploratory case studies lack rigor that is commonly observed in quantitative studies because biases in the study field as well as the researcher may affect the interpretation of results. Yin (1984), as cited in Zainal, (2007), states “too many [researchers] have been sloppy, and ha [ve] allowed equivocal or biased views to influence the direction of the findings and conclusion” (p.21). Second, exploratory case study approach limits biases for scientific generalization because of the use of small number of participants (Zainal, 2007). Third, exploratory case study takes comparatively more time and resources compared to other form or methods of data collection such as surveys or focus groups. Fourth, exploratory case study
depends on one case exploration which makes it harder to generalize conclusions (Tellis, 1997 as cited in Zainal, 2007).

In terms of research design, the limitation of this study was mainly in the number of participants who could be identified to interview. This was primarily because of resource constraints. Second, there was no information available that could corroborate the information supplied by the participants regarding the generation of IGR. Third, there was no audit report that was publicly available for the University or from NUC. Fourth, the researcher’s own bias may have influenced the interpretation of results. This researcher has never been an administrator, and cannot sympathize with the administrators interviewed. This researcher may have consciously or subconsciously been affected by Nigerian education system, and that created some bias. To reduce the bias, this researcher articulated a very important assumption in this study. This assumption was that the Federal Government through NUC has not been allocating adequate resources to the universities. This assumption was grounded in prior literature published by journals and through UN organizations publications. This dissertation recognized that there has been a negative impact on the Nigerian education system due to underfunding as cited in the literature review on Chapter Two. Due to underfunding, some administrators are being more creative, looking for alternative funding sources, but there are still a lot to be done in that areas. The primary goal was to get new information, and gain new knowledge of the underfunding problems in Nigerian federal universities and not to pass judgement on an institution (Rajendran, 2001). Bias was also avoided in how the study was conducted, and the analysis of data completed. Starting with participant recruitment, which was voluntary, all views expressed in the interviews were accounted for while conducting the analysis. Member checking, in addition to triangulation, was implemented to minimize error and increase the reliability of the
conclusions drawn from interviews. All interviews were given equal consideration while conducting analysis. These measures also aided in reduction of researcher bias. Participants trusted the researcher with the information they provided because they believed the study was being conducted with the interest of the University at heart, and that the result of the study may help to improve the underfunding problem, not only in ABU, but in other federal universities in Nigeria.

**Implications for Theory**

As the review of literature demonstrated, research on the underfunding of federal university in Nigeria and its impact on administration is an area that has been researched before. However, there has not been any research on administrators’ perspective, and how they have been able to function with limited resources. The use of resource dependency theory to research the underfunding of federal universities is a unique contribution of this research, and has aided in building theory and evidence within the field of higher education in Nigeria specifically, and in Africa overall.

Resource dependency theory (RDT) addresses strategic management, and deals with the connection between environment, organization and organizational decisions or actions (Pfeffer & Salancik, 2003). This was evident in the data collected as it demonstrated how Ahmadu Bello University interacts with its environment by competing with other federal universities for resources and fund allocation. Further, the data supports the conclusion that federal universities compete among themselves on getting more student enrollment every year. As federal funding disbursed to the universities is based on the number of students enrolled in the universities, maximizing student enrollment is a strategy which would be predicted by resource dependency theory, and was observed in the data (Hillman, Withers, & Collins, 2009).
As prescribed by the resource dependency theory, an organization’s actions are determined by the larger environment in which it exists (Pfeffer & Salancik, 1977). Faced with underfunding, ABU has explored acquisition of alternate funding through different sources such as introduction of fees, ownership of revenue generating products, project sponsorships, public corporations, alumni associations and international donors to overcome the environmental constraints.

