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ABSTRACT

STUDENT DEMOGRAPHICS AND PERCEPTIONS OF THE
COST-SHARING PROGRAM FOR FINANCING HIGHER
EDUCATION IN TANZANIA AND THEIR
RELATIONSHIP TO PERCEIVED
LIKELIHOOD OF STUDENT
LOANS REPAYMENT

by

Protas A. Makimu

Chair: Jay Brand

ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title: STUDENT DEMOGRAPHICS AND PERCEPTIONS OF THE COST-SHARING PROGRAM FOR FINANCING HIGHER EDUCATION IN TANZANIA AND THEIR RELATIONSHIP TO PERCEIVED LIKELIHOOD OF STUDENT LOANS REPAYMENT

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Name and degree of faculty chair: Jay Brand, Ph.D.

Date completed May 2017

Problem and Purpose

All over the world, the costs of higher education are becoming unaffordable for people of low and middle socio-economic status. The rising costs of colleges and universities are outpacing any growth in incomes and the price increases of other indispensable needs such as medical care, food, clothing and housing. Tanzania is facing the same problem. Because the country has very low gross enrollment rate (GER) even in comparison to other African countries, the government has established the cost-sharing program to increase students' access to higher educational institutions and enrollment. Therefore, the purpose of this research is to explore the student perceptions of the cost-

sharing program for financing higher education in Tanzania and whether selected demographics such as age, gender, socio-economic status, and high school academic achievement, as well as student perceptions of the cost-sharing program are statistically significant predictors of the likelihood of student loan repayment.

Research Design

A quantitative research method was used to survey students from five universities in Tanzania; namely: Muzumbe University, Saint Augustine University of Tanzania, the University of Arusha, the University of Dar es Salaam, and Zanzibar University. A sample of 500 students was chosen randomly from these universities, but only 495 students gave responses good enough for analysis.

Quantitative research is useful for quantifying opinions, attitudes, and behaviors and thus can be used to explore how the entire population feels about a certain issue. Because the study was so deeply rooted in numbers and statistics, quantitative research was suitable due to its ability to be effective in translating data into easily quantified charts and graphs. Participants indicated their perceptions of the cost-sharing program for financing higher education in Tanzania.

Descriptive analysis was used to determine frequencies, standard deviations, and means of variables. The categorical regression model was employed to determine the influence of the selected demographical variables on the perceived likelihood of student loan repayment. Finally, a multiple regression model was used to determine the influence of the selected student perceptions on the perceived likelihood of student loan repayment.

Results

Students' awareness of student loans and eligibility criteria of the Higher Education Student Loans Board of Tanzania (HESLB) of student loan disbursement were statically significant predictors of the perceived likelihood of student loan repayment at 0.047 and 0.001, respectively.

Implications

One of the implications of this study is that if the HESLB works effectively according to its vision, mission, and core values, beneficiaries will honor its integrity and repay student loans.

Conclusion

Overall, this study suggests that higher education can be one of the essential key factors benefiting economic growth in Tanzania. The results of this study are in harmony with the idea of establishing public universities in Africa, which were regarded as ontologically embedded for developing countries in the continent. In addition, awareness of student loans and eligibility criteria of the HESLB for student loans disbursement are statistically significant predictors of the perceived likelihood of student loan repayment. There is a need for conducting further research employing mixed methods to provide a richer context for interpreting the feelings of students about the cost-sharing program for financing higher education in Tanzania and to improve the applications of the current research.

Andrews University

School of Education

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APPROVAL BY THE COMMITTEE:

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Member: Sylvia Gonzalez

External: Jerome Thayer

Date approved

DEDICATION

To my two elder brothers, Gerald and Baston Makimu, who taught me how to read and write before I began formal education. Thank you very much for the precious gift you granted me.

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LIST OF ABBREVIATIONS

ACT	American College Testing
CATREG	Categorical Regression
CAS	Central Admission System
GDP	Gross Domestic Product
GED	General Educational Development
GER	Gross Enrollment Rate
GPA	Grade Point Average
HESLB	Higher Education Student Loans Board
FAFSA	Free Application for Federal Student Aid
KEI	Knowledge Economy Index
MRA	Multiple Regression Analysis
NM-AIST	Nelson Mandela African Institute of Science and Technology
NTA	National Technical Assistance
SAT	Scholastic Assessment Test
SDA	Seventh-day Adventist
SPSS	Statistical Package of Social Sciences
TCU	Tanzania Commission for Universities
TPB	Theory of Planned Behavior
UNESCO	United Nations Educational, Scientific and Cultural Organization

US United States

VIF Variance Inflation Factor

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CHAPTER 1

INTRODUCTION

Background and Overview of the Problem

Particularly over last three decades, higher education has been in increasing demand in virtually every country, both by students and as an expectation of employees by employers. This greater demand has developed because higher education is associated with the “social status and greater earnings it is presumed to convey, as well as ... the public benefits it is presumed to bring to the social, cultural, political and economic well-being of countries” (Johnstone, 2003, p. 1). Concern for national well-being is as compelling in the countries of sub Saharan Africa as anywhere in the world (MacGregor, 2008). However, these countries face a greater challenge regarding how to finance higher education because of the shortage of revenue to accommodate the increasing number of students in higher learning institutions. As one of the countries in this region, Tanzania is struggling with the conundrum of how to enhance student enrollment rates in higher educational institutions through its cost-sharing program, while also controlling costs.

Since 1974, the government of the United Republic of Tanzania has been financing higher education as a means of putting into practice the policies of socialism and self-reliance. The state had thought to regulate and control higher education so that it can benefit Tanzanians regardless of their socio-economic status, ethnicity, religious affiliation, or gender (Ishengoma, 2004a). Julius K. Nyerere, the father of Tanzania as the

nation and its first president, used to tell the following story to emphasize to young people the importance of using their education for the benefit of the entire nation:

Those who receive this privilege therefore, have a duty to repay the sacrifice, which others have made. They are like the man who has been given all the food available in a starving village in order that he might have strength to bring supplies back from a distant place. If he takes this food and does not bring help to his brothers, he is a traitor. Similarly, if any of the young men and women who are given an education by the people of this republic adopt attitudes of superiority, or fail to use their knowledge to help the development of this country, then they are betraying our union. (Hatcher and Erasmus as cited in Smith, 1981, p. 23)

The government felt that it had to finance higher education in order to have control of the system and thus educate and train people according to the national needs.

Tanzania has now been an independent nation for about 55 years. During this period, the country has grown and changed demographically, economically, politically, socially, culturally, technologically, as well as in other aspects. Its needs and problems have also grown and become more complex, and consequently the demand for higher education in the country has increased dramatically. The Task Force on Higher Education and Society (2000) asserted that

more than ever before in human history, the wealth—or poverty—of nations depends on the quality of higher education. Those with ... larger repertoires of skills and a greater capacity for learning can look forward to lifetimes of unprecedented economic fulfillment. (p. 15)

Tanzania, as one of the economically struggling countries in the world, needs skilled and well-trained people to help it rise to the global median economically.

The world is now focusing more on human capital than on factories, land, and machinery. Perils and Promise (2000) noted that

the knowledge, skill and resourcefulness of people are increasingly critical to the world economy. Human capital in the United States is now estimated to be at least three times more important than physical capital. A century ago, this would not have been the case. (p. 15)

Higher education, thus, must be near the top of a nation's priorities. Benjamin William Mkapa, former president of Tanzania, once said that "our universities must produce men and women willing to fight intellectual battles for self-confidence and self-assertion as equal players in the emerging globalized world" (Perils & Promise, 2000, p. 15). People who can think critically and find a way of solving problems are needed in all sectors for the development of the country.

The president of Andrews University, Niels-Erik Andreasen, affirming the importance of college education, pointed out that "only with a good education will the next generation be able to take full advantage of rapid developments in higher technology that impact all areas of our life" (Andreasen, 2011, p. 2). An individual with a college degree will probably earn \$ 1 million more in a lifetime than an individual with only a high school diploma (Cohen, 2003). Furthermore, a person with a college degree is expected to be well-rounded in order to accommodate effectively the multiplicity of global challenges ubiquitous in the modern world.

Tilak (2003) added that the externalities or social benefits accompanying a higher education degree are literally a legion, covering economic, political, cultural, moral, social, spiritual, and technological affairs; essentially, such as educational experience influences every aspect of humanity.

Tanzania is treating higher education "as a strategic agent for mindset transformation and for the creation of a well-educated nation, sufficiently equipped with the knowledge needed to competently and competitively solve the development challenges facing the nation" (Southern African Region Universities Association, 2008). This notion has been articulated vividly in the Tanzania Vision 2025, which sets the

overall strategic direction for development of the country. The United Republic of Tanzania (n. d.) articulates the Tanzania Vision 2025 as follows:

In the Development Vision 2025, Tanzania envisages becoming a middle-income country with attributes including a well-educated, poverty free society and a nation capable of addressing emerging development challenges for achieving a high quality of life for its people. According to Vision 2025, Tanzania endeavors to become a nation whose people are ingrained with a developmental mindset and competitive spirit. In attaining these attributes, education and knowledge are critical for enabling the nation to effectively mobilize its domestic resources and in insuring and maintaining the provision of people's basic needs and for attaining competitiveness in the regional and global economy. Tanzania would brace itself to attain creativity, innovation and a high level of quality education in order to respond to development challenges and effectively compete regionally and internationally, cognizant of the reality that competitive leadership in 21st century will hinge on the level and quality of education and knowledge. (p. 4)

Although these higher education demands are obvious, Tanzania's government is struggling badly under the rising costs of primary and secondary education, health care, public infrastructures, security, and other social welfare costs. Due to meager tax revenues, the government has decided to decentralize the higher education system so that parents, students, philanthropists and other stakeholders may participate more fully in financing higher education. The act of involving different constituencies in the costs of higher education is called the cost-sharing program. This has been chosen as one of the means of implementing Tanzania Vision 2025 as far as higher education is concerned (Maghembe, 2008). Through this program, the government has established student loans to enable needy students to pay necessary costs at the beginning of each semester. These loans are considered deferred loans in the sense that students are expected to repay them once they have secured jobs after graduation (Johnstone & Marccucci, 2008).

The cost-sharing program was established to aid individuals of higher intellectual ability but with meager financial means so that they may not be denied access to higher

education (Woodhall, 1992). However, in actual practice, students from families of higher socio-economic status are benefiting from this program more than those of low socio-economic status because the awarding of education loans depends on student performance on the form six final examinations. Most students who perform well on these examinations attend better high schools and are from families of relatively high socio-economic status (Masare & Ernest, 2010).

This tendency for higher education to produce and often to accelerate differences in socio economic status between those with degrees and without is entrenched in many countries and thus, Tanzania must strive to reduce barriers and extend access to participation in higher education, specifically to individuals marginalized by social class, ethnicity, and isolation (Knight, 2009).

Although some students qualify to get students loans according to Higher Education Student Loans Board (HESLB) criteria, the issue of delaying the disbursement of loan money to institutions frustrates students and causes them to strike, producing tensions with the HESLB and their institutions of higher education. Students wonder why when they stage a strike over delayed disbursement, the government, through the HESLB, grants them loans on the following day. They tend to think that incompetence of the upper management of the HESLB causes all the frustrations. The HESLB is the government agency established through Act No 9 of 2004; its main objectives is to issue loans for higher education to students and to recover these loans in order to loan the funds once again to other needy Tanzanian students.

Delaying disbursement of student loans causes a serious threat to students' lives because needy students depend on loans for their existence while they are at school.

Students who are affected by delayed loans disbursement cannot concentrate on their studies because they are incapable of paying their rent, buying groceries, or even funding transportation to school for those who live off campus (Nitume, 2011).

In short, this study will investigate the influence of student demographics such as age, gender, geographical settings, high school academic achievement, and socio-economic status on the perceived likelihood of student loan repayment. In addition, it will investigate student perceptions of the cost-sharing program on the eligibility criteria currently employed by the HESLB to qualify students for student loans to finance higher education in Tanzania, the fairness of the HESLB cost-sharing program to finance higher education in regard to students with low socio-economic status in Tanzania, and the correlation among the HESLB cost-sharing program for financing higher education and the economic growth of the country, the state of student loan disbursement, the level of students' knowledge and awareness of the availability of student loans for financing higher education in Tanzania, and the influence on the perceived likelihood of student loan repayment.

Having discussed the background and overview of the HESLB cost-sharing program for financing higher education in Tanzania, the following section will deal with the rationale of the study.

Rationale for the Study

This study is more inclusive in nature in the sense that it deals with multiple universities in Tanzania. Some previous studies have been conducted on the cost-sharing program in higher education in Tanzania (Ishengoma, 2004a, 2004b; Makulilo, 2009; Mpiza, 2007; Nitume, 2011; Nyakunga, 2011; Puja, 2009; Rugambuka, 2008). However,

not a single study has been conducted specifically to inquire about student perceptions of the cost-sharing program in financing their higher education, and most of them have focused on only a single institution such as Mzumbe University and the University of Dar es Salaam, which are public institutions.

Although the University of Dar es Salaam is the oldest and one of the flagship institutions of higher learning in the country, it does not represent the full spectrum of higher education in Tanzania. The present study focused on students' perceptions of the cost-sharing program in higher education and investigated whether selected demographics such as age, gender, high school academic achievement, and socio-economic status influence perceived likelihood potential of student loan repayment.

It incorporated two other institutions from Tanzania's mainland (University of Arusha, and Saint Augustine University of Tanzania) and one institution from Zanzibar (Zanzibar University [ZU]). All three of these universities are private institutions; these samples will thus achieve a more balanced representation of institutions than previous studies have used.

Since the reestablishment of the cost-sharing program in 1994, the rate of students' strikes in Tanzania has increased tremendously. Students complain concerning the disbursement delay of student loans and the amount of money they receive from the HESLB for student loans, especially for living costs. Students perceive that the HESLB program is not serious about disbursement of student loans on time. Students complain that "the HESLB is notorious for delaying the disbursement of loans, especially for first year students, causing protests at universities at the beginning of each academic year" (Sylvester, 2013, para. 17).

This study will provide some helpful insights regarding how students would prefer the cost-sharing program to be structured and administered. The following paragraph discusses the relationship between higher education and economic growth, as well as how the current HESLB cost-sharing program for financing higher education in Tanzania may be improved.

As aforementioned, the HESLB cost-sharing program for financing higher education in Tanzania was established with the aim of increasing students' enrollment to have enough competent and competitive graduates for the economic growth of the country by 2025. It is believed that higher education may help the country to change its economic status. Kotecha (2010, p. 15) asserted that "the key for Tanzania to be a middle income country with a diversified and semi-industrial economy is higher education." In order for this proposition to be fulfilled, there should be a reformation in the cost-sharing program in higher education in the country. The level of government financial support for higher education is not sufficient to ensure the financial sustainability of the system as it currently exists (Mgaya, 2010). There must be better ways of identifying needy students and collecting repayment of loans from the beneficiaries so that the fund can be revolved to support many eligible students. As it is now, many students from high socio-economic status are benefiting from the program, but the more disadvantaged groups are not benefiting, as they should be.

Furthermore, the HESLB and higher educational institutions need to have a way of working together in harmony to eliminate students' strikes, which are caused by an unsatisfactory spirit among students about the accessibility to student loans, fairness to students with low socio-economic status, and the way loans are disbursed to students and

their higher educational institutions in the country.

Low socio-economic students have difficulty accessing student loans due to the criteria set by the HESLB. One study showed that due to easy access to relevant information and the ability and willingness to misinform the HESLB, students from higher socio-economic status have a better chance of accessing loans to attend higher educational institutions than are low socio-economic students. In 2007, approximately 68% of high socio-economic status students managed to access loans compared to only 32% of low socio-economic students in public institutions, and 67% against 33% in private institutions (Makulilo, 2009). See Tables 1 and 2.

Three years ago the issue of student loans disbursement was discussed in the Tanzania Parliament House, and the members of Parliament suggested that the government must ensure that students receive their stipend from their student loans on time to deter them, especially girls, from pursuing alternative means of support such as having multiple partners for simple subsistence. Dr. Kabwe Steve Kabwe, the Serengeti Member of Parliament, pointed out that “Tanzania leads the African continent in provision of higher education loans to students yet disbursement of loans is still a problem, leaving many students vulnerable” (Mtambalike, 2012). He added,

At the moment, students in higher learning institutions receive a loan of 7500/- (Tshs) per day as personal allowance but they have time and again complained that the funds are released in an erratic manner and are insufficient due to the high cost of living. (Mtambalike, 2012)

Table 1

Access to Public Higher Educational as Influenced by Family Socio-Economic Status

Status	Access to Public Higher Educational Institutions					
	Loans	%	Other Sources	%	Total	%
H	95,000	68	30,000	83	125,000	75.5
L	45,000	32	6,000	17	51,000	24.5
Total	145,000	100	36,000	100	176,000	100

Note. From field data, 2007.

Table 2

Access to Private Higher Educational Institutions as Influenced by Family Socio-Economic Status

Status	Access to Private Higher Educational Institutions					
	Loans	%	Other Sources	%	Total	%
H	34,000	67	32,000	86	66,000	76.5
L	17,000	33	5,000	14	22,000	23.5
Total	51,000	100	37,000	100	88,000	100

Note. From field data, 2007. “**H**” means high Socio-economic Status (SES) and “**L**” means low SES.

This study highlights problematic areas of the cost-sharing program in financing higher education such as eligibility for student loans, student's discipline (field of study), knowledge and awareness, disbursement of loans to students and universities, and perceived likelihood of repayment of student loans. The results of this study may help policymakers, policy implementers, higher education institution administrators, and student bodies to analyze, evaluate, and rectify the present situation in order to solve problems and establish a suitable and lasting cost-sharing plan. It may also assist the HESLB to be more informed about how students regard its service so that it may revamp the program and/or its implementation to prepare a better-trained and more skilled workforce for the nation.

Furthermore, this may help to address issues of strikes in higher educational institutions, increase enrollment and retention of students in higher education in the country, and thus prepare the country to move from third world country economic status to semi-industrial economic status by 2025.

Statement of the Problem

The scholarship aid provision of the education acts of 1965 of American—that no one should be denied the opportunity for an education because of a lack of money—is just as important today as it was when it was established (Pynoos, Schafer, & Hartman, 2012). “However, for millions of students, the increasing costs of college education, combined with lower rates of growth in grant aid, have resulted in additional reliance on student loans to pay for college” (Gordon, 2008).

All over the world, the costs of higher education are becoming unaffordable for people of low and middle socio-economic status. The rising costs of colleges and

universities are outpacing any growth in incomes as are the price increases of other indispensable needs such as medical care, food, clothing, and housing. On December 3, 2008, CNN (Cable News Network) reported that in the United States, “college and fees, adjusted for inflation, rose 439 percent from 1982 to 2007, towering over increases in medical care, housing and food.... Median family income rose 147 percent during the same period.”

Tanzania is facing the same problem. Because the country has a very low gross enrollment rate (GER) even in comparison to other African countries, the government has established the aforementioned cost-sharing program to increase students’ access to higher educational institutions and enrollment. The average percentages (GER) of individuals pursuing higher education are around 70% in North America and Western Europe, 32% in Latin America, 22% in Arab States, 7% in Africa; Tanzania’s rate is 6% and the average for Sub-Saharan African is 5% (Kotecha, 2010).

The cost-sharing program in higher education is promising to increase the number of well-trained and skilled workers in the country in the near future, people with the ability to compete globally. However, the trends of students’ strikes caused by the cost-sharing program show that if this situation continues as currently, the program might not last very much longer. A classic case was in Ghana, when student opposition to the introduction of loans in 1971 “contributed to the fall of the government and in the following year, to the abandonment of the scheme” (Woodhall, 2004, p. 43). This situation indicates that students are not satisfied with the cost-sharing program and/or its implementation in financing their education in the country (Johnstone, 2003).

Purpose of the Study

The primary purposes of this study are (a) to determine student perceptions of the cost-sharing program for financing higher education in Tanzania and (b) to determine whether the selected demographics such as age, gender, geographical settings, high school academic achievement, socio-economic status, and student perceptions of the cost-sharing program are statistically significant predictors of the perceived likelihood of student loan repayment.

Research Questions

The study investigated student perceptions of the cost-sharing program for financing higher education in Tanzania by addressing the following three research questions:

1. What are student perceptions of the HESLB program for financing higher education in Tanzania?
2. Are demographic variables such as age, gender, geographical settings, high school academic achievement, and socio-economic status predictors of perceived likelihood of student loan repayment?
3. Are student perceptions of the HESLB program (e.g., their awareness of student loans availability, knowledge of student loans, eligibility criteria, loans disbursement, student acceptance of the relationship between higher education and economic growth in Tanzania, and their satisfaction with the HESLB program) associated with perceived likelihood of student loan repayment?

Theoretical and Conceptual Framework

Theoretical Framework

The theoretical framework of a study consists of a theory or theories that provide the conceptual context and content for the research study. It “consists of concepts, together with their definitions and structure that holds or supports theory or existing theory/theories” that are applicable in the particular field of study (University of Southern California, 2011). It should “demonstrate an understanding of theory/theories and concepts that are relevant to the topic” of the research (University of Southern California, 2011).

Many economic theories support the cost-sharing program for higher education, but this section will deal with only eight of them: human capital theory, higher education as public good or private good, equity theory, prospect theory, planned behavior theory, cultural theory, age factor, and academic achievement theory. These are much more related to the present study because they can help to explain why the cost of higher education should be shared among stakeholders.

First, human capital can be defined as the productivity capacities—knowledge, understanding, talents, and skills possessed by an individual or society (Arai, 1998; Paulsen & Peseau, 1989; Schultz, 1961; Thurow, 1970; Woodhall, 1995). Human capital theorists believe that “it is [the] human resources of the nation, not its capital nor its material resources that ultimately determine the character and pace of its economic and social development” (Olaniyan & Okemakinde, 2008, p. 158). Psacharopoulos and Woodhall (1997) argued that human resources create the ultimate foundation of the wealth of nations, stating that “capital and natural resources are passive factors of

production, human beings are active agencies who accumulate capital, exploit natural resources, build social, economic and political organizations, and carry forward national development” (p. 102).

Human capital plays a vital role in every economic system in the world. Thus, higher education with its obligation to develop its graduates’ skills is a key agent of change for economic growth in all countries, especially in the developing countries.