This study has some implications for resource dependency theory. Because education is a public good, the agency does not have the option of ceasing operations when faced with chronic underfunding like the Nigerian higher education institutions. This study has extended the application of resource dependency theory in the field of higher education in public institutions to study the role of different stakeholders and their interaction dynamics. The role of administrator is modified, in this context of underfunding, which has led to the administrators in ABU University to:

a) Improve their credentials: Administrators are bolstering their achievements and credentials through attaining PhDs, which is largely an academic degree, in pursuit of justifying their positions and contribution to the organization. Some administrators acted on individual capacity and focused on the needs of their department and students as one of the participants travelled overseas for conferences with his personal money, another participant used his own money to purchase materials for students to do lab work, and all these expenses were yet to be reimbursed.

b) Inter-departmental coordination: Data showed that some administrators are not collaborating with others to achieve a common goal.
c) Mimic other stakeholders: Like other stakeholders, the administrators are resorting to strikes and impeding the functioning of the University.

The interview data showed that depending on internally generated revenue, a hierarchy of federal universities can be informally created within Nigeria, which demonstrates the accumulation of higher quality resources. This is an undoing of the education policy mandate that the country subscribes to. According to Pfeffer and Salancik’s (1978) firms should actively try to reduce their dependency on external resources. This relates to this study because ABU is diversifying its activities to minimize external constraints from its environment in resources acquisition.

Pfeffer and Salancik (2003) further stated that when organizations are regulated by the state, “the importance of the political and administrative environment increases,” and make the consumers less important (p. 203). This is applicable to ABU because since it is a federal University dependent on the Federal Government for funding, it competes with other federal universities for funds. This inadequate funding affects all units of the university- employees, students. One of the participants stated that ABU has created some internal generated revenue to cover the area of budget shortfall which is the basic assumption of resource dependency theory (Drees & Heugens, 2013). The basic assumption commonly used in literature is that administrators try to ensure their university survival.

**Implications for Practice**

Based on the findings and information gained from this exploratory case study research, the following implications for practice were identified. The implications originating from this research apply to higher education administrators more directly, even though some implications
for other stakeholders are discussed, it is acknowledged that those are gathered based on the information provided in the interviews by the administrators.

**Prudent Management**

Findings from this research support that there should be a prudent management of allocated resources. These implications apply to the administrators at ABU and the higher education policy setting organizations such as NUC. In their study, Ofoegbu and Along (2016) concluded that there was a significant relationship between internally generated resources and the management and development of universities in Southern Nigeria. At the University level, IGR should be spent efficiently as this will make more money available for administrators to carry out University activities.

Second, administrators should conduct income and expenditure analysis for each of the income generating projects to determine their economic viability and sustainability. There should be a regular and annual monitoring of income generating activities. To reduce cost, the University’s main focus should be on core activities such as teaching, research, and community service.

ABU could conduct a feasibility analysis of re-introducing moderate tuition, development and sundry fees. This may be useful to gauge stakeholder reaction, and may help the University to design appropriate intervention. This implication for practice is applicable to all the publicly funded universities in Nigeria. A country-wide feasibility analysis may be undertaken by the Federal Government. It may benefit the University to increase its efforts in soliciting funds/fund raising, and increased public services to get more funds. ABU could consider property ownership investments and improve its revenue consultancy services. Development of specialist training
programs, and increased involvement with the corporate sector nationally and internationally may also help the University.

**Personnel Development**

This implication for practice is applicable to the university administrators at ABU and across the universities in Nigeria. Administrators can attend workshops and professional development training on how to manage funds and create alternate funding sources which may help prepare the University administrators to face the problem of underfunding in the institution. Through these trainings, the administrators will develop skills that will allow them the opportunity to evaluate their own departments and the autonomy that they can exercise within the department to change how resources are allocated. Administrators could be educated on entrepreneurship or have entrepreneur experience in managing finances in case they run out of allocated funds. Exposure of staff to training in strategic planning and fundraising could aid in solving the problem of underfunding because the more the administrators are trained, and the more knowledge they acquire, and the more efficient they become in performing their duties. Training in entrepreneurial ventures could help to manage underfunding problem because it will help the administrators to consider different ways to raise funds. Additionally, a knowledge about innovative actions adopted by other administrators in similar underfunded institutions may motivate the administrators to ‘think outside the box’ and try to change their circumstances. Similarly, ABU administrators could be the advocates for their universities. It is possible for them to make a special appeal, with supporting evidence, to the Federal Government to increase their annual fund budget.
Mode of Operation