Therefore, the paramount mission of higher education is to prepare human capital. The National Education Association (2003b) has stated, “Human capital theory holds that colleges and universities contribute to economic growth through the creation of new knowledge and increasing the stock of citizens who are able to implement new processes and technologies into the economy” (p. 3). This phenomenon will remain true in the future. The United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics (2003) asserts:

In the foreseeable future, workers who create and use knowledge to add new value to products and services will be a prominent and perhaps the dominant group in the workforce.... These “knowledge workers” will be found across economic sectors – from computer programmers to teachers. They will have [a] high degree of upward mobility because knowledge is potentially available to everyone. Their work will be increasingly borderless because knowledge travels even more effortlessly than money. (p. 7)

Because higher education is considered an investment for both societies and individuals, its costs must be borne by both entities. The UNESCO Institute for Statistics (2003) says that higher education is increasingly considered as an “investment in the collective future of societies and nations, rather than simply in the future success of individuals” (p. 3).

An important factor in this transition from individual improvement to economic

development, involves the importance of a highly educated workforce to support the largely knowledge-based economies even in the developing world. Along with other influences, this demand for professional staff has resulted in increasing costs for higher education. These increases have left higher education almost unaffordable to many potential students from low and middle socio-economic status without government assistance. Knight (2009) stated that “the increasingly knowledge-based economy also gives a premium to individuals who have access to the requisite higher education systems that are high quality, oriented to the needs of employers and broadly inclusive” (p. 4). Because more educated people tend to have higher employment rates, and earnings in addition to producing more output relative to those who have less education, “ this provides a strong rationale for governments and private households to invest substantial portions of their resources in higher education with the expectations that higher education benefits would accrue over time” (Chea, Halim, & Omar, 2011, p. 233). If students share these views about an important relationship between higher education, employment, and economic growth, this may influence their perceptions of the HESLB and its programs. In this regard, the survey instrument developed for this study includes a section of items to measure student perceptions of possible links between higher education and economic growth as articulated by human capital theory. In addition, human capital theory justifies the reasons why the government should fund higher education.

The researcher employed this theory to determine whether the relationship between higher education and economic growth in Tanzania is a predictor of likelihood of student loan repayment.

A second component of the theoretical framework of this study deals with the

idea that higher education is both a public and a private good. The World Health Organization (2011) defines public goods as “goods and services that are non-rival and non-excludable. In other words, no one can be excluded from their benefits and their consumption by one person does not diminish consumption by others.” In the higher education arena, non-rival means that the consumption of the higher educational benefits by one person does not diminish the same benefits to others and “non-excludable” means that it is not possible to exclude a person from consuming the benefits of higher education (Paulsen & Smart, 2001; Samuelson, 1954). Such benefits include national defense, law and order, understanding of mathematical and scientific principles, information, improved health, welfare, community regeneration, technical innovations, higher productivity, higher tax payments at local, state and federal levels, active citizens, lower crime rates, transmission of values, aspirations, social cohesion, moral ethics, tolerance and cultural sharing (Barr, 2008; Marginson, 2007; Olaniyan & Okemakinde, 2008; Woodhall, 2007).

Furthermore, higher education is not only a national public good, but it is also a global or international public good in the sense that its services are “broadly available across populations on a global scale” (Kaul, Grunberg, & Stern, 1999, p. 2).

It is also undeniable that higher education is a private good, because in some ways, it is both exclusive and rivalrous. After all, only some people can attend university, and accepting one applicant may require denying other applicants due to limited space. In this sense, higher education benefits only its graduates (Marginson, 2011; Paulsen & Smart, 2001). Personal benefits of higher education include personal satisfaction, higher earnings, greater employment security, prestige, promotion potential, better working

conditions, flexibility of changing careers as the world changes, adaptability, expectations of having the next affluent generation, self-confidence, long life expectancy, and better pension remunerations (Cohen, 2003, National Education Association, 2003a; Yeager, Nelson, Potte, Weidman, & Zullo, 2001).

Because higher education is both a public and private good, who should pay for it? The most common answer to this question is that since higher education is a great asset for individuals and society, its costs should be shared between the public and individuals.

Because higher education produces positive externalities in the sense that it benefits other people besides the university graduates themselves, taxpayers should fund it as incentive to the people who decide to pursue a university degree. “Taxpayers should subsidize higher education because, in so doing, he or she incentivizes an activity that promotes economic growth and has other beneficial side effects” (Yeager et al., 2001, pp. 482-483).

If governments are not contributing toward the costs of higher education, few people will decide to go to colleges or universities. Paulsen and Smart (2001) pointed out that “individual students who are deciding how much to invest in higher education will not consider these public benefits, and will therefore, underinvest in higher education” (p. 102). “Individuals who make decisions on investing in higher education do not take into account the fact that their education will affect the functioning and well-being of others in a positive way” (Jongblood, 2003, p. 111).

Students or graduates also should finance their higher education because they are the primary beneficiaries of it. Colleges and universities are preparing them for high-

paying jobs; they are being more equipped to adapt to a changing world and they are becoming well-rounded people (Cohen, 2003). Furthermore, paying for part of their education gives them a sense of ownership of their education and helps them and their parents to hold the higher-educational institutions accountable. Marcucci and Johnstone (2007) asserted that “students and families who pay tuition will demand accountability and therefore, universities will have to be more consumers oriented and efficient” (p. 27). Kirwan (2007) argued, “higher education ... receives sizable funding from students (and parents) who pay tuition, and we must be more accountable to them for ... the educational outcomes for their college experience.” Olaniyan and Okemakinde (2008) suggested that the costs of higher education should be paid by beneficiaries or recipients rather than solely by the state.

Human capital theory predicts a relationship between higher education, employment and economic growth. Employed individuals likely will have more disposable income to contribute to economic growth than will the unemployed. In this way, higher education may benefit both private individuals and the public good. To explore the possibility of this theoretical integration, the survey instrument for this study includes a section containing items to measure student perceptions of the extent to which higher education represents as, a public good by considering its contribution to the national economy. In addition, familiarity with these associations may, to a certain extent predict the perceived likelihood of student loan repayment.

A third component of the theoretical framework for this study is equity theory, which attempts to explain relational satisfaction in terms of perception of fairness or unfairness of the distribution of resources within interpersonal relationships. One of the

so-called justice theories, equity theory was developed in 1963 by John Stacey Adams, a workplace and behavioral psychologist (Cosier & Dalton, 1983; Young, 1994). At the level of college and university schooling, equity implies that personal resource must not be an obstacle for going to school. Financial assistance must, therefore, be offered to enable students of low socio-economic status to attend colleges or universities (Eicher, 1998). Equity involves both a quantitative assessment and subjective moral or ethical judgment that might bypass the letter of the law in the interest of the spirit of the law (Bronfenbrenner, 1973; Gans, 1973; Jones-Wilson, 1986).

Sometimes equity means equal shares, but in other circumstances it determines shares according to need, effort expended, ability to pay, result achieved or to be achieved, or resources and opportunities available. For higher education, equity would seem to require extending access to higher educational institutions to as many students as possible (Espinoza, 2007). The Carnegie Commission (1973) asserted:

We believe that the first priority in higher education today is to move as rapidly as possible toward the equalization of opportunity to attend college. The achievement of universal access, in the first instance, will require some shift in the share of direct costs education dependent more on public aid and less on parental support... In the longer run, however, particularly as family incomes keep rising and as college attendance becomes more widespread at all income levels, we anticipate that somewhat greater reliance will again be placed upon personal resources and somewhat less reliance on government sources... as disposable incomes and ability to pay improve. (pp. 103-104)

The concept of equity in higher education focuses on students' access to college or university regardless of their families' financial and cultural background by distributing resources fairly to everybody who qualifies for higher education.

Further clarifying the issue of access to higher education, equity theory deals with the notion of ratios of inputs and outputs. Baxamusa (2012) argued that

when individuals think their inputs are rewarded according to their outputs and are equal to others around them, they are satisfied. But when they notice others are getting more recognition and rewards, in spite of doing the same amount of work, they become dissatisfied. (para. 4)

The general equation of equity is as follows:

$$\frac{\text{Individual's own outcome}}{\text{Individual's own input}} = \frac{\text{Relational partner's outcome}}{\text{Relational partner's inputs}}$$

Equity theory helps to predict perceptions of fairness by comparing the balance of effort and reward and other factors of give and take—the ratio of output to input—with the balance or ratio enjoyed by other people whom individuals deem to be relevant reference points ('referent') others (Chapman, 2013). In this study, equity theory is used to examine the fairness of the cost-sharing program for financing higher education in the country by examining the quality of the ratio between outputs (performance of higher education examinations) and inputs (student loans) among the students who apply for student loans. In this case, the quality of this ratio will be defined as the relationship between student performance and the amount of student loans he or she is compared to other students.

Therefore, the survey instrument used in this study includes a section measuring student's perceptions of fairness of the HESLB program for low socio-economic status students to investigate the equity of the program. In other words, equity theory is used in this study to support the proposition that fairness in high school achievement and socio-economic status of students for disbursement of student loans is a predictor of likelihood potential of student loan repayment.

A fourth component of the theoretical framework for this study is economics behavioral theory. Kahnemen and Tversky (1979) developed a descriptive alternative to

rational economic models, called prospect theory, by empirically determining decision-making behavior under various conditions. Vossentsyn (2005) suggested that this is a descriptive model of choice under uncertainty. Descriptive models differ from normative ones in the sense that they are concerned with what individuals actually decide (including beliefs and preferences) rather than what they should decide (based on rationality and logical reasoning). Kahnemen and Tversky (2000) said that this theory can reveal people's preferences, values, and attitudes toward risk.

Economic behavioral theory (prospect theory) predicts that people will treat the probability of a loss as greater than its objective value and the probability of a gain as less than its objective value (Berns, Capra, Chappelow, Moore, & Noussair, 2008). Losses loom larger than gains, meaning that responses to potential loss are generally more extreme (i. e. greater than) responses to achieve a potential gain. Prospect theory predicts that perceived value will concave for gains and convex for losses (See Figure 1). Prospect theory does not explain the reasons why this is true; it just accepts this bias as a given. Bauer and Rotte (1997) noted that prospect theory gives us the analytical framework for decisions under “risk with a non-linear utility function where people need to make decisions that vary according to the expectations of losses and gains and on the change of likely outcomes compared with a principally preferred status quo reference point” (p. 2). Since most people's propensity is to avoid loss, a person will “exert more effort, and persist over longer periods of time to avoid losses than to secure gain” (Masters, 2004, p. 705)

The following illustration provides an example of how people make decision based on prospect theory. A study conducted in Israel showed that more than 90% of

Israel's engineering graduates are employed in the profession they studied. Their wages are three times greater than graduates in other fields and they get jobs immediately after graduation (Gilboa & Justman, 2008). "Despite the short and longer term benefits of loans, only a small minority of engineering students in academic colleges (less than 1%) in the north of Israel apply for loans during their studies" (Maharshak & Pundak, 2008, p. 2). Most engineering students in Israel finance their education by having part time jobs which can at least delay their graduation and sometimes prevent their finishing successfully. Students adopt an irrational approach of personally financing their education to avoid the risk involved in taking student loans. Gandhi (2008) noted that behavioral economic theories suggest that because students are loss averse and myopic, they will value front-loaded subsidies more than the delayed subsidies provided through loans.

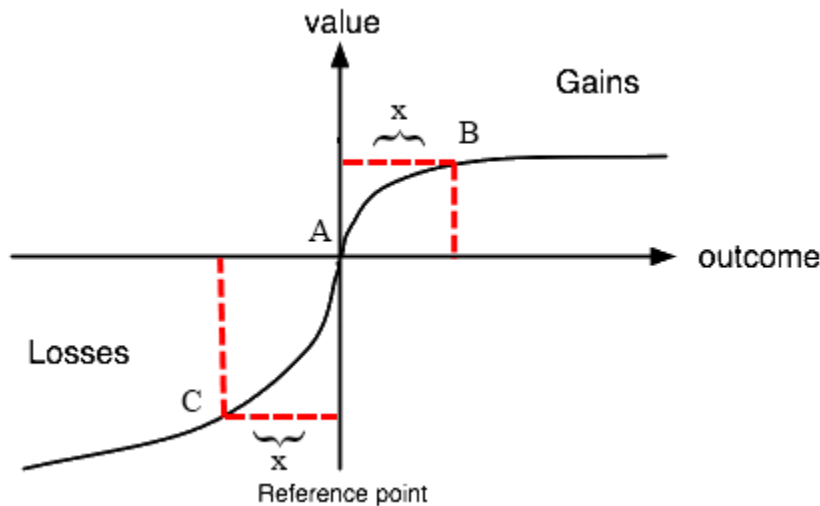


Figure 1. Loss aversion function: Prospect theory and the endowment effect. Data from Tversky and Kahneman (1991).

As aforementioned, loss aversion refers to the reality that people are significantly more averse to losses than they are attracted to gains of the same size as the figure above illustrates. (Royal Swedish Academic of Science, 2002). The subjective impact of losses constitutes twice the impact of gains. Loss aversion not only suggests that “tuition fees have a greater impact on enrollment decisions, but also that the risks of taking up loans are over estimated while the future benefits of higher education are underestimated leading to an aversion of debt” (Teixeira, Johnstone, Rosa, & Vossenstey, 2008, p. 229).

The “endowment effect,” a special case of loss aversion “relates to the phenomenon that people experience a greater disutility when giving up a good that they consider to belong to their property (endowment) than they experience pleasure from buying or adding the same item to their endowment” (Teixeira et al., 2008, p. 229).

Within cost-sharing for higher education, the endowment effect will manifest itself when students face losing their basic or natural right of getting free higher education or the right to receive grants or scholarships. The overreaction predicted by the endowment effect can most likely be encountered in countries where higher education traditionally has been free of charge to all students.

The general principle of prospect theory (Kahneman & Tversky, 1979) is that individuals who cognitively adopt a “loss frame” rather than a “gain frame” in assessing a future economic transaction will be more likely to take risks to avoid that loss, including the risk of breaking the law. When the loss is incurred through a withholding system, an individuals’ freedom is likely to aggravate the loss frame and boost risk even more (Yaniv, 1992). The prospect theory also suggests that students from low socio-economic families may be more averse to loans than are students from high socio-economic

families. Global studies evaluating this prediction have shown that the most debt-averse students include those from the lowest socio-economic classes, black and ethnic minority students, particularly Muslims, while those with the most relaxed attitude to debt include students who attended private secondary schools, were from the highest social classes and males (Callender, 2003).

Applying these economic theories to higher education suggests that the costs of higher education should be borne by both the public and individuals, with students' socio-economic background considered in the distribution of public resources. Johnstone (1986) pointed out that regardless of the size or characteristics of the higher education system and regardless of a country's wealth or politics, all costs of higher education are borne by a combination of four sources of finance—taxpayers, parents, students, and institutions (philanthropists), and that “any cost shifted from one source must per force be shifted to another” (p. 6).

This study's survey instrument includes measures of several perceptions related to behavioral (economic) theory to explore its implications for potential repayment of student loans. In short, the theory was used to verify that eligibility criteria of the HESLB with regard to student's socio economic status is a predictor of perceived likelihood of student loan repayment.

A fifth component is planned behavior theory. According to the theory of planned behavior (TPB), human actions are guided by three main kinds of considerations: behavioral beliefs, normative beliefs, and control beliefs.

The study employed the theory of planned behavior to explore the interaction of the proposed model. It was used to affirm the relationship between the antecedents of

students' attitudes and the perceived influence of likelihood potential of student loan repayment. The theory of planned behavior is based on the principle of understanding an individual's choice of behavior, and further examining person's overall intention relating to that behavior (Ajzen, 1991). The theory consists of three vital components according to its definition: attitude, subjective norms, and perceived behavior control. Attitude refers to the strength beliefs that the person holds towards a particular behavior. Subjective norms are perceived to be social pressures coming from important persons in an individual's life that influence him or her to act the way he or she does. Perceived behavioral control is defined as peoples' perceptions of their ability of performing a given behavior (Ajzan, 2006).

The behavioral beliefs create favorable or unfavorable attitudes towards behavior, normative beliefs give rise to subjective norms, and a rise in perceived behavioral control is always a result of the behavioral control (Ajzen, 2006).

The attitude toward the behavior, subjective norms and perceived behavioral control leads to formation of certain behavioral intention. Francis, Malhotra and Mayoux (2004) argued that although there is no absolute relationship between behavioral intention and actual behavior, intention can still be employed to measure the behavior of a person in the theory of planned behavior relatively.

Using TPB, the researcher affirmed that consumer satisfaction may contribute to both behavioral attention and actual behavior (Xiao & Wu, 2008). Similarly, awareness of the HESLB program for financing higher education in Tanzania was considered as one of the subjective norms considered as predictors that positively influence students' attitude toward the perceived likelihood of student loan repayment.

Awareness is the ability to perceive, to feel, or to be conscious of events, objects, thoughts, emotions, or sensory patterns. In this level of consciousness, an observer without necessary implying understanding can confirm sense data. More broadly, it is the state or quality of being aware of something. It is believed that student may be borrowing money to finance their higher education without being aware of the implications of student loans. Bremer (2012) pointed out that “while there is significant amount of information available about the history of loans, type of loans,” and implications of student loan repayment, “there is very little information measuring students’ awareness of their loans, or specifically, how they perceive their awareness of their loans” (p. 10).

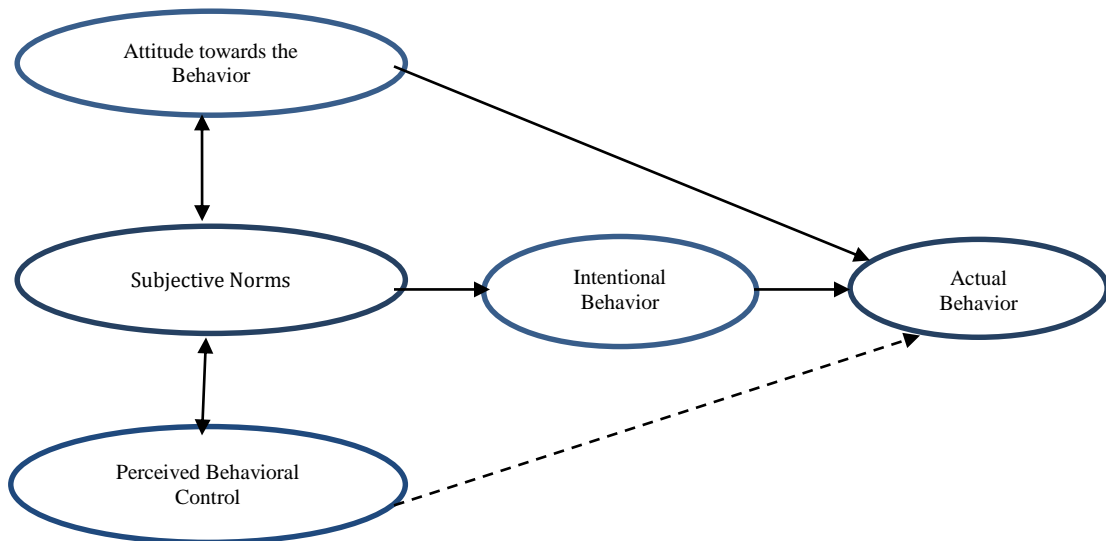


Figure 2. A presentation of the theory of planned behavior. Data from Kang, Hahn, Fortin, Hyun, & Eom, 2006.

The first step to think correctly about repaying student loans is to be aware of the total amount of money borrowed. Once someone knows how much he or she owes, it is possible to explore options for repayment and examine how interest plays part into these options (King & Frishberg, 2001).

According to the TPB, attitude towards the behavior and perceived behavioral controls are interconnected (see Figure 2). In other words, creating positive attitude also strengthens the perceived behavioral control. For this study, it was predicted that increasing students' awareness for the HESLB program strengthens the perceived likelihood of student loan repayment. For such integration, the researcher in this study considered students' awareness of the HESLB program as a positive predictor of the perceived likelihood of student loan repayment.

A sixth component of theoretical framework in this study is cultural theory. Hofstede and Michael (2010) found that male borrowers default more than female borrowers do according to masculinity behavior as supported by cultural theory. They also claimed that according to theory, the distribution of emotional roles between men and women is different in the following ways: men are more assertive, materialistic, ambitious power oriented, and they do not place as much value on relationship issues or quality of life. Because of these reasons, it becomes easier for them to default from repaying student loans. When Woo (2002) conducted research in California, he found that the borrower's chance of defaulting decreased by 36% for females. Similarly, Flint (1997) in the national (US) study conducted about a decade ago supported this idea by affirming that the likelihood of defaulting on loans repayments increased by 5.8% for males.

Most of the literature indicates that students' gender has a significant influence on the repayment of student loans, and thus can influence whether they increase or decrease in default rate. However, one study reported that "a female student is one percentage point less likely reviewed to default on her student loan than a male student is, all other things being equal" (Steiner & Tym, 2005, p. 13).

Nevertheless, many researchers usually conclude that being female is related to substantial increment in the likelihood of student loan repayment (Podgursky, Ehrent, Monroe, Watson, & Wittstruck, 2002; Volkwein & Szelest, 1995; Woo, 2002). According to cultural theory, gender is regarded as a statistically significant of predictor of student loan repayment. This study did not show such evidence of gender being statistically significant predictor of student loan repayment.

A seventh component is the factor of age. Age is considered as one of potential predictors of student loan repayment. Studies show that as age increased so does the likelihood of not repaying student loans (Christman, 2000; Flint, 1997; Harrast, 2004; Herr & Burt, 2005; Podgursky et al., 2002; Steiner & Teszler, 2003; Woo, 2002). The explanations for such a negative relationship between age and likelihood of student loan repayment are based on the proposition that older students likely have more financial responsibilities—such as families to support—that may compete with or prohibit student loan repayment, while younger students have relatively fewer financial commitments. Furthermore, older students may have accumulated other debts in addition to student loans, and therefore, they may have diminished their ability of loans repayment. Gross, Cekic, Hossler, and Hillman (2009), in their review of scholarly literature, noted that in sum, older students are more likely to default because they owe more than their

counterparts and hence they may have relatively less available resources to repay the student loans.

Finally, academic achievement theory was included in this study to enhance the proposition that high school academic achievement is one of predictors of perceived likelihood of student loan repayment. Investigations have showed that academic achievement at both the high school and higher educational levels is regarded as one of the strongest predictors of the student loans likelihood repayment. Students who dropped out of high school or earned General Educational Development (GED) are more likely to default than students who had earned a regular diploma (Dynarski, 1994; Wilms, Moore, & Bolus, 1987).

For example, among students at Texas A&M University, borrowers who reached only the 75th percentile on their high school class achievement tests had a 12.8% loan default rate, compared to a mere 3.2% default rate for borrowers who had reached the 90th percentile (Steiner & Teszler, 2003). In other words, earning low grades was found as one of characteristics that have high default rates (37%) according to Volkwein and Szelest (1995).

It is at least reasonable to summarize that collectively the above-mentioned theories/factors likely play an important role for justification of the cost-sharing program for financing higher education in Tanzania, and no doubt many if not most of these factors influence graduate behaviors concerning student loan repayment.

Conceptual Framework

Miles and Huberman (1994) defined conceptual framework as a visual or written product that “explains, either graphically or in narrative form, the main thing to be

studied –the key factors, concepts, or variables –and presumed relationships among them” (p. 18).

The aim of the conceptual framework in this study is to clarify the variables that have relationships with students’ perceptions of the cost-sharing program for financing higher education in Tanzania. It outlines the relationships between the demographics and student perceptions of the HESLB program as well as likelihood of repayment of student loans. Student perceptions of the HESLB program consist of awareness of the cost-sharing program, knowledge concerning the program, field of study (discipline), access to student loans, eligibility criteria for student loans, disbursement of student loans, higher education as an individual/or public good, link between higher education and economic growth in the country, link between public support of higher education and economic growth, fairness of the HESLB program for low socio-economic status students and students’ satisfaction with the HESLB program.

The conceptual framework model includes a component of potential repayment of student loans as a dependent variable. This variable consists of two elements: intention to repay student loans and ability to repay student loans. (See Figure 3).

In this study the predictor (or independent) variables are demographic variables such as age, gender, geographical settings, high school academic achievement, and socioeconomic status of students. Student perceptions of the HESLB program for financing higher education in Tanzania such as student loans awareness, knowledge of student loans, student loan eligibility criteria, disbursement of student loans, relationship between higher education and economic growth in Tanzania, and students’ satisfaction with the HESLB program, and fairness of the HESLB program for low socio economic

status students were also independent variables. On the other hand, the criterion (or dependent) variable was perceived as likelihood of student loan repayment.

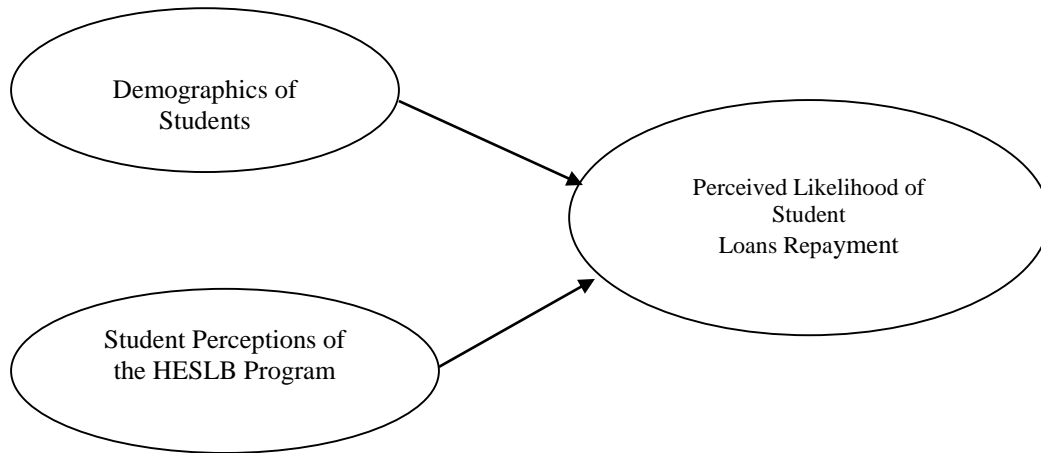


Figure 3. Conceptual framework.

Figure 4 illustrated the selected student perceptions, which were used as dependent variable to predict the perceived of likelihood of student loan repayment. Figure 5 illustrated the selected demographics, which were employed as dependent variables to predict the perceived of likelihood of student loan repayment.

Limitations

The first assumption in this study is that the participants will answer truthfully and accurately to the survey questions based on their personal experience of the cost-sharing program for higher education. Secondly, they will respond honestly and to the best of their individual abilities. Thirdly, western Tanzania has no higher-learning

institutions (universities), and therefore that section of the country may be underrepresented.

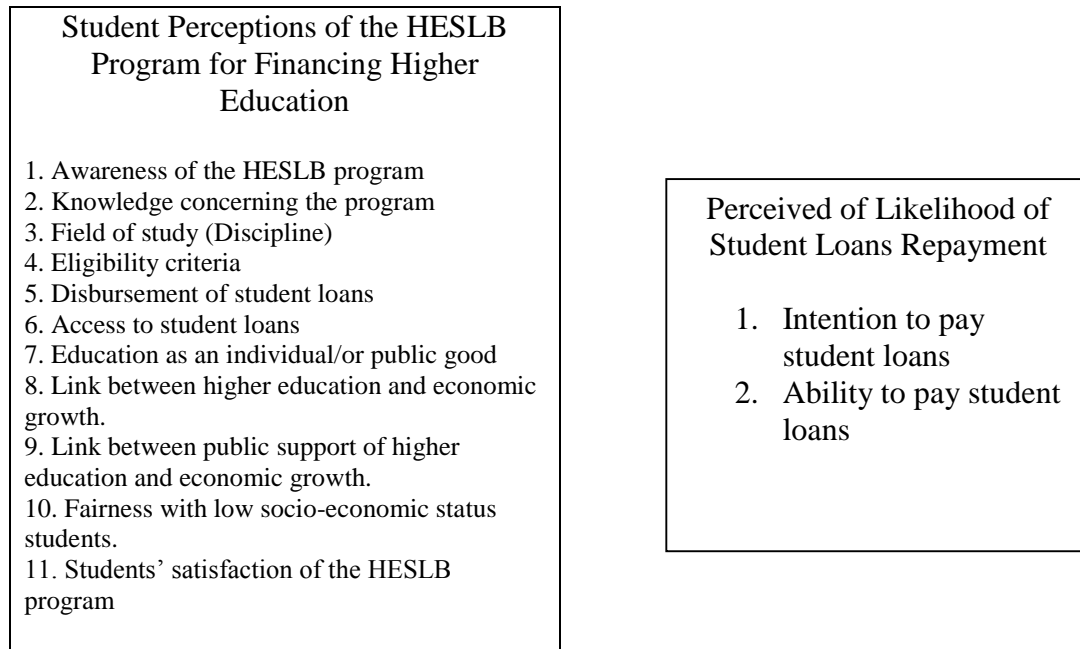


Figure 4. Components of conceptual framework/multiple regression model.

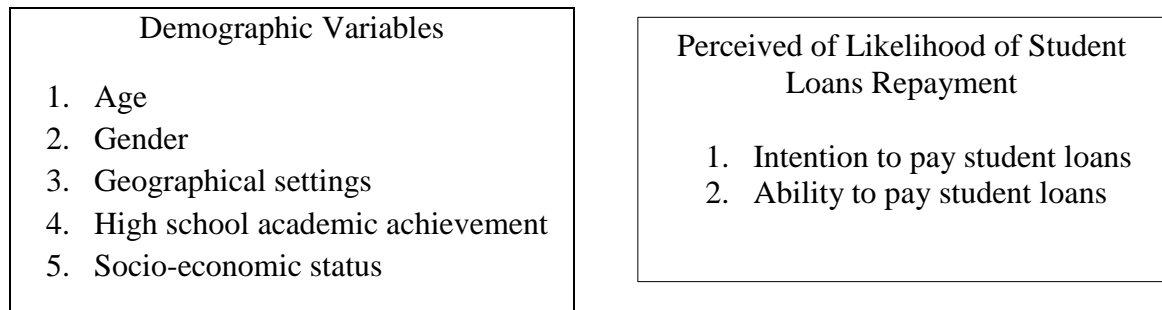


Figure 5. Components of conceptual framework/categorical regression model.

Methodology

This study has employed a quantitative survey research. Quantitative research is useful for quantifying opinions, attitudes, and behaviors and thus can be used to explore how whole populations feel about a certain issue. McGuigan (2012) added that quantitative research involves gathering data that are absolute, such as numerical data so that they can be examined in as unbiased a manner as possible. It also clearly and precisely specifies both the independent and dependent variables under investigation (Matveev, 2007). Quantitative research achieves high levels of measurement reliability due to controlled observations and mass contribution of surveys. As way of controlling observations, this study employed random sampling to enhance the greatest likelihood that the sample was representative of the population since every member of sample was selected independently and had equal chance of being selected.

Furthermore, its measurements are “viable, valid and generalizable in its clear prediction of cause and effect” (Cassell & Symon, 1994, p. 4). Likewise, the study is descriptive-correlational design in nature. Descriptive design is used to gain information about the characteristics in a field of study by providing a picture of situations as they occur, while correlational design examines relationships among variables (e. g. independent and dependent variables). Researcher-employed descriptive-correlational design to examine relationships between demographics (age, gender, socioeconomic status, high school academic achievement) and likelihood potential of student loan repayment, and relationships between student perceptions of the HESLB program for financing higher education (perception of student loans awareness, student loan eligibility criteria, access to student loans, disbursement of student loans, relationship between

higher education and economic growth in Tanzania, satisfaction with the HESLB program, and fairness of the HESLB program for low socioeconomic status students) and likelihood potential of student loan repayment (Creswell, 2009; McMillan & Schumacher, 2006).

This study employed categorical regression (CATREG) to measure the influence demographic predictive variables, such as age, gender, geographical settings, socioeconomic status, and high school academic achievement to dependent variable had on the likelihood potential student loan repayment. In addition, the researcher used multiple regression analysis (MRA) to determine the influence of student perceptions of the HESLB program, such as their perception of student loans awareness, knowledge of student loans, student loan eligibility criteria to student loans, disbursement of student loans, relationship between higher education and economic growth in Tanzania, and satisfaction of the HESLB program for financing higher education on the dependent variable of the perceived likelihood of student loan repayment.

Delimitations of the Study

Delimitations are restrictions/bounds that the researcher imposes prior to the inception of the study to narrow the scope of study. This study has various delimitations. First, the findings are limited to the period of the study. The study was conducted at a particular period of time and thus the findings of the study are related to that particular point in time. Any changes that may occur after the study will not be part of this research. Second, this study dealt with universities only; other higher educational institutions were not included. Third, two public universities randomly selected for inclusion—Muzumbe University and University of Dar es Salaam—are among the nation's oldest flagship

institutions; as a result, smaller and newer public institutions were not represented. Furthermore, the private institutions included have religious affiliations (Muslim, Roman Catholic and Seventh-day Adventist [SDA]) and thus institutions owned by individuals and other organizations were not well represented.

Definitions of Terms

This section provides the contextual definitions of key terms used in this study:

Assumption: Propositions upon which the researcher bases the logical arguments implicit or explicit in a study. These are propositions that the researcher wishes the reader to accept without further proof or evidence.

Awareness: The ability to perceive, to feel or to be conscious of events, objects, thoughts, emotions or sensory patterns.

Bonferroni correction: Is a multiple-comparison correction used when several dependent or independent statistical tests are being performed simultaneously. In order to avoid a lot of spurious positives, the alpha value needs to be lowered to account the number of comparisons being performed (Weisstein, 2004).

Categorical regression: Is a regression analysis, which quantifies categorical data by assigning numerical values to the categories, resulting in an optional linear regression equation for the transformed variables. It extends the standard approach by simultaneously scaling nominal, ordinal and numerical variables. The procedure quantifies categorical variables so that the quantifications reflect characteristics of the original categories (IBM Knowledge Center, 2016).

Cost-sharing in higher education: A shift in the burden of higher education costs –costs that in many nations, at least until recently, have been borne predominantly

or even exclusively by governments or taxpayers to being shared with parents and students (Johnstone, 2003a).

Correlation: A statistical measurement of relationship between two variables. Possible correlations range from -1 to +1. A zero correlation indicates that there is no relationship between the variables. A correlation of -1 implies a perfect negative correlation, meaning that as the values of one variable go up, values of the other one goes down. A correlation of +1 indicates a perfect positive correlation, meaning that values of both variables increase together.

Counter-balancing order: An experimental design in which subjects receive all treatments, but in different order so as to rule out the influence of survey fatigue.

Credit history or credit report: A record of an individual's or company's past borrowing and repaying, including information about late payments and bankruptcy. The term credit reputation is used interchangeably with credit history or credit score.

Decentralization of higher education system: A trend involving the shifting managerial decision-making, authority and accountability of higher education from the central government to local governments, institutions (public and private) and other stakeholders such as students, parents, and philanthropists. It is a power shift from center to periphery.

Default loan: In finance, default occurs when a debtor has not met his or her legal obligations according to the debt contract; it is a failure to pay back a loan. Default may occur if the debtor is either unwilling or unable to pay his or her debt.

Differed payment loan: A debt that has been incurred and will be paid back at some point in future. It is a deliberately delayed payment for a loan.

Endowment Effect: The hypothesis that people value a good (object) more once their property right to it is established (Kahneman, Knetsch, & Thaler, 1991). Thaler (1980, p. 41) said that “people often demand much more to give up an object (or right) than they would be willing to pay to acquire it.” This effect implies that it is much easier to not give somebody something in the first place than to take it away from him/her later.

Endowment fund: An investment fund set up by an institution in which regular withdrawals from the invested capital are used for ongoing operations or other specified purposes. It is a gift in which the principal is kept intact and only the interest income from the principal is used.

Generalization: The extent to which the data are applicable in places other than where the study took place, or under what conditions the study took place.

Grace period: An allotted amount of time during which you are not expected to make payments on student loans after initially leaving school or dropping below half time status. The higher education student loans board of Tanzania allots each student a year as a grace period before starting paying his or her student loans.

Gross enrollment rate (GER): The ratio of number of students in a “specific level of education, regardless of age, divided by the population of the age group that officially corresponds to that level of education” (United Republic of Tanzania, 2010, p. xii).

Higher education: The third stage of education level, post-secondary education; it is non-compulsory educational level. This study will deal primary with undergraduate level, but with graduate as well as postgraduate levels to a certain extent.

Higher learning institution: A university or university college that offers a level of academic education and professional training leading to full academic and or professional qualification and competence.

High School: An advanced level of secondary education, it consists of forms five and six (grades thirteen and fourteen) in Tanzania.

Income-contingent repayment plan: A plan intended to provide borrowers with affordable monthly payments depending on their income and family sizes. In most cases the remaining loan balance is forgiven after 25 years and for people who are employed in public service sectors the remaining loan balance will be forgiven after ten years of paying.

Knowledge Economy Index (KEI): An aggregated index representing a country's or region's overall preparedness to compete in the knowledge economy. It is based on the average of four indexes, namely: economic incentive and institutional regime, innovation and technological adoption, education and training, and information and communications technology infrastructure (World Bank Group, 2012).

Loans recovery: A mechanism of collecting money from the beneficiaries after their graduation. Graduates have a year of grace period and after the grace period they have to be consistent in repaying their education loans according to the contracts between them and financial agencies (lenders).

Loss Aversion: A concept, which expresses the tendency of people to strongly prefer avoiding losses over acquiring gains.

Means testing: A mechanism that used to determine needy students who would be eligible for education loans. The government through the HESLB determines the right

candidates to be granted loans based on their families' financial status and their high school performance.

Muslim: It is believed that about 35-45% of Tanzania population is Muslims while 99% of the population of Zanzibar is Muslim. Religious resources and sociologists estimate that the Christian and Muslim communities are equal. Muslims believe that God's final message to humanity, a reconfirmation of the eternal message and a summing up of all that has gone before, was revealed to his last prophet Muhammad. It is believed that Islamic faith has been in Tanzania since 830 CE (Islam in Tanzania, 2011).

Needy students: Students from poor families. These are students who by any means cannot afford the costs of higher education by themselves without some kind of aid (e.g. loans).

Philanthropist: A person, usually wealthy, who makes some or all of his or her money available to charitable causes. Many community services, such as libraries, churches, educational institution, and sanitation systems have been founded and significantly funded by philanthropists.

Retention of students in higher education: Refers to the extent to which students remain within higher education institutions; and complete a program of study within the time frame of the said programs (Livsay, 2009).

Roman Catholic Church: A worldwide church, under the spiritual leadership of the pope and curia in Rome. There are about nine million Catholics in Tanzania, representing roughly more than a quarter of the total population of the country. It is the largest denomination in the nation, as well as the world's largest Christian church with more than a billion members (Cheney, 2005).

Self-Control: Refers to the idea that people do not trust the way they will behave in the future. Therefore, they voluntarily restrict their range of future choices. (Teixeira et al., 2008, p. 229).

Seventh-day Adventist Church: Often referred to as SDA or Adventist, it is a Bible-based Christian denomination distinguished by its observance of Saturday (as holy day) and by its emphasis on the imminent second coming (advent) of Jesus Christ. It operates about 7,600 schools, colleges and universities, constituting the largest Protestant educational system in the world, second only to that of the Roman Catholic Church in size among religious-based educational systems. As of 2015 membership in the SDA church in Tanzania is 490,750 (Northern Tanzania Union Conference, 2015; Southern Tanzania Union Missions, 2015).

United Republic of Tanzania: A nation composed of 31 regions including those of autonomous region of Zanzibar (26 are in the Tanzanian mainland and five are in Zanzibar). The name Tanzania derives from the names of the two states, Tanganyika and Zanzibar that united in 1964 to form the United Republic of Tanganyika and Zanzibar, which later the same year was renamed The United Republic of Tanzania. It is the largest country among the East Africa community countries with a total area of 945,000 square kilometers, including 881,000 in the Tanzanian mainland, 2,000 in Zanzibar and 62,000 covered by water. Its population is estimated to be 55, 000, 000 (Tanzania Population Clock, 2016; Tanzania –United Republic of Tanzania-Zanzibar Profile, 2011).

Vertical equity: A method of collecting income tax in which the taxes paid increase with the amount of earned income. The driving principle behind vertical equity

is the notion that those who are more able to pay taxes should contribute more than those who are not.

Organization of the Study

This chapter has briefly summarized the background and an overview of the study, statement of the problem, purpose of study, research questions, rationale of study, theoretical framework, conceptual framework, methodology, delimitations, limitations of the study, and finally the definition of terms.

Chapter two provides a literature review, summarizing what other researchers have done on subjects related to the present study. Chapter three delineated the methodology used for this study. Chapter four discusses the results of the collected and analyzed data. Finally, chapter five provides the summary of the study, offering implications, recommendations for implementation within the cost-sharing program and areas for further study, and conclusion of the study.

CHAPTER 2

LITERATURE REVIEW

Introduction

As the demand for higher education around the world grows, its cost increases rapidly, especially as many government agencies reduce their supports in terms of grants and scholarships. Government tax revenues are not keeping pace with the spiraling cost of higher education. The increase in the number of student pursuing postsecondary education has posed a major challenge for systems where tradition has been to provide access to free or highly subsidized tuition. “This expansion has been driven by the shift to post-industrial economies, the rise of service industries and the knowledge economy” (Altbach, Reisberg & Rumbley, 2009, p. iv).

Financing higher education throughout the world has gone through dramatic contests and changes intellectually, ideologically, and politically in the last decades of the 20th and the beginning of the 21st centuries (Johnstone & Marcucci, 2008). This situation may continue through the current decade. Tuition costs are increasing every year due to the rising costs of delivering of higher education. Most people’s incomes are relatively stagnant, but the costs of colleges and universities continue to climb. Pytel (2009) asserted that “even after allowing for inflation and cost of living, college is now costing families a higher percentage of family income than it did in the past.”

This chapter will present the current trends of financing higher education globally.

It will represent the critical review of the existing literature on the importance of higher education globally, different ways of financing higher education, a brief history of higher education in Tanzania, cost-sharing in higher education in Tanzania, rationales of the cost-sharing in higher education, success and challenges facing the HESLB in Tanzania, and finally perceptions of students regarding cost sharing for higher education in Tanzania

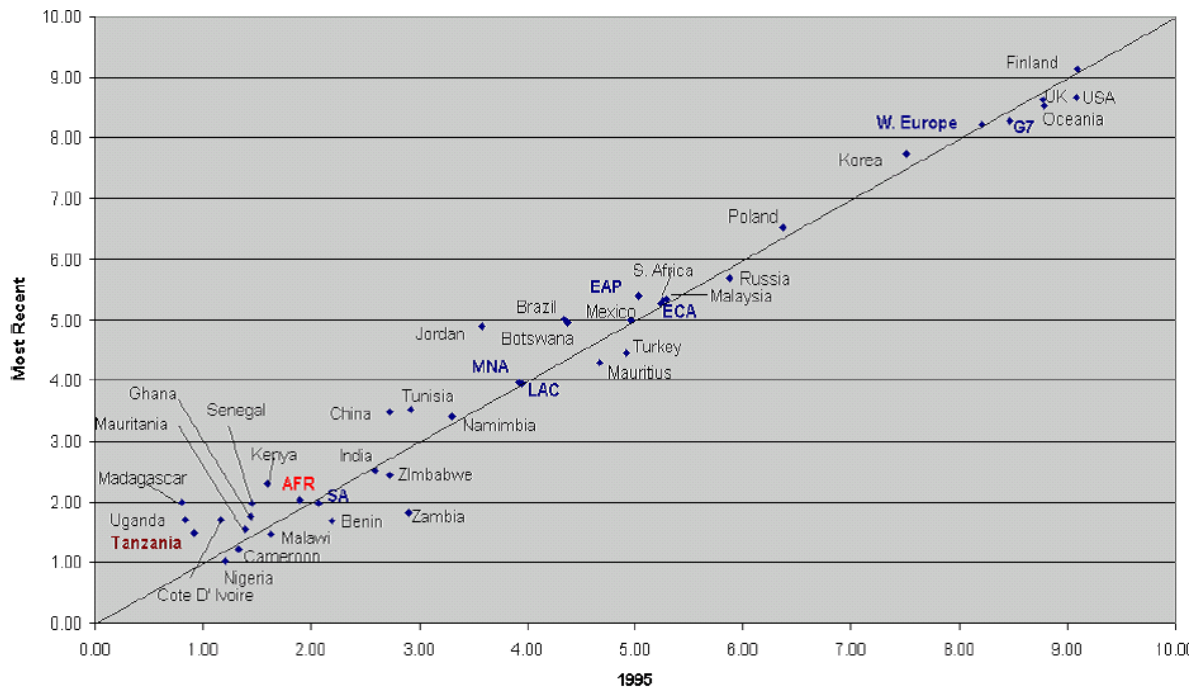
Importance of Higher Education

Higher education matters more than ever today because of the nature of technology and information age, which has increased the demand for highly trained workers. As Barr (2004) pointed out, “The ‘information age’ can be taken to mean a need for education and training that is larger than previously, more diverse, and repeated, in the sense that periodic retraining is required.” Lice, Striedinger, Camilleri, Scholz, & Geven (2006) asserted that the benefits of graduates spill over to all society “in terms of lower unemployment rates, better health, lower crime rates, more societal involvement, higher tax returns and other trickle down effects. The private benefits are hugely compensated by the graduates’ contribution to society” (p. 61).