This implication for practice is applicable to the administrators higher in administrative hierarchy at the universities, namely the vice chancellors at each federal and state universities, as well as institutional administrators at policy setting organization such as the NUC and federal organizations that provide directives for budget making and annual allocations at the Federal, State and university level. In the future, the University should be run as profit-oriented entity, if it must survive the future. Though it is noted that entrepreneurship training is now being advocated and established on the campuses, universities must do business like any other business / legal entity; it must live up to its reputation to patent some of its research works. Universities have experts in different areas who could help in obtaining contracts from bigger corporate actors that students can use for projects.

More efforts towards revenue generation will help administrators run their departments. To address the issue of underfunding challenges the University administration should be free of religious and ethnic bias. To make the University liberal and without any bias, a special committee needs to be established by the government to monitor the administration’s adherence to the University policies. This implication for practice is for the Federal Government of Nigeria, especially the administrators who are responsible for policy setting at NUC.

The University should get more involved in the agricultural systems by having the students practice what they have learned, which would both benefit the students and generate more revenue for the University. In other words, the University should try to commercialize its intellectual property produced on campus through research and development. The University should utilize its resources and experts and the management of the University should work as a team in this revenue drive.
Universities could increase IGR (fees, other sundry charges, as well as donations and endowments, etc.). This implication for practice is specific to all university administrators. To attract more funding from both government and private sources, the researcher suggests the following measures:

a. Seek for approval to increase their yearly student admission quotas, as the number of students admitted into the University will determine the amount of funds needed from the government.

b. The University should seek more funds from private sources such as Nigerian National Petroleum Company (NNPC) and Dangote Company. The University should also intensify its revenue drive by engaging in more commercial ventures, and commercializing some of its services.

**Institutional Administrators**

In addition to administrators in universities, personnel in the Federal Government, NUC and other organizations in the same hierarchy, can review their process flow as well. A transparent process, with high level of accountability, is required in the allocation and use of funds in higher education institutions. In terms of specific implications for stakeholders, budget making administrators could review the specific categorization of all budgeted costs, and cost allowances to determine the real cost of university services. Second, use of funds allocated to the universities could be closely supervised and monitored to capture misappropriation, and misapplication of funds. Third, centers and institutes that are semi-autonomous could contribute to the running costs of the central university administration on a pro rata bases. These are implications that deal with how costs are categorized and accounted for in the current system of
audit practices. A review of the same by an expert as consultant could result in a host of implications that could help to identify resource leaks and improve efficiency.

The Federal Government should increase Federal university appropriations, through Regular & Special Intervention – the Education Trust Fund. In addition, the government must adhere to UNESCO’s recommendation of allocating 26 percent of the county’s total budget to university education. Financial accounts of the universities should be audited regularly so that anomalies would be rectified easily before it gets out of hand, and increase accountability.

Although the country can boast of 74 public universities and 47 private universities, Nigeria does not need such a high number of universities. It should reduce the establishment of new universities, so that the Federal Government can equip and fund the existing ones adequately. A feasibility analysis can be conducted to identify institutions which are not performing well, and appropriate incentives offered to institutions for meet performance standards.

When viewed through the resource dependency theory, the roles of administrators can be understood, and implications for practice be identified. According to the theory, uncertainty in the environment leads to the actors focusing on their own survival, rather than the survival of the organization. In the case of ABU, administrators who are responsible for drawing up the budgets etc., have modified their roles by being more focused on survival. All the administrators interviewed for this study held PhDs, a couple of them had held sabbaticals in overseas universities. While, a PhD degree may indicate that they are academically inclined, it also elevates them to the same standard as the faculty who teach, and in times of uncertainty may solidify their position in the institution, if academic merits are considered as the standard for appointment and retention. However, administrators holding a degree in management, such as
the MBA, may be more fitting as that credential would set a foundation of how to manage the university efficiently. Through this observation, it may be recommended that ABU University would benefit from appointing administrators who have degrees in management, and political science, which would allow their administrators to know how to manage with efficiency as the criterion, and how to form alliances with other stakeholders and other universities so that they may advocate for a change in policies together as a collective, rather than approaching the Federal Government alone.