According to Barr (2005),

Tertiary education is an important element in national economic performance and a major determinant of a person’s life chances. Thus, the expansion that is taking place internationally is both necessary and desirable. But higher education is costly, and competing imperatives for public spending. (p. 1)

Altbach (2006) observed that higher education has become more important not only to individuals to enrich their lives and status, and to give them more job opportunities, but



Note: Countries above the 45 degree line have improved their position in the KEI for the most recent period relative to their position in 1995 (or closest available date in the mid-90s), and vice versa for countries below the line. © K4D, WBI

Figure 6. The KEI of some countries in the world. Taken from World Bank (2012).

also for the society at large “for the sake of economic prosperity generally as well as for the advancement of democracy and social justice” (p. xiii)

The higher education commission for Africa, in its report, states clearly that the international community recognizes higher education’s values for development (Bloom, Canning & Chan, 2005). (See Figure 6).

It is also true that higher education can equip a country’s policymakers to establish more effective policies and can enable people to value their resources as ways to advancement of the country. A comparison of Mauritius and Tanzania is illustrative. The per capita gross domestic product (GDP) is just \$ 1,715.00 in Tanzania but \$ 16,056.00 in Mauritius, even though Tanzania has greater natural resources including gold, natural gas, diamonds, tin and coal (Bloom et al., 2005, Index of economic freedom, 2015). One

reason is that just 4% of Tanzanians enrollment in higher education, compare to 15% in Mauritius (from 1% in 1980). Life expectancy is 61.5 in Tanzania but 73 years in Mauritius.

Another example to show the importance of education is the comparison between Ghana and South Korea. Both Ghana and South Korea had similar GDP (US\$490.00) in 1957 (Werlin, 1991). By then Ghana was the wealthiest country in Sub-Saharan Africa. It had huge economic advantages over South Korea. The former Gold Coast was known for natural resources such as gold, diamond, manganese, bauxite, and timber. Ghana was also a leading producer of cocoa in the world. But over 40 years South Korea has made great economic, scientific and technological strides and has emerged as one of the world's largest economies.

By 2008, the GDP of South Korea was 17 times higher than Ghana. Despite of lacking the natural resources and having smallest territory among the G. 20 major economic countries, South Korea is regarded as one of the stronger economic country in the world. Some of its industrial companies like Samsung, Hyundai-Kia, Lucky and GoldStar, and Daewoo are leading globally. Ghana on the other hand remains in the agro-based economy (Atuahene, 2007). Benneh (2002) indicated that South Korea was able to make these strides because the government invested heavily in quality higher education. The above illustrations support the idea that “if ever there can be a cause worthy to be upheld by all toil or sacrifice that the human heart can endure, it is a cause of education” (Mann, 2011).

Higher education can play big role in different projects. For instance, Tanzania government has introduced a project known as Kilimo Kwanza (Agriculture First), the

purpose of which is to improve the “current agricultural growth rate from 4% to 8%. [Achieving this goal] will indeed need and depend on trained agricultural experts with higher education” (Abeli, 2010, p. 22). People with higher education also make a powerful difference in the field of engineering. Abeli (2010) augments that “engineering graduates have designed and supervised construction works ranging from highways, dams, bridges, mining, irrigation, machines, and buildings to industries. Proper designs of those infrastructures have led to low unit cost production, improved productivity and environmental sustainability” (p. 23).

In sum, the importance of higher education to a society and the economic development is great and it cannot be overstated. Higher education alleviates poverty by providing the necessary expertise needed in economic growth (Brossard & Foko, 2011). Abeli (2010) added that “higher education is necessary if problems related to poverty, people’s well-being, infrastructure, sanitation, diseases, health, water, environment, food security, agriculture and governance are to be solved” (p.21). There is no way we can ignore higher education if we want the development of any nation. Mwamila and Diyamett (2006) concurred, stating that development in science and technology (provided by higher education) “is not only an important determinant of a country’s level of development but also enhances its international competitiveness and its position in the world economy” (p. 10). Success in a global economy depends on well a country can assimilate the available knowledge, “build comparative advantages in areas with good growth prospective and how it can use technology to address the most pressing environmental challenges” (World Bank, 2008, p. viii). The Tanzania’s vision for 2025 envision a nation of

high level of education at all levels; nation which produces the quantity and quality of educated people sufficiently equipped with the requisite knowledge and skills to solve the society's problems; meet the challenges of development and attain competitiveness at regional and global levels. (Tanzania Commission for Universities, 2009, p. 15)

Furthermore, higher education reduces the tendency to commit crimes. Baum and Payea (2005) report that about 2 percent of people with no high school “were incarcerated in 1997, as were 1.2 percent of those with a high school diploma, but only 0.3 percent of adults with some college experience and 0.1 percent of college graduate were incarcerated” (p. 20). Having discussed the importance of higher education the following section will discuss different ways of funding higher education.

Different Ways of Funding Higher Education

Although higher education plays a vital role in society, the quality, accessibility and form of higher education depend on how this long-term investment to individuals in the entire society is financed. There are ways of governments (i.e., taxpayers) to fund higher education, including grants, scholarships, loans, subsidies, work-study programs, tuition reimbursement, prepaid tuition, graduate fellowships, college student tax benefits, graduate assistantship, performance-based funding, endowments, part-time employment and cost-sharing programs.

Because of the growing of the number of students in higher learning institutions and the competition between higher education and other imperatives, many countries are withdrawing their support for higher education. But an up-front charge (i.e., requiring students to pay tuition at or before the beginning of a term) is a stumbling block to many students who cannot afford these costs. Accordingly, countries unable to shoulder the full cost of higher education often seek to let students defer their charges through loan

programs (Woodhall, 2007).

Grants and scholarships are both types of funding that have no repayment obligation. Grants are given to students based on their financial need while scholarships are generally granted according to students' merit. Government, the school itself or other nonprofit organizations give grants.

In rare cases, scholarships may be granted based on need but in most cases students get them due to their academic, artistic, athletic abilities. Minority scholarships may be offered on basis of race, gender, religion, tribe, family or medical background. Some of them are based on career interests such as computer science, education, nursing, counseling or social work according to the need of particular society (Thomas, 2010). Students who receive scholarships need to meet certain criteria such as grade point average (GPA) and number of credits attained before and/or after receiving financial aids.

Most prestigious higher educational institutions employ endowments to finance higher education. Large endowments are both a driver and a reflection of university growth and prestige. Once they have endowments schools manage them as if those educational institutions are there to exist forever (Weisbrod, Ballou, & Asch, 2008).

Endowments can be enormous contributor to a school's budget. For instance, it has been noted that

nearly \$ 1 in \$ 3 spent at Yale today comes from the endowment. Having such a financial advantage gives a school the opportunity to pursue goals that would be financially unattainable at current tuition rates in the absence of endowment incomes. (Weisbrod et al., 2008, p. 138)

Endowments help colleges and universities to reduce tuition fees. At large-endowment institutions, tuition constitutes a lower percentage of revenues (typically about 10 percent) while at small endowment institutions; tuition may constitute 60 percentages of

revenues.

Student loans are becoming the most popular methods of funding higher education in many countries. It is replacing the upfront fees funding. There are different forms of student loans as will be discussed later in this chapter. All student loan programs provide financial aids with the costs of tuition, books and or living expenses while they are in school. Upon the completion of studies students have to repay money, generally at little or no interests. The arrangement is called deferred loan because its payment depends on the “future income of students rather than their current resources” (Albrecht & Ziderman, 1992).

In some countries like the United States of America, the government subsidizes higher education through tax and spending programs. For instance, the US uses American opportunity and lifetime learning credits as tax relief to students and their families (Maag, Mundel, Rice, & Rueben, 2007). Department of the Treasury –Internal Revenue Service (2011) asserts that student or a person claims student “may be able to claim an American opportunity credit up to \$ 2,500 for qualified education expenses paid for each eligible students” (p. 8). Under the lifetime learning credit an individual may claim up to \$ 2,000.00 for the expenses paid for eligible student per year and there is no limit on the number of years the lifetime learning credit can be claimed for each student (Publications 970, 2011).

Work-study program provides jobs for undergraduate and graduate students on the basis of financial needs. Students have to complete a Free Application for Federal Student Aid (FAFSA) form in order to be in work-study program. Jobs and some can be

found off-campus. The government reimburses employers part of the costs to support needy students.

Some employers offer tuition reimbursement to their employees as part of their employee benefits package. Students are required to pay their school expenses up front and then submit their expenses to their employers for reimbursement. In most cases employee will continue to work for the company when he or she is in school and after graduation.

Prepaid tuition plans are programs that allow parents to pay for their children's future college tuition at the present prices. These kinds of programs are known in the US as 529 plans. As US Securities and Exchange Commission (2007) assert:

A 529 plan is a tax-advantaged savings to encourage saving for future college costs. 529 plans, legally known as 'qualified tuition plans,' are sponsored by states, state agencies, or educational institutions and are authorized by Section 529 of the Internal Revenue Code.

Some states offer income tax benefits or other matching grants to investors in 529 plans (U.S. Securities and Exchange Commission, 2007). However, some 529 plans charge enrollment and administrative fees.

Another way of financing higher education is through performance-based funding. This method links funds to the quantity of outputs or the quality of outcomes rather than inputs. Hauptman (2005) says that performance-based funding is "designing incentives for institutional improvement, not just maintaining status quo." This kind of financing mechanism tends to be more transparent than others because its performance indicators have to be developed in advance and be readily available to the public.

The state of Indiana, under the leadership of Governor Mitch Daniel who is now the president of Purdue University in 2009, adopted performance-based funding as a

means to increase the percentage lower- income students completing their degrees. “The enrollment component of the state’s formula is now based on completed credits rather than attempted credits” (Conklin, 2010). Indiana hopes that the use of performance-based will help it improve student retention rates and meet its economy’s future demands. It is believed that “two out of three students who start at an Indiana campus fail to finish on time and about half don’t graduate at all” (Indiana Commission for Higher Education, 2011).

The performance-funding scheme in European countries is based on five components measuring institutional efficiency and effectiveness in academic achievements: first, by measuring the ability of institution by attracting external sources of funding domestically as well as internationally; second, by ranking institutions in international student and faculty exchange; third, by measuring the efficiency of adult education services; fourth, by checking career replacement of graduates in the labor market; and fifth, by evaluating institutions’ success in creating academic quality in teaching and research (Holttta, 1998). The goal is to promote the quantity and quality of higher education. Alexander (2000) asserts that “Universities, on the other hand, are expected to compete intensively for additional resources based on predetermined performance objectives established by the state. In this kind of performance-based system the responsibility for improvement rests with individual institutions and departments” (p. 426). Each institution and department does its best to achieve the established goals thereby generating income.

Among the countries finance higher education through loans, are Australia, England, South Africa, China, Chile, Canada, Germany, United States of America, Japan,

Kenya and Tanzania (Marcucci & Johnstone, 2010; The World Bank, 2010).

This study will examine the effectiveness of cost-sharing as means of financing higher education in Tanzania with regards to student perceptions of the program. Cost sharing can involve the division of responsibility for costs among any of four parties: government or taxpayers, parents, students and philanthropists (Teixeira et al, 2008, p. 56). Politically, it can be defined as a shifting of a portion of educational expenses from governments to students, parents and/ or philanthropists. The Tanzanian government chose to finance higher education by using the cost-sharing program because this system creates an avenue to improve access to students from low socio-economic backgrounds (Woodhall, 2004). It is also a means of making students more responsible and causing them to acknowledge the value of their education. After seen different ways of funding higher education globally and the current means of financing higher education in Tanzania, let us see the brief history of higher education in Tanzania.

Brief History of Higher Education in Tanzania

Higher education can be defined as “all types of studies, training” and or skills for researching “at the post-secondary level, provided by universities or other educational establishments that are approved as institutions of higher education by the competent state authorities” (UNESCO, 1998). This study will deal only with universities.

The relatively short history of higher education in Tanzania can be divided into five phases: pre-independence, 1961 – 1974, 1975 -1983, 1984 -1993 and 1994 to present (Tanzania Commission for Universities, 2005). The United Republic of Tanzania was formed on April 26, 1964 as union of the Republics of Tanganyika and Zanzibar. Before independence these two states were separate countries. Administratively the United

Republic of Tanzania contains two governments: the union government which also oversees all matters in Tanzania mainland, and Zanzibar revolutionary government, which has full autonomy on all aspects pertaining to the island of Zanzibar except those that are spelled out in the Republic's constitution. Higher education is one of those aspects (ministries).

Before independence, a very small number of fortunate Tanganyikans persuaded higher education at Makerere College, Uganda, a college affiliated with the College of London University. "In 1947, there were only 25 Tanganyikan students at Makerere" but in 1959-1960 academic year the number increased to 183 (Tanzania Commission for Universities 2005).

A few Tanganyikan students attended at Royal Technical College in Nairobi, Kenya, which was established in 1956. In 1959–1960 there were just six Tanganyikans there (Tanzania Commission for Universities, 2005). Before independence, Tanganyika had some intermediate-level technical colleges such as Ifunda, Moshi and Dar Es Salaam. These were established in 1954, 1957 and 1958, respectively (Tanzania Commission for Universities, 2005).

The University of Dar es Salaam was officially established pre-independence on Wednesday, October 25, 1961, just eight weeks before Tanganyika gained independence, as a college of the University of London. It started with only one department, the faculty of law, with 14 enrolled students (Douglas, 2007; Makulilo, 2009; Southern African Regional Universities Association, 1999; University of Dar es Salaam, 2007). "In 1963 it became a constituent of college of East Africa. In August 1970, it became a national university...." (University of Dar es Salaam, 2007, p. 4). It was established for the

purpose of training people at “the highest level for clear and independent thinking, analysis and problem solving” (University of Dar es Salaam, 2007, p. 4).

After independence each country in East African region wished to have its own institution of higher education. Alphonse (1998, p. 3) explained:

The University of East Africa was formed in 1963 and comprises of Makerere College in Uganda, the Royal University College in Nairobi Kenya and the Dar es Salaam University College in Tanzania. Making reference to a National University here is important because in these early years of independence, having a university was almost synonymous with the national flag, national anthem and the national airline, which may explain in part why the regional university arrangements did not hold. Each country had to have a nation institution of higher education to call their own. This is a realm where it can be argued that higher education institution served as a symbol of political legitimation for the post-colonial states.

Because of patriotism of each country the University of East Africa did not survive for long time. Each country decided to have its own university. Uganda established Makerere University, Kenya University of Nairobi and Tanzania University of Dar es Salaam.

Between 1961 and 1974 Tanzania experienced growth in the number of tertiary education institutions. The Tanzania Commission for Universities (2005) declares that “the establishment of the Dar es Salaam University College did not meet the national demand for the professionals needed for development of the country” (p. 2). Institutions were established targeting specific ministries. For instance ministry of education had teacher training colleges, ministry of finance Institute of Finance Management and public administration and supervision had Institute of Development Management (Tanzania Commission for Universities, 2005).

During the period of 1974 and 1983 Tanzania adopted the Universal Primary Education Policy. Also during this period, the University created a policy that it would

admit only students who have Advanced Certificate of Secondary Education or other people of acceptable academic qualifications who had at least working experience of two years after National Service requirements.

Between 1984 and 1993 the government established other two universities, Sokoine University of Agriculture in 1984 and Open University of Tanzania in 1993. Also in this period, a Constituent College of the University of Dar es Salaam—Muhimbili University College of Health Science—was established (1991). Up to this point, all higher education in Tanzania was offered virtually free of charge (Makulilo 2009).

Higher education in Tanzania since 1994 has been characterized as going through a period of reformation. The Tanzania Commission for Universities (2005) recognizes this period as a time of higher education institutional reformation in such of “ways of positioning the institutions better in meeting the challenges of globalization and market economy” (p. 2). Since 1994, the government of the United Republic of Tanzania has been implementing the policy of cost-sharing to students of higher educational institutions as a means of meeting the nation’s demands. This exercise was to be carried out in three phases as we will see in the following section.

Cost-Sharing Program in Higher Education in Tanzania

After seeing the brief history of higher education in Tanzania, let us now consider the cost-sharing program for financing higher education in the country. The term cost-sharing in higher education answers the question ‘who should pay for higher education?’ (Biffi & Isaac 2002; Bou-Habib 2010; Johnstone, 1986; Teixeira et al., 2008; Woodhall, 2002;). D. Bruce Johnstone, the Distinguished Service Professor of Higher and Comparative Education Emeritus at the State University of New York at Buffalo and

Director of the International Comparative Higher Education Finance and Accessibility Project, coined this term in the mid-80s (Johnstone, 2010). He defined it as follows:

Cost-sharing is both a fact – that is, that the costs of higher education are shared among a limited number of parties, or bearers, in what is an essentially zero-sum game of sharing and shifting the very considerable costs of the higher educational enterprise –and also a description of a worldwide policy of shifting these costs from a substantial ... reliance on governments, or taxpayers, toward greater shares being borne by students and/or parents. (p. 3)

The cost-sharing language is very much associated with the introduction of tuition fees where they might have not existed previously. This is true for the case of Tanzania. Furthermore, it may be evidenced by a freezing of stipends (grants) and their replacement by loans. Instead of students getting allowances and free education students now get education loans for instruction fees and living expenses.

The funding situation is critical as Tanzania's higher education system in the country is experiencing the paradigm shift from a few elite students to reaching larger number of people, including many students from disadvantaged socio-economic background who cannot afford the price of higher education unless it is subsidized or paid through cost- sharing program.

Because the Tanzanian government is facing a financial crisis, it has decided to reintroduce the cost-sharing in higher education as one of the means of increasing student enrollments in higher learning institutions. The World Bank (2010) asserts that “in response to public demand for higher education in the context of scarce public resources, after a period of totally free education, in 1992 the government of Tanzania introduced a cost-sharing policy that expects beneficiaries to contribute gradually” to the expenses of their education (p. 140). In fact Tanzanian government adopted the cost-sharing policy in higher education in 1988, but for political expedience, made its formal announcement of

the policy in January 1992 (United Republic of Tanzania, 1998). The government introduced cost-sharing in three phases.

Phase 1 began in the academic year of 1992-1993. Parents and students were responsible to pay for students' transportation, application, registration and examination fees. At this time private sponsored students who did not reach the cutoff point for government scholarship were admitted on the basis that they would pay their own tuition fees (Ishengoma, 2004a; Thomas & Rawle 2006; World Bank, 2010).

Phase 2 was implemented in the following academic year. At this point, on top of phase 1 costs, now students were required to pay for the living expenses such as food and accommodation. Those who could not afford the costs of living had to get loans from the government. Loans were available for all qualified Tanzanian students admitted at public universities as well as at accredited private universities and colleges (Ishengoma, 2004a; Thomas & Rawle, 2006; World Bank 2010).

Phase 3 began in 2005. Now, in addition to the contributions enumerated in phase 1 and 2, "students are expected to contribute to education costs. The level of this contribution is set by each institution and should in principle cover the real costs of training provided" (World Bank, 2010, p. 140). Students from low socio-economic backgrounds can still get loans to cover these costs. Immediately after graduation or after one year of grace period students have to start to pay their loans and they must continue to pay for the next 10 years. No interest payments were required when the program started but since 2011/2012 academic year small interest payments of six percent has been introduced.

As a matter of fact, the University of Dar es Salaam's Council approved an official proposal for admitting privately sponsored Tanzanian students in 1996 and in 2002 it was officially recommended that the university fill remaining spots not taken by government-sponsored students with privately sponsored students (Ishengoma, 2004a). In order to accommodate that policy, the university introduced criteria and set a minimum cutoff point for admitting fee-paying students into a particular degree. The number of fee paying students into a degree program determined by the number of students sponsored by the government.

The Rationales of the Cost-Sharing Program for Higher Education in Tanzania

Having discussed the cost-sharing program for higher education in Tanzania in the previous section, let us now consider its rationales. There are various reasons for the cost-sharing program for higher education in Tanzania. The first and foremost is that, Tanzania is one of the poorest countries in the world, with half of its population living below the poverty line. Its economy heavily depends on agriculture, which contributes about 50% to the nation's GDP and engages over 80% of the total population. The second significant sector is service, which contributes about 39.3% to GDP (Mwamila & Diyamett, 2008). The other factor considered to be the most powerful engine for structural change and modernization of the economy is the manufacturing sector, which contributes only 7.6% to the GDP and it accounts for less than one percent of the export (Mwamila & Diyamett, 2008).

The second reason for the cost-sharing for higher education in Tanzania is the declining resources of existing donors. A 1999 analysis stated that "donors in both capital

and recurrent expenditure, have helped to keep the system somehow going; but there are clear signs of donors' fatigue due to changing conditions in the socio-economic and political global situation" (United Republic of Tanzania, 1999, p. 16). There was a great need for an effective alternative plan for financing higher education to accommodate the changing role of the government and other donors. It was clear that students and their families would have to contribute towards the expenses of higher education.

The third rationale for the cost-sharing in higher education program "is the neo-liberal economic theory that tuition allows some virtues of the market in higher education such as efficiency (consumer-provider relationship) and producer responsiveness" (Mhamed, 2004, p. 6). Students, parents, philanthropists, and society at large will hold the higher educational institutions more accountable if they play a role in paying the costs of higher education. They will question the institutions to see if their products are worth the money. Students also will have sense of responsible for the money they pay (or will pay in future, if they receive education loans). This sense may motivate them to work hard and to finish their studies on time.

The fourth reason is the paradigm shift of higher education from serving the elite to having a more constituency. Mhamed (2004) affirmed that equity is one of the vital "factors in sharing the burden of the costs of higher education between the government and students and families because it allows equal access to higher education for both students who can afford it and students who cannot" (p. 6). Students and parents who can afford higher education must pay for themselves, while those who cannot get education loans from government or its agency. Johnstone (2003) argued that supplementing the revenues of higher education "by non-governmental sources –primarily students and

family –is one of the major recommendations from the World Bank and most other development experts as one important solution to increasingly underfunded and overcrowded universities in the developing world” (p. 8). In order for Tanzania to fulfill its goal of becoming a middle-income country by 2025, it has to invest in higher education, and multiple resources of funding be involved in financing it (Southern African Regional Universities Association, 2010).

Figure 7 shows that by 2015 there will be an enormous expansion of students in higher education in Tanzania. “This sizeable increase in the number of students would lead to a cumulative level of current expenditure by 75 percent higher than the volume the public resources could be mobilized” (International Bank for Reconstruction and Development and the World Bank, 2010, p. 30).

The fifth reason is that the availability of loans as a means of the cost-sharing will not only provides more students access to higher education but will also increase retention rates.

Furthermore, higher educational institutions are expected to be creative in generating income to supplement subsidies. However, precaution must be taken so that universities and colleges do not concentrate on activities that detract from their primary mission.

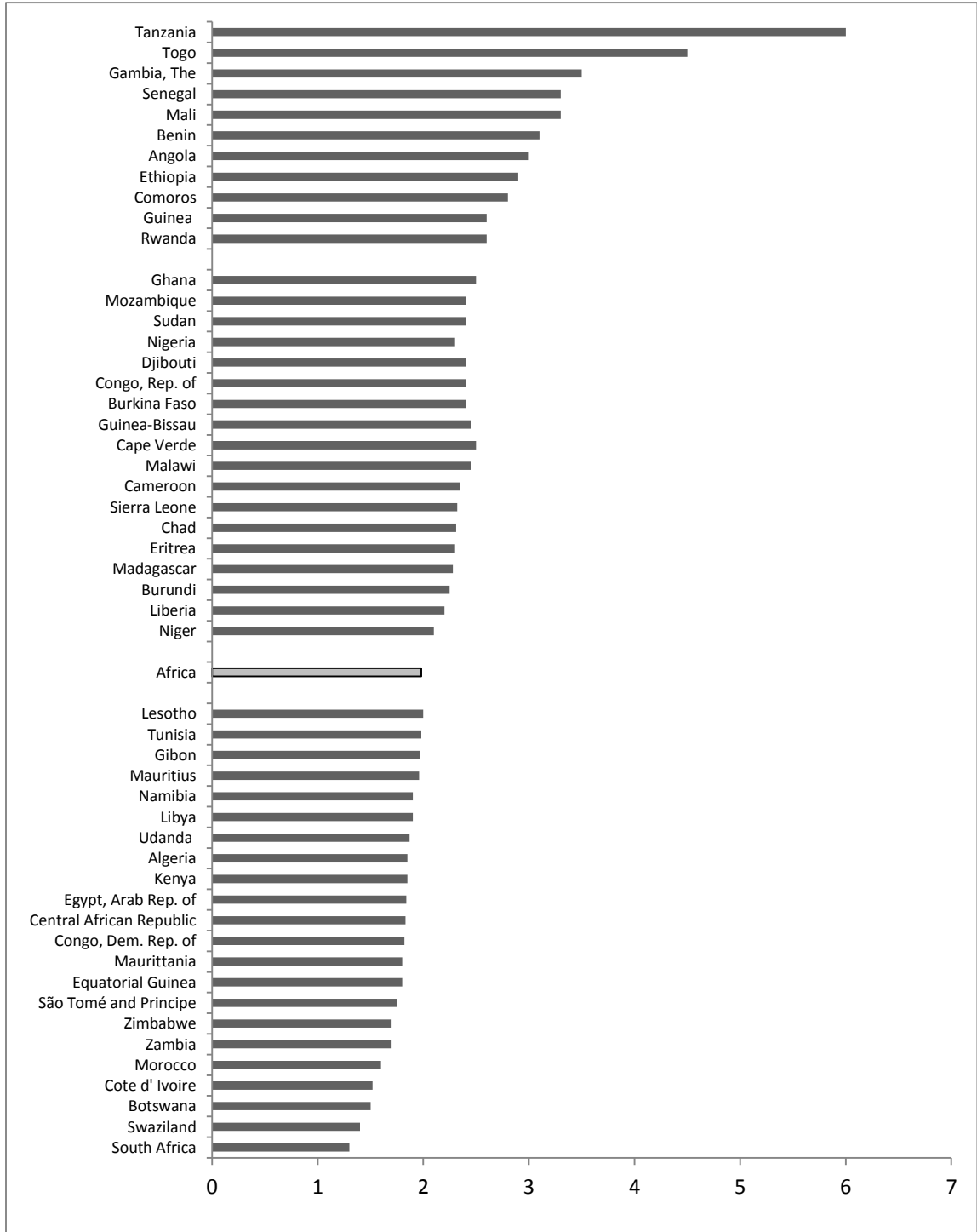


Figure 7. Numbers of students expressed as a multiple of 2006 enrollment in 2015 in African countries on the basis of current trends in higher education growth. The World Bank, 2010.

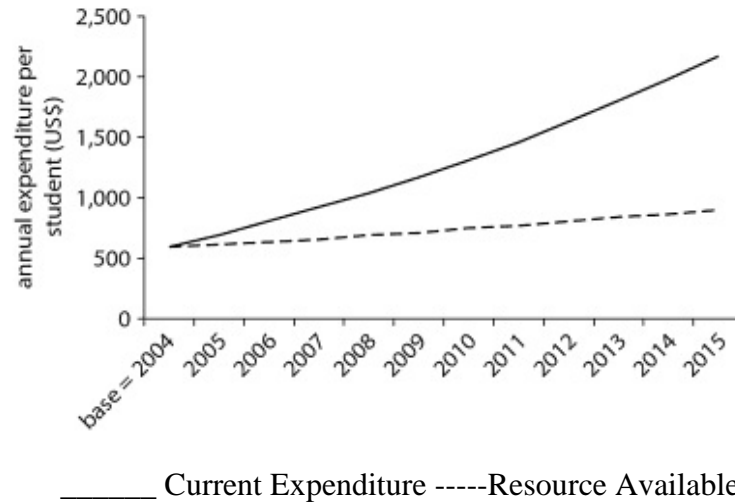


Figure 8. Current expenditure on higher education and public expenditure required for expanding higher education in Africa at current and unit cross current expenditure. The World Bank, 2010.

Although the above clarifications in Figure 8 have shown the reasons of the cost-sharing program for financing higher education in Tanzania its opponents argue that the costs of higher education should solely borne by students and their parents based on the following proposition. The empirical evidence has shown that private rate of return to higher education has been rising in most countries and, according to international analysis, exceeds the social return. This analysis is illustrated in Figure 9.

The private return on postsecondary education especially in Africa exceeds the social return. Empirical evidence shows that

in Africa and, indeed, in Tanzania, private rates of return to higher education are conservatively 15 per cent greater than social rates of return. This is more than three times higher than in Latin America ... and fifteen times higher than in Asia. (The United Republic of Tanzania, 1999, p. 15)

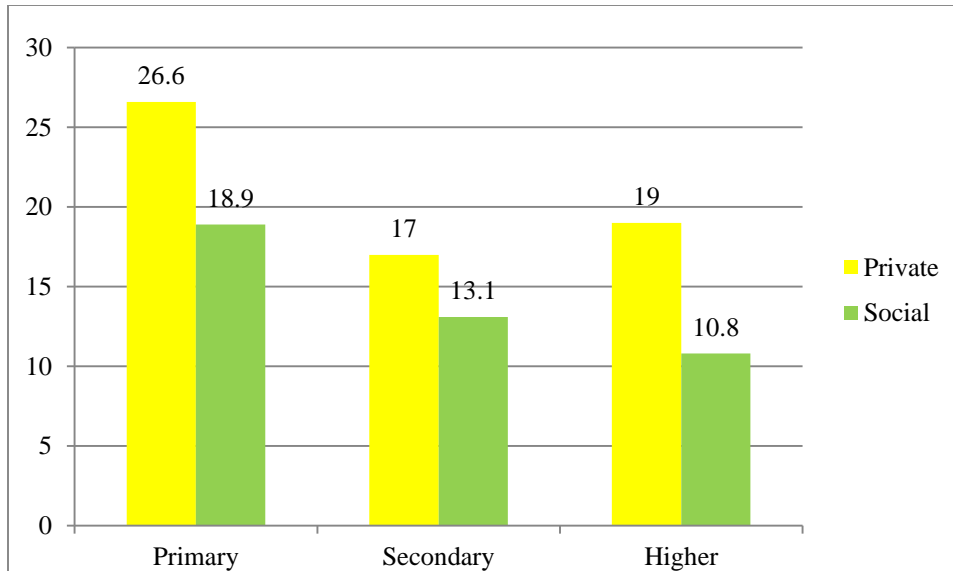


Figure 9. Private and social rates of return to education in general. Taken from Asian Development Bank, 2009; Psacharopolous & Patrinos, 2004.

However, in an indirect sense the private return is also the public return. For instance, if the nation has educated people, they will not be a burden to their government because they will be productive and will not need food stamps. Bloom et al (2005) stated:

Higher earnings for well-educated individuals raise tax revenues for governments and ease demands on state finances In a knowledge economy, tertiary education can help economies to keep up or catch up with more technologically advanced societies. Higher education graduates are likely to be more aware of and better able to use new technologies. They are also likely to develop new tools and skills and understanding of non-graduate coworkers, while the greater confidence and know-how inculcated by advanced schooling may generate entrepreneurship, with positive effects on job creation. (p. 15)

Public finance for higher education is essential. However, it is not sufficient to provide adequate resources for quality and quantity education; the only way to increase resources is through the increment of the contribution by higher education beneficiaries, philanthropists and donors (Asian Development Bank, 2009). The strongest rationale for the cost-sharing in higher education in Tanzania is that the costs of higher education are

rising faster than the availability of public resources. “The combined impact of population growth of the middle class, and the need of substantial quality improvement simply makes cost-sharing unavoidable” (Asian Development Bank 2009, p. 10). Johnstone (2003) concluded that the “most compelling case for cost-sharing in developing countries ... [is the] sheer need for alternative (i.e., non-government) revenue” (p. 6).

Due to the importance of higher education to the society and individuals as well, there is a need to combine resources from different parties to finance it. Such combination of resources will create avenues to improve access and equity to students from low socio-economic backgrounds that would have been denied access to higher education because of their inability to pay the costs.

Johnstone (2005) indicated that any effective cost-sharing approach should integrate an efficient loan scheme so that needy students in particular could supplement their limited resources. Atuahene (2007) points out that “in sub-Saharan Africa where student vacation employment is limited or non-existent, a viable loan system would play a huge force in improving access, affordability and even retention” (p. 411). Tanzania must have a viable loan system in order to respond to the demands for a trained workforce. The World Bank acknowledges that an “efficient cost-sharing mechanism is indispensable to a functioning student loans and scholarship programs that guarantee necessary financial support to academically qualified poor students” (World Bank 1994, pp. 46-47, as cited in Woodhall, 2004, p. 41).

Public support of people from low socio-economic status enables them to contribute significantly to the labor market. Economic theory has demonstrated that

economic growth closely depends on the synergies between new knowledge and human capital, which is why large increases in education and training have accompanied major advances in technological knowledge in all countries that have achieved significant economic growth. Thus, higher education and training are considered to be the most important driving force for economic development (Becker, 1975; Jones & Romer, 2009; Lin, 2011).

It is widely suggested that students and their families should finance at least part of the costs of higher education they are the foremost beneficiaries of this education as they enjoy substantial greater opportunities for interesting, pleasant, and better-paying jobs (Merisotis & Wolanin, 2002).

Therefore, education policymakers should continue to require students to contribute some amount towards their education. Nitume (2011) points out that

if the government does not demand those who receive higher education to pay the portion equivalent to what they gain as a private profit, the other tax payers who are not necessarily beneficiaries of higher education will be funding ... the beneficiaries for private benefits. (p. 14)

However, as already noted, it is very difficult to have a clear demarcation between private and societal benefits of higher education, because some of private benefits they spillover to the society in general. If someone may consider the “externalities, then societal rate may well be higher than private rates of return to education” (Nitume, 2011, p.16).

Spillover benefits may be found in the following categories: first, higher tax revenue due to higher productivity and wages of the highly educated personnel; the vertical equity in tax (see Figure 9); second, more informed public participation and greater social tolerance by college-educated citizens; and, third, the benefits gained by other workers who imitate or learn the skills of graduates.

Although the last two types of benefits cannot be quantified, the contributions are worth to be noting. As we have seen on the section of the importance of higher education, policymakers should pay attention to the factors that will promote and motivate the spirit of innovation and knowledge creation.

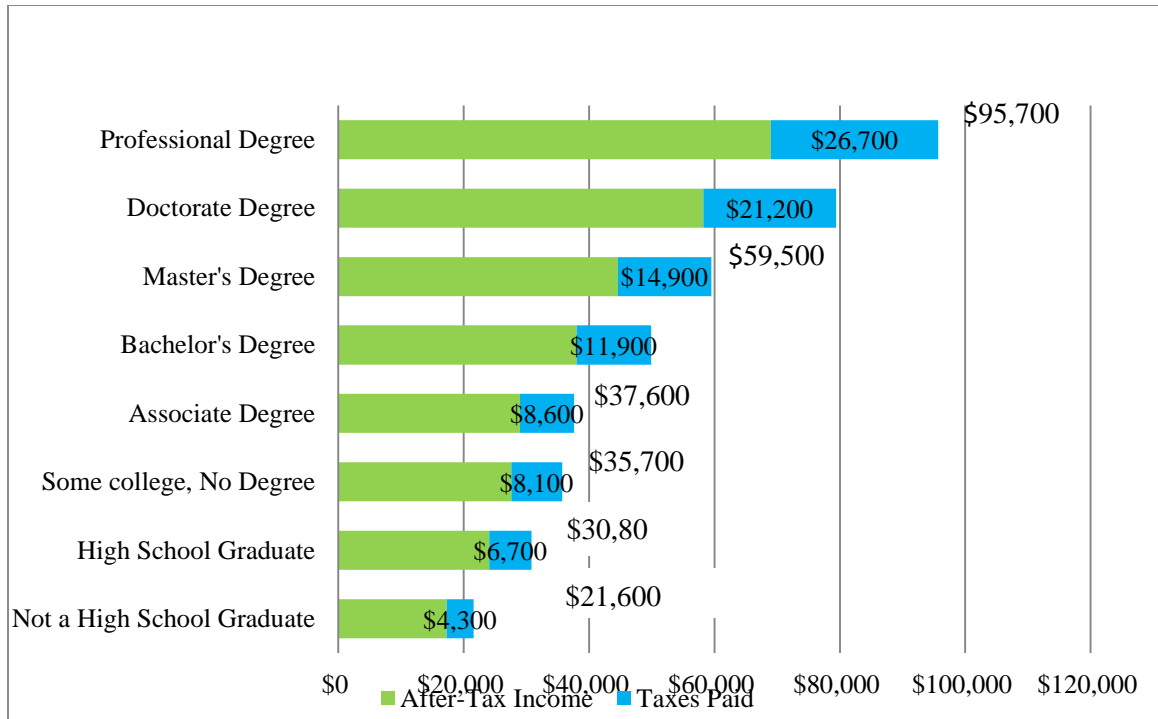


Figure 10. Education, earnings, and tax payments, median earnings and tax payments by level of education 2003. Taken from U.S. Census Bureau, 2004, PINC-03; Internal Revenue Service, 2003. Calculations by Baum & Payea, 2005.

Note. Includes full-time, year-round workers age 25 and older. Tax payments are based on 2002 tax rates and do not incorporate the 2003 federal income tax reductions.

The bars in Figure 10 show median earnings at each level of education. The blue segments and their dollar amounts, represent the average federal, state and local taxes paid at these income levels. The green segments show after-tax income.

Successes and Challenges Facing Higher Education Student Loans Board (HESLB) in Tanzania

Background

In order to facilitate the implementation of cost sharing, the Tanzanian government has established the HESLB. This board was established by Act No. 9 of 2004, inaugurated on March 30, 2005; it began operation in July 2005. It was amended by Act 9 of 2008 (Cap 178) (Mwanyika, 2008). The HESLB's primary responsibility is to issue loans to eligible students and to collect repayments of due loans issued since July 1994, so as to make the student loans program successful and sustainable (Higher Education Students' Loans Board 2011; Tumaini University-Kilimanjaro Christian Medical College, 2008). This board was established to implement the Higher Education Policy of 1999, which requires students, parents, guardians and other stakeholders to contribute towards the expenses of higher education.

The main objective of the HESLB is to grant loans to needy Tanzanian students who secure admission in accredited higher educational institutions but they cannot afford the costs of higher education by themselves.

The HESLB grants loans to students doing Advanced Diplomas and first degree studies at accredited higher-learning institutions within and outside the country. Loans are provided to students who attend both public and private higher education institutions. Beginning with 2008-2009 academic the board extended loans to students pursuing MA and Ph.D. Programs (Tanzania Higher Education Loan, 2010).

Success of the HESLB

Since the HESLB commenced operation in 2005 the number of students in higher-learning institutions in Tanzania has increased tremendously. This is because before the establishment of the HESLB only students from public higher-education institutions were offered education loans (Nitume 2011). Msangya (2011) reported that “the loans increased from Shs 56.1 billion in 2005/06 when the students were 42,729 to Shs 237.8 billion for 92,542 students in 2010/11.” The increment of loans granted to students since 2005/06 to 2010/11 is about 424%, and the increment of the number of students benefiting from education loans scheme is about 216.6%. The GER in Tanzanian postsecondary schools was five times as great in 2010-2011 as five years earlier (see Table 1).

Recently Jakaya Mrisho Kikwete, president of Tanzania, said that

we have 166,000 students in our universities while Kenya, regardless of its small size and population, has 265,000, and South Africa has 800,000. It is good to note that we have grown faster from 45,000 students in 2005, but we are not good enough. (Saiboko, 2013)

Such tremendous growth in students’ enrollment may be influenced by the cost-sharing program for financing higher education in the country. Kawambwa (2013), minister of education and vocational training, added that “the government has increased funds from 56.1 billion shillings in 2005/06 to 326 billion shillings in 2012/13 and the number of loan beneficiaries has increased from 40,729 students in 2005/06 to 94,477 students in 2011/12.”

Table 3

GER in Higher Education for the Past Six Years in Tanzania

Year	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
GER	1.22	1.47	2.2	3.0	4.1	6.3

George Nyatega, director of the HESLB indicated that during 2011-2012 “the loans board will be sponsoring ... about 110,000 students in total, including returning students” (Turuku, 2011).

The HESLB has placed application forms for education loans online to simplify the access for potential applicants. However, the forms may seem intricate for students who live in very remote areas.

The HESLB has open office in Dodoma to assist with students’ loan applications and is planning to open another one in near future in Zanzibar (Msangya, 2011). It is decentralizing its operations to reach its consumers easily.

Since the 2008-2009 academic year the HESLB has also extended education loans to students who are pursuing graduate degrees. “In order to enhance availability of academic staff in local higher learning institutions, a limited number of loans are being issued to academic staff of higher learning institutions pursuing master and PhD courses tenable in the country” (Tanzania Higher Education Student Loans Board, 2010). Due to the budgetary limitations, initially loans for postgraduate students were granted only to academic staff of public institutions. However, in the following year loans were granted also to academic staff of private institutions.

Higher Education Student Loans Board education loans for students attending non-government educational institutions have helped to reduce the rate of brain drain in Tanzania. Southern Universities Association (2010) stated that, to a significant extent, private education providers “have diminished the brain drain trend among the youth who were moving there in search of better paying employments (greener pastures). They can now be employed in these non-government education institutions some of which pay reasonably” (p. 2). The education loans have contributed a lot toward the growth of private higher-learning institutions.

Challenges Facing the HESLB

In the 2005-2006 academic year the HESLB, as a new board faced several challenges. It received and processed more applications than the board had anticipated, resulting in an “overstretched budget, compelling the board to provide partial loans” (Nitume, 2011, p. 28). Other problems including strikes from students demanding that costs of their education be paid in full by loans, inability to identify the means-testing method so as to identify and assist needy students, loans granted to non-needy students who had not been targeted, delays in processing loan applications and double payment to some applicants.

Some students have been demanding funds that they do not deserve at the first place, in part because authorities such as the Tanzania Commission for Universities and the National Council for Technical Education do not recognize them (Tanzania Higher Learning Institutions Students Organization, 2011). Also that

delays by some institutions of higher learning in feeding (the HESLB) with correct and relevant data on students entitled to or eligible for bursaries have turned the processing and payment of the funds in question into an especially tasking

undertaking. (Tanzania Higher Learning Institutions Students Organization, 2011)
Some of higher-education institutions are not up to date according to HESLB's regulations.

Some of the challenges mentioned above still exist currently. For instance, strikes are still going on at many institutions. Because of the continuing problems, the former president, Jakaya Kikwete formed a commission to look into the operations of the HESLB. The commission was supposed "to come up with recommendations on how to improve the mechanism for the loans" and submit a report by April 15, 2011 (Msangya, 2011). The commission was expected to propose solutions to the HESLB's problems, including two major, persistent ones; a poor recovery system and poor tracking system.

Poor Recovery System

The HESLB is now facing the major challenge of becoming unable to grant effective services to current students due to the lack of funds from the state's coffers. Much of the money problem has resulted because the board has failed to collect loans from beneficiaries. Recently Sylvester (2013) said that only Tshs 48 billion out of 1.45 trillion disbursed by the government and the HESLB during the period of 1994 to 2013 has been recovered.