**External stakeholders**

In addition to the Nigerian government, some implications for practice emerged for other stakeholders, such as the international aid organizations, United Nations and corporate funders. The interview data has highlighted how the specific projects funded by international aid organizations have tight fiscal monitoring and evaluation indicators built into the project. Participants revealed that such requirements have led to less waste and more return on investments. The external stakeholders may introduce training for the administrators on specific fiscal monitoring and evaluation practices which may permeate the University administration. Adoption of culture specific efficient administrative practices may benefit the federal university system in Nigeria. In the long run, this may benefit the grant making by international aid organizations, as the administrators will already have prior know how on the administrative or audit practices.

Second, corporate donors within Nigeria may step into partnership with the University and set up technology transfer offices, which works on commercialization of technology produced within the University.

Implementation of recommendations from this study can be done in the following manner:
Body of research. By continuing academic activity, i.e. continuing research (replicating this study in other federal universities in Nigeria, exploring the experience of other stakeholders such as students, parents, community leaders), and disseminating the results through presentation at conferences and publication in peer review journals, the researcher may produce a body of research which has compelling evidence that specific recommendations will remedy or reduce the financial hardship experienced by the federal universities Nigeria. This body of research can establish the basis for recommending practice changes.

Grant making for training. The researcher may act as a change agent and approach multiple countries in Africa, including the government of Nigeria, and create an agency that prepares curriculum for training administrative personnel, particularly those in higher educational settings. The researcher may also apply for grants (RFPs) in specific countries which targets the training and skill development of administrative officials. Alternatively, the researcher may harness the network and resources of development organizations like OECD, UNDP, World Bank etc. and propose a training program for administrators across Africa, particularly those in the universities.

While it is easy to propose a training, changing the mindset of administrators and the university culture is a monumental task. The institutional culture, that is exhibited in the formal and informal behavior, norms and operating procedures will need to be evaluated and changed, once the administrators are trained on being more entrepreneurial and adopt more efficient administrative practices. Through interviews in this research, it was shown that the administrators at ABU do not recognize identifying and sourcing of external funds as a part of their work within the University. This mindset will be challenged through the training, and it may require a change in mode of operation by all stakeholders; they will need to review their positions and realize how their actions and inactions compound the problem of underfunding. As
stated previously through systematic research in this area, this researcher will build evidence that continuous training is a necessity. Providing examples of where countries where administrative procedures are more entrepreneurial may offer the opportunity to adopt policies and practices that are more suitable.

**Consulting.** Based on the conclusions drawn in this research study, the researcher may approach the Nigerian government and provide consulting services, as a subject matter expert, on how new revenue streams can be identified within a Federal university setting. Using ABU as a model, the consulting can identify potential sources of revenue at the university level, and additional tier of revenue, customized to the local urban area near the University campus may be also identified.

In this study, the researcher observed that the administrators were not aware of how they can tackle the problem of underfunding. The lack of awareness on their role, and how that may influence the overall operation of the university is symbolic of the stakeholder inertia that coexists in addition to the underfunding of universities. As previously stated, training and skill enhancement, connection with other universities, perhaps being a member of a consortium of universities may be one of the ways to enhance awareness. Further, if the push for becoming more entrepreneurial comes from the Federal Government, in the form of carrots, i.e. incentives that may stir the administrators to display leadership and engage in more resource seeking.

**Recommendation for Further Studies**

Underfunding of Nigerian University has resulted in multifaceted problems in the Nation. Not only are the current higher education institutions unable to keep up with the student demand, they are also facing a problem of low or no maintenance of their infrastructural assets. In the
future, this may lead to increased demand for new structures, and increase the burden on the
government.