Many countries in African continent are not doing well in cost recovery. Zideman and Albrecht (1995) discovered that the notable African examples such as loan programs in Ghana, Kenya and Nigeria, as well as several newer and lesser known program such as those in Tanzania and Burkina Faso are looking like failures, at least on the criterion of cost recovery. Johnstone and Marccucci (2008) argue that "student loans

have a history of failure regardless of the underlying policy objectives –especially when one of the main objectives is cost recovery” (p. 25).

Poor Tracking System

Since the HESLB “took the responsibility of providing students’ loans from the then ministry of Higher Learning Education, Science and Technology, the majority of beneficiaries, who studied before 2005 are hard to be traced” (Mwalimu, 2011). The board started with the creation of a database to identify all the beneficiaries who got education loans from 1994/1995 to 2005/2006, using the information from the ministry. The board managed to come up with a list of “48,948 loan beneficiaries, but only 27,837 were traceable” (Mwalimu, 2011). The major reason why it is difficult to trace beneficiaries is due to the absence of national identity such as social security number.

Investigation has shown that some of higher educational institutions grant “admission to the students out of the central admission system” (Rugonzibwa, 2011). After finishing their studies, graduate often relocate, some subsequently return to further studies, and some leave the country for long periods of time to studies or work. Most of them do not understand the importance of maintaining a good credit rating; “indeed the very notion of credit may be foreign to them, and they may well not have truly understood the money they received was to be repaid –with some adverse consequences if they did not” (Johnstone, 2003, pp. 12, 13). Maintaining good credit is not in the minds most Tanzanians. This is a foreign concept that meant nothing to most of African people.

Johnstone (2003) contended that “African governments have frequently colluded in this failure to take repayment obligations seriously. Records of borrowers have been lost or possibly not kept at all” (p. 13).

Student Perceptions Regarding Cost-Sharing Program for Higher Education

The phenomenon of the cost-sharing program for financing higher education in Tanzania is not the new idea. The colonial government established The Tanganyika Education Trust Fund in 1956. This fund offered scholarships, bursaries and loans for higher education to students from poor families. The bursaries and loans were recovered in full from post-graduate salaries. This arrangement continued even after independence up to 1964 when the National Service Scheme was introduced. From 1964 to 1974 students served in National Service for six months. After being employed by the government they worked for 40% of their salaries for 18 months and 60% of the remaining salaries was contributed to the government as a payback of the bursary (Ferdinand, 2010).

Although the phenomenon of the cost sharing program in Tanzania is not the new idea, its reestablishment in 1994 was not welcomed by many people in the country, because Tanzanians had enjoyed free higher education for nearly 20 years (from 1974 to 1993). Because of that notion, most of the beneficiaries regarded their loans as grant or free scholarships. Of course, most people would prefer grants and/or scholarships instead of student loans. Johnstone (2003) argues that in countries with socio-political ideologies backgrounds that consider higher education to be social entitlement, people do not easily accept the cost-sharing programs. They have the ideology that society is the major beneficiary of higher education and that thus individuals are not responsible for its costs.

As noted previously, cost-sharing in higher education was not well accepted from the beginning, and some people still believe in the notion that higher education should be free to every citizen of Tanzania. Rugonzibwa (2011) observed the problem of

stakeholders' resistance to fully accept cost-sharing policy in Higher Learning Institutions which is caused by students demanding the government to contribute 100 per cent of cost of their studies and stakeholders perceiving the loans to students as grants and not loans. (para. 11)

This has been a case in many countries previously colonized by Europeans. Johnstone (2003) noted that “the European colonial legacy and the fact that the continent of Europe –on which most of African classical universities are modeled –still remains the world’s last bastion of free higher education” (p. 4). The notion that higher education should be offered free of charge is very strong among European countries and some other African countries. Johnstone (2003) added:

European political and cultural resistance to tuition fee is powerful. Thus, to African politicians and powerful student unions faced with prospect of charging or paying for something that may once have been free of charge (at least a few fortunate families and students), the fact that most European governments, with far wealthier families and far better employment prospects for students continue to resist tuition fees gives credence to the belief (or hope) that higher education can somehow continue to be free. (p. 4)

The concept that higher education should be provided free by the government is one of the main barriers to implement the cost-sharing in higher education program. Since traditionally higher education has been free in the country, it is extremely difficult to withdraw an entitlement. The Asian Development Bank (2011) points out that opponents of cost-sharing in higher education argue that access to higher education “is a basic right and that those students who have been successful in meeting entry requirement should continue to receive free education” (p. 11). In some countries recovery of student loans has been one of the major problems because students did not

take the obligation to repay their education loans seriously due to the firmly entrenched ideas that higher education should be free.

Moreover, Tanzania and other countries in Sub Saharan African have historic held Marxist ideologies, which would tend toward the viewpoint that governments should finance all kind of education, health care, and other social services.

Students are not in favor of cost-sharing in higher education program because they do not trust the means-testing which is employed to identify needy students. In cost-sharing in higher education program means-testing may be defined as the method of determining who is able to pay and the portion they can pay in relation to the costs of higher education (Meritosis & Wolain, 2002). Means-testing requires the collection of information on the total income of households of individuals (Coady, Grosh & Hoddnott, 2004). This can be done easily in developed countries such as US where every person is required to file his or her yearly incomes for the sake of tax returns, but this may be difficult in developing countries such as Tanzania where the government has not yet developed the reliable means of tracking incomes of individuals. Tekleselassie and Johnstone (2004) argue that

in theory, income-testing transfers function well if (a) the government operates a personal income tax system (b) everyone files a tax returns, (c) information is deemed sufficient to determine a fair payment and (d) the administrative machinery exists to effect payment. (p. 140)

Using income as the variable in means-testing becomes problematic due to the number of reasons: Firstly, it is difficult to introduce filing tax returns system to the persons who are likely to have income that are below the tax threshold (Atkinson, Peketty & Saez, 2011).

Secondly, it is hard to determine whether the family is willing to finance higher education. According to Meritosis and Wolain (2002) this may happen for several reasons, for instance, where the family perceives higher education as the responsibility of the government and is not willing to pay anything for it, or in cases where there is no family relationship between the parents and students for valid reasons (such as abuse or lack of obedience).

Thirdly, it is difficult in African countries to determine the size of the family because of extended relatives who are considered as a part of family and polygamy marriages. Furthermore, Ngolovoi (2008) noted that in African countries where cases of polygamy exists complexities arise in establishing who should pay the costs of higher education for a certain student in the family, and hence muddy the term family.

The twin issues of ability to pay and willingness to pay, are crucial in consideration to policy and implementation of cost-sharing in higher education program. The questions of what are the views of students on why are they are not satisfied with the cost-sharing policy and its implementation has to be discussed comprehensively. Obasi and Eboh (2002) stated that “cost-sharing policies cannot be blind to the willingness-to-pay and ability-to-pay attributes of the various stakeholders” in higher education (p. 7). Therefore, ex ante perceived private rates of returns, which may differ from ex post actual costs and benefits bears tremendous implications for the question of how higher education should be financed and how the costs should be shared (Psacharopoulos & Woodhall, 1985).

Some stakeholders may oppose the cost-sharing program for financing higher education due to their belief that it is the major factor contributing to increasing tuition and fees. Yeager et al. (2001) argued that:

If federal student loans had been unavailable over the past two decades would tuition be so high today? Certainly not at private colleges and universities. The availability of student loans has played a critical role in the ability of those institutions to stabilize their share of enrollments over the past two decades after a quarter century of declining market share. As for public higher education loans, they have become a more predominant factor in financing college tuition and fee only in the last decade. Here, too, it is hard to imagine that the rapid price hikes of the early 1990s could have occurred without the greater availability of loans. (p. 251)

While this quote explains the phenomenon of the costs of higher education in the US, the same principle may be applicable in developing countries such as Tanzania. Higher educational institutions may increase the price of higher education without concrete reasons knowing that students will get education loans from the government.

For the above reasons some students fear to incur loans as Woodhall (2004) stated that

the equity arguments focus on the fear that obligation to incur debt and to repay loans will discourage students from low-income families particularly women (who may regard the obligation to repay loan as a 'negative dowry') or mature students (who will have a shorter working life than other graduates, in which to repay their loans, because of their age). (p. 42)

Some higher education experts are arguing that starting college or university – and going into debt to repay for it –without clear plan for a degree is a recipe of disaster (Stokes, 2012). Students are facing hard time to make choices between the benefits of degree and the burden of repaying for it.

Factors that Determine the Perceived Likelihood of Student Loans Repayment

This section is to reiterate the predictors of likelihood student loan repayment as it is stated in theoretical framework section.

There is enough body of literature that supports that demographic characteristics such as age, gender, geographical settings, high school academic achievement, and socio-economic status background as well as student perceptions of higher education and its costs such as higher education as private or public good, higher education as one of the key factors of economic growth, knowledge toward student loans, awareness of student loans as predictors of perceived likelihood of student loan repayment (Podgursky et al., 2002; Steiner & Teszler, 2003; Woo, 2002).

According to Podgursky et al. (2002) both age and gender are characteristics that statistically significantly affect the likelihood of student loan repayment. Their study revealed that males were more likely to default than female at the same time they noted that as the age of student loans beneficiaries increased the likelihood of repayment decreased. In addition, their research, which was conducted in the state of Missouri, designated that non-traditional aged students were more Some stakeholders may oppose the cost-sharing program for financing higher education due to their belief that it is the major factor contributing to increasing tuition and fees. Yeager et al. (2001) argued:

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While this quote explains the phenomenon of the costs of higher education in the US, the same principle may be applicable in developing countries such as Tanzania. Higher educational institutions may increase the price of higher education without concrete reasons knowing that students will get education loans from the government or another lending agent.

Students' fears regarding repaying their debt stem from different reasons. Woodhall (2004) said likely to default than traditional aged students. Similarly, Flint (1997) found that default probability increases by three percent of each year beyond the age of 21 years.

On the other hand, Woo (2002) found that a borrower's age was statistically insignificant factor in predicting the likelihood of student loan repayment. Other studies also indicated that there is no direct a statistically significant relationship for age of borrower's and default behavior (Knapp & Seaks, 1992; Volkwein & Szelest, 1995). Retcliffe and Mckernan (2013) pointed out that age is not statistically significantly related to student loan repayment concerns, but

people age 60 and older are, on average, significantly less likely ... to be concerned about their ability to repay student loan debt. These individuals are retired or nearly to retirement, so we might expect them to have greater concerns about their ability to repay debt. (pp. 5-6)

However, they also noted that "at same time, they may have less student loans debt, making repayment less of a concern" (p. 6).

As we have seen previously, the negative relationship between age and the likelihood of student loan repayment is likely because older borrowers have greater financial obligations such as families to support than their younger counterparts. Similarly, older borrowers have overall great debt burden than younger borrowers even

before starting student loan repayment. Harras (2004) found that on average each year of age added \$ 312.00 to a borrower's cumulative debt load.

For gender as independent variable of likelihood of student loan repayment, Ratcliffe and McKernan (2013) said that while females are no more likely to worry about repaying it. Women are more likely to be worried about their ability to repay student loans debt, even when controlling household income, household structure, and number of financially dependent children. Another research reported that, women may be more aware of the monthly student loan repayment and its impact on family financial aspects. This idea is well supported with cultural theory (Nyahende, 2013). Similarly, another study on micro credit affirmed that “women have better repayment behavior than men” (Amendariz de Aghion & Morduch, 2010; D’Espallier, Guerin, & Mersland, 2009). Furthermore, Chakravarty, Shahriar, and Iqbal (2014) found that “women have a greater willingness to pay microcredit, hold true in the Marma community as well” (p. 6).

Number of studies has shown that there is strong relationship between borrowers' academic performance and likelihood of student loan repayment. High pre-college and college GPAs, Scholastic Assessment Test (SAT) scores, and American College Testing (ACT) scores and continuous enrollment have great impact on likelihood of student loan repayment (Gladiux & Perna 2005; Herr & Burt, 2005; Ionescu, 2009). According to Gross et al. (2009, as cited from Dynarski 1994; Wilms et al., 1987) attainment at both secondary and tertiary levels of education is perhaps the strongest predictor of student loans default. Students who dropped out high school or earned a GED were more likely to default than who had earned a regular diploma. Gross et al. (2009) on this variable concluded that generally, students who are better prepared academically according to

ACT, SAT, and have a high GPA in high school are less likely to default on student loans. This literature is well supported with academic achievement theory (Woo, 2002).

Another predictor in this research is socio-economic status, which literature shows that student with lower socio-economic status backgrounds are often carry greater debt burden than their upper income counterparts as a result, they may be more likely to default their student loans if their debt burdens become unmanageable. On the other hand, borrowers from upper income families are more likely to have family members who can help them to repay their loans, which reduces the likelihood of defaulting among students from middle and high socio-economic status families (Beum & O'Malley, 2003; Choy & Li, 2006; Gross et al., 2009; Kesterman, 2006). Literature is rapidly growing, which supports the prosper theory that socio-economic status is expected to have a statistical significant relationship with default, whereby individuals who are socio-economic disadvantaged are expected to face great challenges in terms of debt repayment than their counterparts who are socio-economic advantaged (Gandhi, 2008).

The likelihood of student loan repayment is strongly influenced on the way student perceives higher education. A number of scholars have shown that if students perceive higher education as private good they incline to repay their loans but if they perceive that it is public good they tend to default. Weber and Bergan (2005) concurred that idea by reiterating the Bologna Declaration on higher education:

As Bologna Declaration sets out ministers asserted that building Europe higher education area is a condition for enhancing the attractiveness and competitiveness of higher education in Europe. They supported the idea that higher education should be considered as public good and will remain public responsibility ... and that students are full members of the higher education community. (p. 13)

The above statement affirmed that it is the responsibility of the society to incur the cost of higher education for every student. The opposite is also true that if higher education is perceived as a private good its costs has been incurred by student himself/herself. Weber and Bergan (2005) pointed out that “public good are not readily tradable, whereas their opposite -private goods -are essentially sold on the market for exclusive consumption by one person or a group of persons paying for privilege” (p. 14). This point has supported previously in the section of theoretical framework that if higher education will be considered as pure private good it will end up with neo-liberalism (Polychroniou, 2013).

Another factor that is included in this study as predictor of the likelihood of student loan repayment is an idea that higher education is one of the key factors for economic growth of Tanzania. Duncan the US secretary of education (2015) said that in today’s economy, higher education is no longer a luxury for the privileged few, but a necessity for individual economic opportunity and America's competitiveness in the global economy. It is a time when jobs can go anywhere in the globe, skills and education determine success, for individuals and for nations. As a result, higher education remains the best investment a student can make in his or her future. A majority of people, recognize that higher education is a key to opportunity, and that has fueled a substantial increase in college and university attendance rates in recent years. Researcher found that “it is possible that education would seem more affordable if people thought about it as a fundamental need and as an investment to be paid forever time, much as they think of housing” (Baum & Schwartz, 2012, p. 6).

Similarly, Kapadia (2015) said that

pursuit of higher education, as an investment in human capital, yields a higher rate of return on investment on physical capital. By pursuing higher education, an individual invests in his or her human capital, and can expect returns in the form of higher earning potential. (p. 598)

Recognition of investment in higher education, coupled with its great potential for financial returns, encourages investors to invest in human capital which can be equated with higher education (Kapadia, 2015).

Interestingly, there is evidence that individuals who borrow more money actually tend to have lower rates of student loans default. This makes sense because beneficiaries with the most expensive educations like doctors and engineers tend to earn enough money after school and therefore repay their debt with less pains. McMillion (2004) affirmed that borrowers with high earnings after graduation are less likely to default than those with lower earnings. Bear (2015) pointed out that student with lower amount of student debt at the end, default because of worsening economy or failing to reach their expectations of payback from a two-year degree at a community college or for profit school. On the other side of the coin, student with greater amounts of student loans, default less due to the fact of being higher earners after their graduation.

This shows that people who consider higher education as investment according to human capital theory repay their student loans co-operatively.

Another important factor as predictor of student loan repayment is attitude of beneficiaries. In this study attitude (right or wrong knowledge) is regarded as positive or negative perception towards higher education or/and student loans. In the study examining the influence of debt load on higher education persistence, the researchers found that borrowers in repayment expressed anger at having to assume more debt than students of a generation earlier (Cofer & Somers, 1999). They also found that students

and their parents are willing to invest time and money, and to assume debt when the students rewarded by grants for good grades, and feel socially integrated into the campus environment (Cofer & Somers, 1999). Similarly, another study revealed that age, gender, and attitudes are three factors that have a statistically significantly influences on student loans default rates though at different magnitude. It is believed that in all three factors, attitudes rank first in contributions towards student loan repayment (Nyahende, 2013). Furthermore, some beneficiaries consider repaying student loans as a loss because they gain nothing by repaying (Delisle & Holt, 2015).

Delisle and Holt (2015) pointed out that failure to pay monthly bill such as auto loans or utility bills results in loss, whereas repaying student loans might feel like a loss in the sense that beneficiary gains nothing from that repayment because s/he has already accrued the service (his or her education) and it cannot be taken away. One focus group research found that many beneficiaries were more reluctant to repay and push student loans down on their list of bills to pay (Hackett, 2015).

In addition, Delisle and Holt (2015) added that beneficiaries assign a low priority to their student loans with comparison to other things they need or want to spend their money on each month. They pointed out:

These attitudes bring to light how student loans are different other expenses in a family's budget. Many bills that people pay on monthly basis are payment towards ownership of an asset (like house or a car), which can be seized if the borrower fails to make payments, or towards an ongoing and vital service such as a phone or a utility, which a provider can shut off swiftly in response to late payments. Failure to pay these bills result in a loss, whereas paying a student loans might feel like a loss in the sense that borrower gain nothing from the payment because she has already obtained the service (her education) and it cannot be taken away. (p. 13)

In other words,

Other loans and financial obligations have value right now, in the present, and the consequences of not paying are swift and severe, like higher interest rates, late fees,

discontinuation of service, or repossession of an asset. Not with ... student loans. (Delisle & Holt, 2015, p. 30)

Another research revealed that “student loans borrowers’ attitude has direct impact on student loans” repayment (Nyahende, 2013, p. 38). More research on Islamic perspective revealed that “when students perceive the attitude -especially during their final year of study -they are likely to act positively and significantly; therefore, they make efforts to start repaying their student loans immediately after graduating” (Omar, Bahrom, & Mello, 2014, p. 262).

Another factor used in this study as predictor of perceived likelihood of student loan repayment is awareness. Literature shows that awareness is a strong indicator of borrowers’ relationship to their debt. It is expected that, at least, every student who received student loans knows how much debt is incurring. Harrison, Agnew, and Serido (2015) described awareness as the extent to which individual feels engaged with his or her debt, and postulate that this likely reflects the degree of control that the individual feels in regards to his or her debt. The measured awareness in terms of subjective awareness such that participants did not have to display knowledge of their repayment terms but simply responded whether or not they have good idea about their repayment terms. In another research Sutcliffe found that “over half of the participants sampled could not report how much they currently owe in student loans” (p. ix). Emrey-Arras (2015) proposed:

Although education department has a strategic goal to provide superior information and service to borrowers, the agency has not consistently notified borrowers who have entered repayment about the plans. As a result, borrowers who could benefit from the plans may miss the chance to lower their payment and reduce the risk of defaulting on their loans. (p. ii)

Many studies have revealed that students who are not aware of their repayment option may be more likely to default on their student loans (Bremer, 2015). The sooner students are aware of the implications of student loans borrowing, and process of repayment the better to establish awareness on student loans and repayment.

For eligibility criteria we have seen previously that the idea of equity theory in higher education is to enable all students regardless of their backgrounds to have equal opportunities of attending college. “The achievement of universal access, in the first instance, will require some shift in the share of direct costs of education, dependent more on public aid and less on parental support” (The Carnegie Commission, 1973). The access of everyone to higher education has a connection with equity theory on the sense that

when individuals think their inputs are rewarded according to their outputs and are equal to others around them, they are satisfied. But when they notice others are getting more recognition and rewards, in spite of doing the same amount of work, they become unsatisfied. (Baxamusa, 2012, para. 4)

Equity theory help to investigate the perceptions of students on fairness by comparing the balance of effort and reward, and other factors of give and take away -the ratio of output to input (Chapman, 2013). This theory is employed in this study to find out the fairness of student loans disbursement with regard to students’ high school achievement and their socioeconomic backgrounds. In short, this theory used to verify if all students are treated according to the HESLB’s eligibility criteria for student loans disbursement. Furthermore, the research is to reveal if access to student loans is a predictor of the likelihood of student loan repayment.

Summary

This chapter reviewed the literature pertaining to various approaches for funding higher education and the effectiveness of Tanzania's cost-sharing program in higher education. After describing the contemporary importance of higher education, it discussed different ways of funding higher education around the world and provided a brief history of higher education in the country. It then explored the cost-sharing program for financing higher education operating in Tanzania, reasons for its implementations, successes and challenges facing the Higher Education Student Loans Board of Tanzania, and finally, student perceptions regarding the cost-sharing program for financing higher education.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

Introduction

This chapter presents the research methodology, which was employed in this study. It covers research design, research questions, population and sample size, research instruments, validity and reliability of the research instrument used, data collection, data analysis, and protection of the rights of human participants.

Research Questions

The study investigated student perceptions of the cost-sharing program for financing higher education in Tanzania by addressing the following three research questions:

1. What are student perceptions of the HESLB program for financing higher education in Tanzania?
2. Are demographic variables such as age, gender, geographical settings, high school academic achievement, and socio-economic status predictors of perceived likelihood of student loan repayment?
3. Are student perceptions of the HESLB program, such as their perceptions of student loans awareness, student loans eligibility criteria, knowledge about student loans, student loans disbursement, relationship between higher education and economic growth

in Tanzania, satisfaction with the HESLB program predictors of perceived likelihood of student loan repayment?

Research Design

This study employed a survey method to collect data for examining the perceptions of students regarding the cost-sharing program for financing higher education in Tanzania.

Surveys are used frequently in education research to describe attitudes, beliefs, opinions and other type of information. Usually the research is designed so that information about a large number of people ... can be inferred from the responses obtained from a smaller group of subjects. (McMillan & Schumacher, 2006, p. 25)

The researcher used a quantitative descriptive correlational design in nature because the study deals with quantifiable results. “Because it is so deeply rooted in numbers and statistics, quantitative research has the ability to effectively translate data into easily quantified charts and graphs” (Answers Research, 2011).

The researcher employed descriptive statistics to determine student perception of the cost-sharing program for financing higher education in Tanzania. In addition, he used CATREG analysis to determine the influence of demographic variables such as age, gender, geographical settings, high school academic achievement, and socio-economic status on dependent variable of perceived likelihood of student loan repayment. Furthermore, to determine if student perceptual variables of the HESLB program such as their perceptions of student loans awareness, knowledge of student loans, student loans eligibility criteria, and relationship between higher education and economic growth in Tanzania, satisfaction with the HESLB program, are statistically significant predictors of perceived likelihood of student loan repayment, the researcher employed multiple

regression analysis (MRA).

Quantitative research also enables generalization to an entire population of the results to be obtained from a specific sample. Castillo (2009) asserts that “due to the representativeness of a sample obtained by simple random sampling, it is reasonable to make generalizations from the results of the sample back to the population” (para. 5).

Sampling is like taking a few of grains of rice from the cooking pot to know if the dish is well cooked or not. McMillan and Schumacher (2006) state that generalization in research “is the extent to which the result of one study can be used as knowledge about other populations and situations” (p. 8). They add that

in both social science and education, many generalizations are limited to particular times and places. And because the social world changes more rapidly than the physical world, social generalizations usually have shorter life spans than generalizations in the physical world. (p. 8)

Population and Sample Size

This research focused on the entire county of Tanzania, which is divided into 31 regions, 26 on the mainland and five on Zanzibar (U. S. Department of State, Diplomacy in Action, 2011). Tanzania has 50 accredited universities; 11 are public ones and the rest are privately owned (Tanzania Commission for Universities, 2011). Five of them were randomly selected for the purpose of this study; each combination of elements had equal probability of selection. The selected institutions are University of Arusha (private), University of Dar es Salaam (public), Muzumbe University (public), Saint Augustine University of Tanzania (private), and Zanzibar University (private; Tanzania Commission for Universities, 2011). The researcher employed stratified random sampling by separating the population into two subgroups according to the type of

institution, public or private (Crawford, 1990; Jen, Tam, & Wu, 2010; Pyrczak, 2008).

Researcher decided to select randomly two of the 11 public universities and three of the 39 private universities.

The following step was used to select two public universities randomly by listing them on small pieces of equivalently sized paper and then blindly picking two of them by a person who is unfamiliar with this study. As a result the University of Dar es Salaam and the Mzumbe University were selected. Both of these universities are situated on Tanzania's mainland. Since this research is intended to cover the entire nation of Tanzania, four universities are from the mainland and one from Zanzibar (Moslem) to have good representation. The next step was to pick the private university from Zanzibar. Since Zanzibar University is the only private university there it had to be included.

The final step was to list all private universities from the mainland on small pieces of equivalently sized paper and then blindly picking two of them by a person who is unfamiliar with this study. As a result, the University of Arusha (SDA Church) and the St Augustine University of Tanzania (Roman Catholic Church) were selected.

All five universities were randomly selected. This study employed probability sampling which means that each element had a non-zero probability of selection which implied that every element had a chance of being selected once (Gy, 1992). The University of Arusha, the University of Dar es Salaam, the Mzumbe University, and the St Augustine University of Tanzania are situated on Tanzania's mainland and Zanzibar University is situated on Zanzibar.

Overall, public and private universities enroll a total of about 166,484 students (Kawambwa, 2013). This is a vast population that could take considerable time and

expense to study. Thus, the researcher employed the following sample size formula to get the right number for representation: $n = N/[1+Ne^2]$ (Yamane, 1967)

Where n = Sample size

N = Number of population

And e = Significant error term (in this study 0.05 was used).

According to the sample size selected and formula for calculating margins of error, with the sample size selected in this study, 5% (0.05) is the right margin of error to be employed (Bell, 2010; Krejcie & Morgan, 1970). Research shows that the “larger sample sizes give smaller margins of error and tighter confidence intervals” (Bell, 2010, p. 4).

The sample size was calculated as follows:

$$\begin{aligned} n &= 166,484/[1+166,484(0.05)^2] = 166,484/[1+ 166,484(0.0025)] \\ &= 166,484/1+416.21 = 166,484/417.21 = 399.0412502 \sim 400. \end{aligned}$$

I will add ten percent (40) of that sample to be 440. Since the researcher used some of the people who have graduated but working at the selected higher educational institutions the working number was 500 people.

To get a good proportion of the represented universities the following formula was used to get the representative number from each institution.

$$a = [(b/c) * 100\%] * n$$

Where a = Stratified Sample Size

b = Number of Population in a Selected Institution

c = Total Population Size of the Selected Institutions

n = Sample size of the entire population (500 people).

The strata are formed according to the commonality of attributes or characteristics, and the random sample from each stratum is taken in a number proportional to the stratum's size when compared to the entire population (Castillo, 2009).

By using the probability proportional formula as indicated above, the researcher selected students according to the enrollment of each institution.

$$\begin{aligned} \text{University of Dar es Salaam will be } a &= [(b/c) * 100\%] * n \\ &= [(20,000/43100) * 100\%] * 500 = 232.018 \sim 232 \end{aligned}$$

$$\text{Muzumbe University} = [(7000/43100) * 100] * 500 = 81.206 \sim 81$$

$$\begin{aligned} \text{Saint Augustine University of Tanzania} &= [(12000/43100) * 100\%] * 500 = 139.211 \\ &\sim 139 \end{aligned}$$

$$\text{University of Arusha} = [(2600/43100) * 100\%] * 500 = 30.162 = 30$$

$$\text{Zanzibar University} = [(1500/43100) * 100\%] * 500 = 17.401 \sim 17.$$

$$\text{The total number of students in all universities} = 232 + 81 + 139 + 30 + 17 = 499.$$

In order to have a total of 500 participants, the researcher added one more person from Zanzibar University.

By using the above formulae, each stratum was represented by a percentage according to its populations. This means that universities with larger populations had larger sample sizes and the universities with smaller population smaller sample sizes (McMillan & Schumacher, 2006). The total sample of the strata is equal to the sample size of the population (500).

Students were selected from different colleges and schools of universities who receive educational loans from the HESLB and those who do not receive the loans from the HESLB. Students who receive grants from the government were not included in this

study. Researcher worked together with universities to select students by employing stratified systematic sampling. “Stratified systematic sampling techniques are generally used when the population is heterogeneous, or dissimilar, or where certain homogeneous, or similar sub-populations can be isolated (strata)” (Barbara, 2010, para. 4). This sampling was used because of its advantages such as enabling the survey to include importance sub-populations and provide a representative sample as well as spatial balance (Barbara, 2010).

In each discipline (program) students were selected by using systematic sampling, which means that every k th subject in a list was selected by inclusion in the sample (Gay, 1987). The k refers to the sampling interval; it may be every 4th ($k = 4$) or 10th ($k = 10$) subject. The value of k is determined by dividing the population size by sample size (Yount, 2006). For instance, if you have a list of 1000 students and you decide to use a sample size of 100 students, k will be $1000/100 = 10$. This implies that a random number between 1 and 10 will be selected as a starting point. Suppose the number selected is 4; this suggests that beginning with the 4th name, every 10th name will be selected throughout the population of 1000 students. Thus, student 4, 14, 24 ... 994 will be chosen for the sample.

Research directors and heads of various departments of the selected universities prepared samples by using stratified systematic sampling from the alphabetical lists of students from each discipline employing the above approach. The researcher distributed forms 1 and 2 to students who were already prepared at the selected universities. He collected both forms after being filled by students.

Survey Instrument

The instrumentation was used to examine the student perceptions of the cost-sharing program through its seven major components and other related components. One of the major components of the cost-sharing program that was considered in this study is eligibility.

An eligible student for student loans is a student who is an orphan (who lost both parents); a poor applicant with disability or his /her parents have disability, a person from marginalized and disadvantaged groups or an applicant from a poor family. Furthermore, the applicant must be Tanzanian, must have been admitted into a fully accredited/registered higher learning institution, a continuing student must have passed the examinations necessary to enable him/her to advance to the next stage (year) of study, he/she must have passed the final advanced secondary education (form six) examinations at least with division three. Or an applicant under the technical and vocational education and training must have at least an average of C for his/her final examinations. Students from other countries will get loans under bilateral agreement between the government of the United Republic of Tanzania and the government of student's country. Should be a person who is not fully funded by another organization or sources (Executive Director: Higher Education Students' Loans Board, 2012a). All applications must be submitted through the online loans application system.

The second and third major components were students' awareness of the availability of student loans and knowledge of the HESLB program. The survey instrument on these components helped to examine the level of knowledge and awareness students have concerning the availability of student loans for financing higher education.

Its results were employed to determine if these variables have statistically significant influence on the perceived likelihood of student loan repayment.

The next major component was the relationship between higher education and economic growth of Tanzania. Science and technology are regarded as crucial in shaping the modern world needs of every society. Due to that fact Tanzanian government has decided to offer special support to students pursuing science-oriented courses (HESLB, 2011). It has chosen the following subjects as the national priority for the time being: Education (Science and Mathematics), Health Science (Doctor of medicine, Dental surgery, veterinary medicine, pharmacy and nursing), Civil and Irrigation Engineering, Education non science and none mathematics (through means testing), Computer engineering and Architecture (through means testing), Agricultural sciences (through means testing) and Animal science (through means testing). All other students who are pursuing other programs than Health Science and Education (Mathematics and Sciences) on the basis of indirect or equivalent entrance to higher educational institutions may not be eligible for student loans (Executive Director –Higher Education Students’ Loans Board, 2012a).

According to 2025 vision Tanzanian government regards the above-mentioned areas as vital contributor of economic growth for moment. The survey instrument was used to determine how students perceive this phenomenon.

The fifth major component of cost-sharing program was disbursement of education loans to various higher learning institutions in the country. Some studies have questioned the validity of the criteria used by the HESLB for the disbursement of student loans. Some students claim that there is no transparency on giving out student loans and

have even claimed that the whole process is influenced by favoritism (Saiboko, 2012). Through the survey instrument, the study revealed the perceptions of students about the student loans disbursement with regards to the HESLB's criteria for qualified students for education loans (Executive Director: Higher Education Students' Loans Board, 2012a).

The sixth major component of the cost-sharing program is students' satisfaction for student loans program. Researcher wanted to know if student are satisfied with the services rendered with the HESLB. Survey instrument used to determine if the HESLB works effectively.

The final major component of cost-sharing program to be considered in this investigation was the perceived likelihood of student loan repayment. The issue of repayment is the greatest problem on cost-sharing program in higher education in the country because some of students decide to be 'defaulters' even before they get loans by providing false information (Mwalimu, 2011). Trends show that the rate of education loans repayment in Tanzania is low. The World Bank (2010) suggested:

Student loans in Africa must be accompanied by other forms of financial assistance, including a judicious use of grants, especially where there is genuine evidence of aversion to student debt, as well as repayment forbearance and eventual forgiveness in cases of lifetime low incomes or other conditions that contribute to unmanageable repayment burdens. (p. 7)

The above quotation shows that repayment of education loans is a challenge for many African countries including Tanzania (Mwalimu, 2011).

The questionnaires covered relevant demographic factors as well and were formulated by using dichotomous and Likert five-point type scales questions.

Validity of the Instrument

According to Lani (2009), “validity refers to the extent to which an instrument measures what it is intended to measure.” Rudestam and Newton (2003) added that “validity indicates that a measure in fact measures what it purports to measure” (p. 96). The instrument for this study was developed based on research conducted by Nitume, Mpiza, Adeniyi, and Taiwo with the assistance of the methodologists Professor Jimmy Kijai and Professor Jay Brand (Adeniyi & Taiwo, 2011; Mpiza, 2007; Nitume, 2011). An expert, statistician in the School of Education at Andrews University, Professor Jerome Thayer, designed the final version of the instrument.

The correlations between the researcher’s survey items and published survey are as follows: Both the researcher’s survey items of this research and the published ones are employed to investigate the effectiveness of cost-sharing programs for financing higher education. However, the published survey items were framed in both closed and open ended questions form (Mpiza, 2007; Nitume, 2011) while the survey items of the researcher of this study were all in form of closed ended questions.

Furthermore, the final product of questionnaires was arranged in counter-balancing order so as to rule out the influence of survey fatigue. Counter-balancing can be defined as any experimental design in which subjects receive all treatments, but in different order. Brown (2013) says that

each subject only goes through one sequence of treatment conditions, but many different sequences are created and overall. Because subjects are going through different sequences, order effects should be balanced out when you average the results of all the subjects together.

Conceptual and Operational Definitions

Table 4 is the table of conceptual and operational definitions of the independent and dependent variables to support the validity of the instrument. Operational definition is a clear, concise detailed definition of a measure. The need for operational definitions is fundamental when collecting all types of data. Conceptual definitions are simply dictionary ones; they tell a reader the meaning of a variable while operational definitions are clear and detailed definitions of a variable or concept that can be used to confirm the validity of the measures obtained in a certain study. Its purpose is to control the given variables of a study so that they can be precisely measured. McMillan and Schumacher (2006) argued that

researchers use an operational definition, which assigns meaning to a variable by specifying the activities or operations necessary to measure categorize or manipulate that variable. An operational definition tells the researcher and the reader what is necessary to answer the question or test the hypothesis. (p. 56)

Table 5 illustrates each variable used in the questionnaire of this study with corresponding letter. Each letter presented a scale of one variable. Letter A to K are independent variables and letter L is dependent variable.

Reliability of the Instrument

Reliability is the degree to which the results are repeatable. To ensure that the study has reasonable reliability, the researcher employed Cronbach's alpha to measure the internal consistency or reliability. Cronbach's alpha is known as "a coefficient of reliability" (University of Southern California, 2011). According to The University of California (2011) Cronbach's alpha α is defined as follows:

Table 4

Conceptual and Operational Definitions of Dependent and Independent Variables

Components of Cost-Sharing Program in Higher Education			
Variable	Conceptual Definition	Operational Definition	References
Awareness of the HESLB program for financing higher education	A state of being informed on what is taking place in a certain surrounding environment, having special or certain knowledge as from firsthand source without necessarily implying understanding.	<ol style="list-style-type: none"> 1. Funds are available for student loans 2. Government supports eligible students only. 3. Student can appeal if he or she is not satisfied with student loans disbursement. 4. Student loans have to be repaid by law. 	<p>Kawambwa, 2013</p> <p>Sylvester, 2013</p> <p>Sylvester, 2013</p> <p>Kawambwa, 2013</p>
Knowledge of cost-sharing	Acquaintances, facts, information, familiarity, skills or state of knowing; the perception of fact or truth, clear and certain mental apprehension gained through experience or education (form or inform).	<ol style="list-style-type: none"> 1. Differences between student loans and educational grants/scholarships. 2. Repayment of student loans after graduation. 3. Student loans policies 4. Grace period of student loan repayment. 	<p>Executive Director – Higher Education Students’ Board, 2012b</p>
Eligibility of students for student loans	Fit or proper to be chosen, worth of choice, desirable. To be a needy student and have a required pass mark.	<ol style="list-style-type: none"> 1. Student background --socio-economic status 2. Pass mark Achievement on Advanced Certificate of Secondary Education Examinations. Student is eligible by getting a pass mark of division I or II of form six final examination 3. Students with special personal challenge such as being an orphan or physically disabled. 	<p>Kotecha. 2010, and Atkinson, 2011</p> <p>HESLB, 2007</p> <p>HESLB, 2007</p>

Table 4—Continued.

<p>Access to student Loans</p>	<p>It concerns opportunities and ability of obtaining student loans</p>	<p>Ability of retrieving online information, filling online student loans application form and submitting it accurately and on time</p>	<p>HESLB, 2007</p>
<p>Disbursement of student loans</p>	<p>The act or an instance of disbursing money to support eligible students for financing their higher education.</p>	<p>1. The loans disbursement system favors students pursuing education, science and technology</p> <p>2. Students will be awarded different percentage according to their performance as well as the kind of degrees they are pursuing. Percentiles of loan disbursement are administered in the following categories according to their performance of form six final examinations. (100%, 90%, 80%, 70%, 60%, 50%, 40%, 30%, 20%, 10% or 0%).</p> <p>3. There are complaints that disbursement is not always done on time</p> <p>4. Students have expressed dissatisfaction with the amount and the delay of meal allowances and rent money received from the HESLB while they are in universities. This will be measured in the amount of money (in Tanzania shillings) received and the time disbursed to students with reference to the time institutions begin semesters.</p>	<p>The Citizen, 2011a</p> <p>HESLB, 2010 World Bank, 2010</p> <p>Kagashe, 2011</p>

Table 4—Continued.

<p>Discipline (Field of Study)</p>	<p>A branch of knowledge taught and researched at college or university level</p>	<p>1. Science oriented subjects such as medicine, mathematics, chemistry, physics, agricultural studies and engineering</p> <p>2. Liberal art such as geography, history, and political studies.</p> <p>3. Education; training for teaching.</p> <p>4. Modern technology such as computer science and software engineering.</p>	<p>The Citizen 2011b,</p> <p>Ernest, 2011</p> <p>Ernest, 2011</p> <p>Ernest, 2011</p>
<p>Link between higher education and economic growth</p>	<p>The relationships between higher education and economic growth. Higher education is considered as a key to economic development.</p>	<p>1. “The widely adopted human capital view is that higher education increases skills and knowledge and results in higher income” (p. 5)</p> <p>2. High levels of education in general, and of higher education in particular, are essential for the design and productive use of new technologies, while they also provide the foundations for a nation’s innovative capacity, and contribute more than any other social institution to the development of civil society.</p>	<p>van Hilten, 2015</p> <p>Carroy, Castells, Cohan, and Cardoso, 1993; Serageldin, 2000</p>
<p>Student Loans Repayment</p>	<p>The act of paying back money previously borrowed from a lender. Usually it takes the form of periodic payment that normally includes part principal plus interest in each payment. The other common method of repayment is a lump sum with interest at maturity</p>	<p>1. The HESLB requires the beneficiaries to pay eight per cent of their monthly basic salaries as loan repayment installments</p> <p>2. For the purpose of retaining the value of loans issued as well as making the loan scheme sustainable, all loans issued from 2011/2012 onwards shall bear interest rate of six percent per annum</p>	<p>Songa, 2011</p> <p>Executive Director: Higher Education Students’ Loans Board, 2012b</p>

Table 5

Variables with Corresponding Items in Questionnaires

Components of Cost-Sharing Program in Higher Education		
No	Variable	Section
1	Awareness of HESLB Program	A
2	Knowledge of Student Loans	B
3	Field of Study (Discipline)	C
4	Eligibility Criteria for Student Loans	D
5	Access to Student Loans	E
6	Student Loans Disbursement	F
7	Students' Perceptions of Higher Education as an Individual/Public Good	G
8	Students' Perceptions of a Link between Higher Education and Economic Growth	H
9	Students' Perceptions of Public Support of Higher Education and Economic Growth	I
10	Students' Satisfaction of HESLB Program	J
11	Fairness of HESLB Program with Low Socio-Economic status	K
12	Potential of Student Loans Payment	L

$$\alpha = Nc/[v + (N - 1)c]$$

Where N = number of items

c = the average inter-item covariance among the items

v = the average variance.

When someone employs Likert-type scales “it is imperative to calculate and report Cronbach’s alpha coefficient for internal consistency reliability for any scale or subscales one may be using. The analysis of the data then must use these summated scales or subscales...” (Gliem & Gliem, 2003, p. 88). Cronbach’s alpha (α) is a reliability test that requires a single test administration to prove a unique estimate of the reliability

of a given survey instrument. Normally it ranges between 0 and 1. McMillan and Schumacher (2006) point out that “an acceptable range of reliability for coefficients for most instruments is .70 to .90” (p. 245). In this study Cronbach’s alpha coefficients ranged from 0.659 to 0.783.

Laerd Statistics (2011) points out that Cronbach’s alpha α “is the most common measure of internal consistency (reliability). It is most commonly used when you have multiple Likert questions in a survey/questionnaire that form a scale and you wish to determine if the scale is reliable.” By increasing number of items in a scale, you increase the coefficient of reliability.

Pilot study was conducted in order to estimate the reliability coefficient α of the instrument. Reliability was established by using a pilot test of 25 subjects excluded from the sample (Radhakrishna, 2007).

It is good practice to pilot or pre-test any questionnaire with a small sample of respondents before employing it with the entire sample. Questionnaires should be tested to check people’s understanding and ability to answer the questions, to highlight areas of confusion, to discover any routing errors, as well as provide an estimate of the average time it may take to complete the questionnaire. Any necessary changes indicated by piloting testing were included in the final version of the survey instrument (Kirklees Council, 2012).

Data Collection

This study used a quantitative survey method for collecting data as well as existing data. The researcher administered questionnaires to the five selected institutions.

Questionnaires to students were considered as the primary sources. The questionnaires to be used with students at five selected universities featured close-ended items, quantitative type questions. The researcher personally went to all five higher educational institutions to administer the questionnaires and get the responses. He expected to gather responses from a sample of about 500 students out of the population of 166,484 students. However, only 495 responded and returned the questionnaires. This happened because the researcher went to the selected higher education institutions by himself and students were eager to support this research because they wanted to have input for improving the program. More information is found in Chapter Four.