As mentioned in this case study research, there are five federal universities, which are the
closest to ABU in terms of annual allocation and student enrollment. The five federal universities
on the same level with ABU could be studied for a better comparison, especially those that
receive more funding than ABU such as University of Ibadan and University of Nigeria Nsukka.
These universities could be studied to examine the impact of underfunding to the administration,
students, staff, and research, as well as their efforts in collaborating with other administrators in
seeking for more funds, and their efforts in getting international actors to get more research
funds. Extending the research to other similar federal universities on the same level with ABU
will enable the researcher to see what their perceptions are about underfunding of their institution
and the criteria for some federal universities getting more funding than others from the
allocation.

While survey and quantitative research method could be useful so that more participants
are included in the sample size, the usefulness of qualitative design in this context is higher. Any
quantitative study cannot offer the insights that can be generated through a qualitative
methodology using interviews. One recommendation from this study is that sample size should
be larger; a pool of administrators should be interviewed from various federal universities.
Similarly, underfunding effects on students should be studied at ABU, and different federal
universities.
Conclusion

ABU plays a crucial role in Nigerian higher education in general, and offers quality education and research activities. The University graduated 305 PhDs in year 2016, as mentioned by the vice chancellor in the 38th convocation ceremony of the University (Premium Times, 2016). The commitment and engagement in the leadership of ABU administrators is impressive. The mission of ABU is to advance the frontiers of learning and make education accessible to all. The academic program of the school is primarily tailored to suit the needs of the immediate environment with adequate funding. ABU’s complex structure, the diversity of different areas of research and education as well as the inadequate infrastructure and the difficult financial situation are the biggest challenges to overcome.

The data collected for this study shows, including the responses received from the respondents on the central question, and four sub questions, that ABU administrators do not play a crucial role in resources acquisition to bridge the financial gap. There is no policy that promotes or empower administrators in research acquisition, as some of the administrators seem not to be aware of their role in fund acquisition. It was apparent that ABU has been benefiting by collaborating with some international actors. The increase in the number of federal universities has decreased the amount of funds ABU receives in allocation from the government every year. The three innovations identified through responses from the respondent will help ABU administrators to overcome these resource barriers.

Considering the growing number of federal universities in Nigeria, it is apparent that the Federal Government may no longer be able to bear the financing of these universities alone. There is a need for federal universities to identify other ways of generating more money, internally or externally, to reduce the financial burden on the government. The critical analysis
of ABU’s financial operations and records in terms of expenditure (actual) income for the past ten years revealed the need for diversification of funding sources. For management to achieve its objectives, the appropriate staff with the requisite experience, and qualification, age and personality need to be employed which requires adequate funding. The Nigerian government needs to understand the challenges faced by University leadership, and should support them with the resources needed to carry out their daily responsibilities effectively and efficiently.
References


Retrieved from http://dx.doi.org/10.1787/hemp-v16-art26-en


doi:10.5296/jse.v1i1.1031


doi:10.5539/jel.v5n2p1


Retrieved from http://www.unilorin.edu.ng/unilorin/downloads/okojie-innovative%20Funding.ppt


Appendix A: Interview Protocol

Interview questions are guided by these three main questions listed in the document, on the basis of that the interview questions can be segmented into three parts.

I. Role played by administrators to secure resources?

1. Can you please share the budget cycle for your department? What sources of funding may be assumed?
2. How do you deal with uncertainty in funding provided by the federal agency?
3. Can you please share your work responsibilities with respect to securing funding, in addition to the allocation received from the government?
4. What methods for negotiating and bargaining for more funds are ABU administrators using?
5. How does the process of fund allocation by the government and National Universities Commission affect your ability to perform your duties?

II. Role played by external environment

6. How has ABU acquired alternative funds from outside sources? To what extent has this helped the institution to meet its financial needs? Who are the main contributors?
7. How has the prolonged underfunding by Federal Government affected University activities and functions?
8. What are some issues that administrators have to prepare for with regards to budgetary allocation from federal agency?
9. How have the demands from private sector affected University funding received, and its array of functions?

10. Have other federal universities affected the allocation from the Federal Government, and resource flow from corporate sector to ABU?

11. How have international actors affected the allocation of resources targeted to ABU? Those resources which are channeled through the Federal Government, and those coming through foundations?

12. Who are the stakeholders and what role do they play on the University’s decision making process? How have demands from student groups, teachers groups, civil society activists affected the goals and functions of ABU?

III. Innovations in University administration

13. Have you developed, or noticed some effective strategies among your peers to maximize the resource allocation to your department?

14. Are you currently collaborating with another department/agency within or outside the University with the purpose of increasing resources within your department? If so, please elaborate (examples include, technology transfer offices, corporate partners-internship projects)

15. What do you think the University can do differently to attract more funding from both government and private sources?
Is there anything else you want to add? Thank you for your time and for sharing your knowledge and experience.
Appendix B: Consent Form for Interview
Appendix C: Introductory Letter
Appendix C: Introductory Letter

Professor E. B. Aman
Deputy Vice Chancellor
Ahmadu Bello University
Zaria, Kaduna State, Nigeria
Re: Letter of Introduction

Dear Professor Aman,

My name is Valentina O. Dimunah, I am completing a doctoral degree program at Northeastern University while working in Boston. I am writing a dissertation on the Underfunding of Federal University in Nigeria, and Perceived Impact on Administration: A Case Study. My research plan calls for me to interview key administrators to obtain their perspectives on the impact of underfunding on the management of Ahmadu Bello University and university decisions. At ABU, I would like to interview 10 administrators in key management positions and with decision making capabilities including administrators in the STEM discipline. For example the DVC Academics, Administrators in Medicine, Engineering, Technology, Business administration, Law, Education, Library, Research and Administrator in Finance and/or Budget who could provide that perspective. I would like the interview to be conducted in ABU facilities or premises between March and December, 2016.

I have two favors to ask of you. First, would you be willing to be interviewed by Valentina? Second, would you be willing to help me schedule the other interviews at ABU? If so, please let me know if the proposed time frame seem workable, and provide me with some suggestions about the people I should talk to, and help me get on their calendars. I would contact you directly on a later date.

Sincerely,

Valentina O. Dimunah
Student Researcher
Northeastern University, Boston Massachusetts
interview scripts to the participants before the interview will help to assure them that information will be kept confidential.

Will I benefit by being in this research?

There are no direct benefits for you to participate in this research, however, potential benefits include using your answers to learn more about the underfunding of the university and its impact on administration. The information learned from this study may help to create more awareness of the underfunding problem, may lead to policy change and enable the government, stakeholders, individuals, corporations to do something about it. Addressing the underfunding problem properly may help to reduce migration of well qualified university instructors to other advanced countries of the world in order to seek for better working conditions and remuneration. The information from this study may help to provide better working conditions and improved standard of living for university administrators and staff in Nigeria.

Who will see the information about me?

Your taking part in this study will be confidential. Only the researchers on this study will see the information about you. No reports or publications will use information that can identify you in any way or any individual as being of this project. All data including audio tapes will be safeguarded by having a security check of passwords so that only those who are authorized by their role in the study can go in and see what they are supposed to see. There will be a system reconfigured to research work so that only those authorized can unzip the files by entering the password. I will also have disks with security profile that will enable those with authorization to open the data. These security system or file wall will help in keeping the confidentiality. The research work information cannot be discussed with unauthorized people. Data warehouse will be created which will serve as a place to save all sorts of information securely. Data will be destroyed upon completion of the study.

In rare instances, authorized people may request to see research information about you and other people in this study. This is done only to be sure that the research is done properly. We would only permit people who are authorized by organizations such as the Northeastern University Institutional Review Board to see this information.

If I do not want to take part in the study, what choices do I have?

This study does not involve treatment, the participant’s option is to not participate.

What will happen if I suffer any harm from this research?

No special arrangements will be made for compensation or for payment for treatment solely because of your participation in this research.

Can I stop my participation in this study?

APPROVED
Appendix D: Letter to Participants
Appendix D: Letter to Participants

Since the late 1990s funding Nigerian higher education has been an issue for discussion on national level in Nigeria and globally. The monies awarded by the federal government come in form of allocations to all the federal universities in Nigeria. As a doctoral student in higher education administration at Northeastern University Boston, I am interested in the impact these allocated funds have had on your campus administration and the educational decision making process. As part of my research, I am conducting campus interviews with key campus administrators involved in the fund allocation process.

By participating in this study, you will be contributing to a better understanding of how underfunding affects Ahmadu Bello university. The outcomes of this research have the potential to inform decisions that are made about underfunding at the legislative level.

I would like to request and hope that you might agree to participate in this study. I will be contacting you by phone between March and December, 2016 to set up an interview date and time. Any time that you may make available to me will be highly appreciated. I am also available to meet after work hours if that best fits your schedule.

I am enclosing a copy of the Informed Consent Form for this study. A copy will also be given to you at the beginning of the interview. I will need to obtain a signed copy for my records. Your interview responses will be held confidential—neither your name nor position will be revealed without your permission. Participation in the study is voluntary and can be withdrawn at any time. You may do so without penalty by contacting me. If you have any questions regarding this study, please contact Valentina Dimunah, at 617-877-5956 or Dimunah.v@husky.neu.edu. If you have any questions regarding your rights as a research participant, please contact me.

Sincerely,

Valentina O. Dimunah,
Doctoral Student in Higher Education Administration
Northeastern University, Boston Massachusetts.
NOTIFICATION OF IRB ACTION

Date: April 11, 2016
IRB #: CPS16-02-02
Principal Investigator(s): Atira Charles
Valentina Dimuah
Department: Doctor of Education Program
College of Professional Studies
Address: 20 Belvidere
Northeastern University
Title of Project: Underfunding of Federal University in Nigeria, and
Perceived Impact on Administration: A Case Study
Participating Sites: ABU permission forthcoming
DHHS Review Category: Expedited #6, #7
Informed Consents: One (1) signed consent form
Monitoring Interval: 12 months

APPROVAL EXPIRATION DATE: APRIL 10, 2017

Investigator’s Responsibilities:
1. The informed consent form bearing the IRB approval stamp must be used when
recruiting participants into the study.
2. The investigator must notify IRB immediately of unexpected adverse reactions, or new
information that may alter our perception of the benefit-risk ratio.
3. Study procedures and files are subject to audit any time.
4. Any modifications of the protocol or the informed consent as the study progresses must
be reviewed and approved by this committee prior to being instituted.
5. Continuing Review: Approval for the proposal should be requested at least one month
prior to the expiration date above.
6. This approval applies to the protection of human subjects only. It does not apply to any
other university approvals that may be necessary.

C. Randall Colvin, Ph.D., Chair
Northeastern University Institutional Review Board

Nan C. Regina, Director
Human Subject Research Protection

Northeastern University FWA #4630
Your participation in this research is completely voluntary. You do not have to participate if you do not want to and you can refuse to answer any question. Even if you begin the study, you may quit at any time. If you do not participate or if you decide to quit, you will not lose any rights, benefits, or services that you would otherwise have as an employee.

Who can I contact if I have questions or problems?

If you have any questions about this study, please feel free to contact Valentina Dimunah, the person mainly responsible for the research, at Dimunah.vi@husky.neu.edu, Tel: 617-877-5956. You can also contact Dr. Atira Charles, the Principal Investigator. Email: a.charles@neu.edu.

Who can I contact about my rights as a participant?

If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, 490 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: n.regina@neu.edu. You may call anonymously if you wish.

Will I be paid for my participation?

You will not be paid for your participation in this study.

Will it cost me anything to participate?

It will not cost you anything to participate in this study.

Is there anything else I need to know?

There is nothing else you need to know about the study.

I agree to take part in this research.

Signature of person agreeing to take part

Printed name of person above

Signature of person who explained the study to the Participant above and obtained consent

Printed name of person above