Data Analysis

The collected data was analyzed using Statistical Package for Social Science (SPSS) 22.00. An alpha level of 0.05 was chosen for determining statistical significance. A 95% level of confidence has $\alpha = 0.05$ and critical value of $z_{\alpha/2} = 1.96$. The critical value for our margin of error formula is denoted by $z_{\alpha/2}$. This is the point z on the standard normal distribution table of z -scores for which an area of $\alpha/2$ lies above z . Alternately it is the point on the bell curve for which an area of $1 - \alpha$ lies between $-z$ and z . Sullivan, professor of Biostatistics at Boston University in School of Public Health pointed out that

strictly speaking a 95% confidence interval means that if we were to take 100 different samples and compute a 95% confidence interval for each sample, then approximately 95 of the 100 confidence intervals will contain the true mean value (μ). In practice, however, we select one random sample and generate one confidence interval, which may or may not contain the true mean. http://sphweb.bumc.bu.edu/otlt/MPH-Modules/BS/BS704_Confidence_Intervals/BS704_Confidence_Intervals_print.html In practice, however, we select one random sample and generate one confidence interval, which may or may not contain the true mean. (2004, para. 2)

She continued to say that another way of thinking about a confidence interval is that it is the range of likely values of the parameter (defined as the point estimate \pm margin of error) with a specified level of confidence (which is similar to a probability). In other words, these parameters provided 95% probability of the true findings (if the whole population could be surveyed) would be within the margin error of 5% of the results obtained from the sample. If $x = 85\%$ for example, then the actual percentage could be assumed to be between 80 – 90%. The sample size of 400 among the entire population of 166,484 students corresponds well with the margin error of 0.05 as aforementioned. The researcher added some objects as indicated previously that the larger sample sizes yield smaller margins of error, and tighter confidence intervals (Bell, 2010). The investigation employed other statistics include the Pearson correlation coefficient, and arithmetic mean. Both descriptive and inferential statistics were calculated using SPSS 22.00 software, in particular using CATREG analysis and MRA.

The Pearson product-moment correlation coefficient r is used to measure the degree of linear relationship between two variables. “The Pearson r is calculated to show the linear relationship between two variables. To compute the Pearson r two measures on each subject are needed” (McMillan & Schumacher, 2006, p. 485). It characterizes the degree of linear dependence between variables, assuming that the variables are normally distributed (Howell, 2007). The Pearson correlation coefficient r ranges from -1 to +1. A positive correlation indicates that either variables increase or decrease together, whereas a negative correlation indicates that as one variable increases, the other decreases, and vice versa. Pearson correlation coefficients will be used to determine initial relationships between the independent and dependent variables. This analysis indicated whether there

is a statistical significant relationship between student perceptions of the HESLB program and likelihood potential repayment of student loans and it also indicated the relationship between demographics and likelihood repayment of student loans.

Multiple regression is a general statistical technique through which the researcher can analyze the relationship between a dependent or criterion variable and a set of independent or predictor variables. It was utilized in this study to determine the magnitude of direct and indirect relationship that demographic and student perceptions of the HESLB program variables have on the likelihood of student loan repayment variable (criterion variable).

It is very flexible technique in a sense that independent variables can be numeric or categorical ones. It also enables the researcher to study the individual influence of independent variable on criterion variable. Its general equation is:

$y = a + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_nx_n$. Crown (1998) said that multiple regression has been widely used by researchers since the 1950s. It is useful for the social and behavioral sciences (e.g. social psychology) as well as economic fields.

This study employed multiple regression analysis because we want to know which if any of independent variables is statistically significant correlated with the dependent variable, taking in account the various correlations that may exist between independent variables. So typically we use multiple regression to analyze data that come from natural rather than experimental situations. This makes it very useful in social psychology and social science generally as we have seen previously in this section. However, it is inherently a correlational technique; it cannot of itself tell us anything about the causalities that may underlie the relationship it describes.

To analyze research question number one requiring the investigation of student perceptions of the HESLB program for financing higher education in Tanzania, the researcher used descriptive statistics including means, frequencies, and standard deviations of the sample to explore student perceptions toward the current HESLB program for financing higher education.

To respond to research questions number two and three which require the investigation of the influence of selected demographics such as age, gender, geographical settings, high school academic achievement, and socio-economic status on perceived likelihood of student loan repayment, as well as the influence of student perceptions of the HESLB program such as awareness of student loans, knowledge of student loans, the HESLB eligibility criteria, disbursement of student loans, relationship between higher education and economic growth of the nation, satisfaction of the HESLB program for student loans, the researcher employed categorical regression analysis and multiple regression analysis (SPSS version 22.00).

Human Participant Rights' Protection

There will not be any kind of physical or psychological risk involved in participating in this activity beyond those risks experienced in everyday life. All participants will be anonymous for ethical reasons. No participants will be identified by name. In accordance with the guidelines of Andrews University regarding the protection of human participants, a request for review will be submitted to the Institutional Review Board (IRB) for approval to survey/ interview approximately 500 participants for this research. After the IRB has granted approval, recruitment of participants and data collection will begin.

The researcher ensured all participants that my research purpose is not to expose or evaluate any individual but to examine the student perceptions of the cost-sharing program for financing higher education in Tanzania, and that confidentiality was not to be compromised in any way.

Summary

This chapter has introduced the methodology, including the procedure, design and instruments used in the present investigation. The survey and documentary methods approach were used to carry out this research. The chapter discussed the research design, research questions, population and sample size, research instruments, validity and reliability of instrument, data collection, and data analysis. Finally, it articulated how the rights of human participants were protected. Chapter four deals with the results of the study.

CHAPTER 4

DATA ANALYSIS AND RESULTS

Introduction

The primary purpose of this study was to determine student perceptions of the cost-sharing program for financing higher education in Tanzania and whether the selected demographics such as age, gender, geographical settings, high school academic achievement, and socio-economic status as well as student perceptions of the cost-sharing program are statistically significant predictors of perceived likelihood of student loan repayment.

This chapter provides step-by-step explanations of how the data were analyzed to answer the research questions. It provides a demographic profile of participants. Frequencies, percentages, means, standard deviations, reliability analysis of original subscales, reanalysis of subscales, and reliability of reanalyzed subscales are addressed. It outlines components of student perceptions of the cost-sharing program for financing higher education in Tanzania and how these perceptions along with demographic characteristics predict the potential repayment of student loans and summaries of other relevant results. It addresses the general results and specific research questions by employing descriptive statistics, categorical regression and multiple regression analyses reported along with various processes. A well-known adage states that ‘a picture is worth a thousand word.’ This saying proves true when it comes to presenting statistical

information about a data set. Each major section is comprised of a written description with supporting tables, some of which are grouped together to improve comparability.

Researcher employed the SPSS 22.0 to perform statistical analyses. This chapter focuses on presenting the collected data in a meaningful way to facilitate interpretation and discussion, which will be presented in Chapter five.

Description of Participants

This research targeted 500 potential participants across the entire country of Tanzania. However, only 495 participants responded and returned the surveys within the defined time frame. Therefore, 495 surveys were considered to be complete and adequate for this study, which is 99% of the total surveys distributed. A relative few of these received surveys were not considered useable for various reasons; thus, the final analysis considered only 480. With 480 surveys out of 495, the respond rate for useable surveys was 96.97%. The response rate was high because the researcher went to the selected higher educational institutions to administer the surveys to participants personally. In addition, students were eager to contribute to the outcome of this investigation because they wanted their voice to be heard by the Tanzanian government, and they anticipated change after the study.

Descriptive Demographic Data

The demographics of the 480 respondents can be summarized as follows: Male and female participants participated in a close ratio, 51.1% and 43.8% respectively. The majority of participants were young and middle age, which is 46.1% and 42.4% respectively.

Table 6

Demographic Characteristics

Demographic Variables	N	%
Gender		
Male	256	51.1
Female	217	43.8
Missing Value	22	4.5
Total	495	100.0
Age		
Young	228	46.1
Middle Age	210	42.4
Adult	22	4.4
Old Age	12	2.4
Missing Value	23	4.6
Total	495	100.0
Income Level		
Low	243	49.1
Middle	231	46.7
High	6	1.2
Missing Value	15	3.0
Total	495	100.0
Socio-Economic Status		
Low	342	69.1
Middle	128	25.9
High	6	1.2
Missing Value	19	3.0
Total	495	100.0

Note: Young = 18 -24 years old; middle-age = 25 -31 years old; adult = 32 – 38 years old; and old-age = 39 years old and above, low income level = Tshs 2,400,000 – 36,000,000 per year, which is equal to US \$ 1,200 – 18,000, middle income level = Tshs 37,000,000 – 60,000,000 per year, which is equal to US \$ 18,500 – 36,000 and high income level is above Tshs 60,000,000 per year, which is above US \$ 36,000, Tshs = Tanzanian shillings.

For income level; the majority were from low income (49.1%) followed by middle (46.7%). High-income level was represented by only 1.2%. Likewise, for socio-economic status, the majority of participants were from low (69.1%) followed by middle (25.9%). High socio-economic status was only 1.2% as it was for income level. Geographically participants from rural areas and urban areas were almost the same except for the difference of 4.7% only; rural areas represented by 49.1% and urban areas was 44.8%. As far as zones concerned, the majority of participants came from the Northern of the country (22.6%), followed with Highlands and Lake Zones with the same percentage of 19.8%. The minority came from Island (2.6%). See Table 7 for more details.

Table 7

Geographical Characteristics

Variables	n	%
Location		
Rural areas	245	49.1
Urban areas	222	44.8
Missing Value	28	5.7
Total	495	100.0
Zone		
Central	32	6.5
Eastern	76	15.4
Highlands	98	19.8
Lake	98	19.8
Northern	112	22.6
Southern	17	3.4
Western	15	3.0
Island	13	2.6
Missing Value	34	6.9
Total	495	100.0

Table 8

Academic Characteristics (N = 493;489; 470)

Variables	n	%
Institution		
Arusha	30	4.2
Dar es Salaam	232	47.3
Mzumbe	81	15.4
St. Augustine	139	29.1
Zanzibar	18	3.6
Missing Value	2	0.6
Total	495	100.0
Programs		
Arts & Design	4	0.8
Business	78	15.8
Communication Media	23	4.6
Computer Sciences	8	1.6
Education	152	30.7
Engineering Sciences	55	11.2
Environmental Engineering	7	1.4
Ethic Study	1	0.2
Law	51	10.3
Liberal Arts	3	0.6
Medical Studies	1	0.2
Religious &Theology	5	1.0
Tourism	1	0.2
Other Area	100	20.2
Missing Value	6	1.2
Total	495	100.0
Academic Achievement		
Division I	91	18.4
Division II	260	52.5
Division III	119	24.0
Missing Value	25	5.1
Total	495	100.0

The academic response rate was as follows: The majority of participants were from The University of Dar es Salaam (47.3%) followed by the St. Augustine University of Tanzania (29%). For programs, the majority of participants were Education majors (30.7%), and the second one was Business (15.8%). For academic achievements, most of them had division two (52.5%). See Table 8 for illustration.

Preliminary Analysis

Cronbach's alpha was developed by Lee Cronbach in 1951 to provide a measure of the internal consistency of a scale or a test; it is expressed as a number between 0 and 1. "Internal consistency describes the extent to which all the items in a test measure the same concept or construct and hence it is connected to the inter-relatedness of the items within a test" (Tavakol, 2011, p. 54). Internal consistency reliability estimates of the subscales developed for this study are shown in Table 9. Generally, reliability estimates of 0.7 or higher are considered adequate (Gliem & Gliem, 2003; Tavakol, 2011). As Table 9 indicates, there are many subscales that do not meet these criteria, suggesting that, perhaps, the items that were initially designed to measure each of those subscales do not correlate adequately, and thus, may be multi-dimensional.

To examine the dimensionality of the original subscales, a series of conceptual and exploratory analysis were reconsidered. Conceptually, the 12 original subscales were examined for redundancy. It was considered that field of study, eligibility criteria, fairness of the HESLB with low socioeconomic status students, and access to student loan are all about eligibility. It was also considered that higher education as individual/public good, link between higher education and economic growth and public support of higher education and economic growth are all about higher education and

economic growth. Exploratory factor analysis and reliability analysis resulted in six measures of perceptions about the HESLB and one measure of likelihood of student loan repayment.

Table 9

Cronbach's Alpha of Measurement Scales with Number of Items

No	Variable	No. of Variables	alpha α	No of Variables Included	Items Excluded
1	Awareness of HESLB program	6	0.50	6	0
2	Knowledge on student loans	6	0.40	6	0
3	Eligibility criteria for student loans	5	0.84	4	D ₅
4	Link between higher education and economic growth	6	0.78	6	0
5	Students' satisfaction of HESLB program	15	0.68	14	J ₄
6	Student loans disbursement	7	0.78	5	F ₂ & F ₇
7	Likelihood of student loan repayment	12	0.73	11	L ₁

Table 10

Cronbach's Alpha of Measurement Scales with Number of Items

No	Scale	Items	Alpha (α)
1	Awareness	A1 & A2	0.66
2	Knowledge	B4 & B5	0.75
3	Eligibility Criteria	D1, D2, D3, D4, K1 & K3	0.78
4	Higher Education and Economic Growth	H1, H2, H3, H4, H5, H6, I1, I2 & I3	0.78
5	Satisfaction with HESLB	J1, J2, J3, J4, J8 & J9	0.67
6	Disbursement	F1, F3, F4, F5 & F6	0.78
7	Likelihood Repayment	L2, L7, L8, L9, L10, L11 & L12	0.69

A summary of the reanalysis of the original subscales is reported in Table 10. Internally consistency reliability ranged from a low Chronbach's alpha of 0.66 for awareness to a high of 0.78 for eligibility criteria. The reanalyzed scale follows in good category. Henson (2001), George and Mallery (2003), and Lance, Butts, and Michels (2006) suggested Cronbach's alpha value in this way: $\alpha \geq 0.9$ excellent; $0.7 \leq \alpha < 0.9$ good; $0.6 \leq \alpha < 0.7$ acceptable; $0.5 \leq \alpha < 0.6$ poor, and $\alpha < 0.5$ unacceptable.

Research Questions

The following three research questions guided this quantitative study by investigating student perceptions of the cost-sharing program for financing higher education in Tanzania:

1. What are student perceptions of the HESLB program for financing higher education in Tanzania?
2. Are demographic variables such as age, gender, geographical settings, high school academic achievement, and socio-economic status predictors of perceived likelihood of student loan repayment?
3. Are student perceptions of the HESLB program (e.g., their awareness of student loans availability, knowledge of student loans, eligibility criteria, loans disbursement, student acceptance of the relationship between higher education and economic growth in Tanzania, and their satisfaction with the HESLB program) associated with perceived likelihood of student loan repayment?

Research Question 1

The first research question that guiding this study was: What are student perceptions of the HESLB program for financing higher education in Tanzania? To address this question, the researcher reported the overall subscale statistics and item level statistics of each scale as follows: Students in this study agree ($M = 4.03$, $SD = 0.85$) that they are aware of the HESLB program. They also agreed ($M = 3.94$, $SD = 0.63$) that there is connection between higher education and economic growth. On perception of satisfaction participants were neutral ($M = 3.06$, $SD = 0.77$) that they were not sure if they are satisfied with the HESLB or not. Likewise, on the likelihood of repayment of student loans they were neutral ($M = 2.88$, $SD = 0.66$) that they were not sure if they will repay student loans or not. On eligibility criteria of the HESLB program they disagreed ($M = 2.53$, $SD = 0.94$) that not all students who meet these criteria receive student loans. On the similar note, respondents disagreed ($M = 2.23$, $SD = 1.10$) an idea that they have adequate knowledge of student loans program.

Table 11

Descriptive Statistics

No	Scale	N	M	SD
1	Awareness of HESLB program	476	4.03	0.85
2	Knowledge about student loan program	475	2.23	1.10
3	Eligibility criteria for HESLB	480	2.53	0.94
4	Higher education and economic growth	478	3.94	0.63
5	Satisfaction of the HESLB program	478	3.06	0.77
6	Disbursement of student loans	476	2.03	0.89
7	Likelihood of repayment of loan	480	2.88	0.66

Furthermore, they disagreed ($M = 2.03$, $SD = 0.89$) an idea that student loans are disbursed as articulated in the HESLB policy. For more information, see Table 11. The following paragraphs will discuss the descriptive statistics of each items of each subscale.

In order to discuss the descriptive statistics of each item we need to know the characteristics of the questionnaire. The questionnaire's items utilized a Likert-type 5-point scale: where 1 = Strongly Disagree; 2 = Disagree; 3 = Cannot Decide/Neutral; 4 = Agree; and 5 = Strongly Agree. Tables 12 to 18 show student perceptions of the HESLB program for financing higher education in Tanzania on the aforementioned components.

Participants showed their awareness of the HESLB program as follows: Many participants indicated that they were aware that the government funds higher education through student loans (85.7%) but 14.3% was not aware, defining 'awareness' as 'agree' or 'strongly agree'. The mean score and standard deviation were 4.09 and 0.97 respectively. A majority of participants also agreed that they know that applicants have to meet HESLB criteria in order to qualify to get student loans, 83.1% knew that in order to receive student loans they must meet HESLB criteria for loans, while 16.9% claimed to know nothing about this requirement for student loans. The mean score was 3.97 ($SD = 1.00$) using a type 5-point Likert scale. For verification, see Table 12.

Table 12

Awareness of HESLB Program for Financing Higher Education

Awareness Variable	n	Mean	SD	% ^a
Government support HE through student loans	480	4.09	0.97	85.7
Students must meet HESLB criteria	480	3.97	1.00	83.1

Note. ^a Percentage 'agree' or 'strongly agree'

Few students (20.5%) communicated that their university dedicates time to educate students on student loan policies, contrast to 79.5% who strongly indicated that their university didn't dedicates time to educate students on student loan policies. The mean and standard deviation were 2.19 and 1.21 respectively. Similarly, a small number of students (22.7%) affirmed that the HESLB dedicates time to educate students on student loan policies, but 77.3% claimed that the HESLB does not. Mean and standard deviation were: 2.27 and 1.23 respectively. See Table 13.

Table 13

Students' Knowledge about Student Loans for Financing Higher Education

Knowledge	n	Mean	SD	% ^a
University and student loans policies	480	2.19	1.21	20.5
HESLB and student loans policies	480	2.27	1.23	22.7

Note. ^a Percentage 'agree' or 'strongly agree'

Students' perceptions regarding HESLB eligibility criteria of receiving student loans were as follows: Few participants (17.8) acknowledged that every student who meets the HESLB eligibility criteria receives loans. A majority of beneficiaries disagreed (M = 2.00, SD = 1.33) the statement that every student who meets HESLB criteria gets student loans. The results indicated that only 30.8% of beneficiaries are from low socio-economic status. 65.4% of respondents rejected the proposition that orphan students receive student loans to finance 100% of their education. On the same note 59.2% of students designated that physically challenged students do not receive student loans to

finance 100% of their education while 40.8% ($M = 2.99$; $SD = 1.39$) students augmented the proposition.

Likewise, 72.1% indicated that students with physical challenged parents do not receive student loans to finance 100% of their education. Again analysis showed that 78.3% of students strongly disagreed that every student with low socio-economic status gets student loans. Only 27.9% ($M = 2.64$; $SD = 1.33$) agreed that students of handicapped parents receive 100% student loans. Furthermore, only 21.7% of respondents agreed ($M = 2.21$, $SD = 1.36$) that students with low socio-economic status receive 100% student loans. See Table 14.

Table 14

Student Perceptions of Eligibility Criteria of HESLB Regarding Student Loans

Eligibility	n	mean	SD	% ^a
Everyone who meets criteria gets student loan	480	2.00	1.33	17.8
Majority from low SES receive student loans	480	2.55	1.33	30.8
Orphan students receive 100% student loans	480	2.80	1.40	34.6
Physically challenged students receive 100% loans	480	2.99	1.39	40.8
Students of handicapped parents receive 100% loan	480	2.64	1.33	27.9
Students with low SES receive 100% student loans	480	2.21	1.36	21.7

Note. ^a Percentage 'agree' or 'strongly agree'

Students' perceptions regarding contribution of higher education to economic growth were as follows: The study showed that 85.0% of students strongly acknowledged ($M = 4.16$, $SD = 1.06$) that higher education is the most important factor for promoting economic growth in Tanzania, while 15% rejected the proposition. Also 79.8% of students supported ($M = 4.02$, $SD = 0.98$) the proposition that employees with higher education degree have a positive influence on other employees' productivity while 20.2%

did not agree with that position. In the same note 85.4% students strongly augmented a proposition that higher education is the key factor for economic competitiveness of Tanzania as a country in opposition to 14.6% who indicated different.

Similarly, 83.0% designated that higher education is the key factor for transitioning Tanzania as a national from third world economic status to middle industrial economic class while 17.0% argued that higher education is not the key factor for that cause. Again, 74.8% of participants indorsed that their institution of higher education prepared students to contribute to the knowledge based economy of Tanzania in contrary to 25.2% who opposed that argument. Analysis also showed that 73.8% of students believe that their higher educational institution prepares students to compete in the global markets of today’s international economy in contrary to 25.2% who did not support that proposition.

Table 15

Student Perceptions Link between Higher Education and Economic Growth

Link between H. education and economic growth	N	Mean	SD	% ^a
Higher education as important factor for economic growth	480	4.16	1.06	85.0
Higher education with influence for productivity	480	4.02	0.98	79.8
Higher education as key for economic competitiveness	480	4.14	0.92	85.4
Higher education as a factor for changing economic status	480	4.11	0.98	83.0
Higher education as knowledge based economy	480	3.85	1.00	74.8
Higher education institution prepare students for glob mk	480	3.86	1.12	73.8
Cost-sharing is imperative for economic growth	480	3.63	1.17	65.5
Higher education has to be subsidized for economic status change	480	3.98	1.04	75.7
Government supports HE for economic interests.	480	3.67	1.04	65.8

Note. ^a Percentage ‘agree’ or ‘strongly agree’, glob mk = global market.

Link between H. education and economic growth = Link between higher education and economic growth

A good number (65.5%) of respondents indicated that cost the cost-sharing program for financing higher education in Tanzania is imperative for economic growth of the country. Similarly, majority of participants (75.7%) designated (M = 3.98, SD = 1.04) that higher education has to be subsidized for economic status change of the country. Furthermore, 65.8% of participants supported the idea that Tanzanian government supports higher education because of economic interests. For illustration, see Table 15.

For student perceptions of satisfaction for student loans' program, results indicated as follows: About two thirds (67.7%) believe (M = 3.67, SD = 1.23) that student loans program has increased opportunities for many people. Likewise, 58.8% of participants supported the statement that the statement that the cost-sharing program for Tanzanian higher education system has created educational opportunities for themselves. Only 28.8 participants indicated (M = 2.40, SD = 1.29) that I am satisfied with the student loans' program. Less than half (41.5%) said that the cost-sharing program has increased the quality of education that universities provide.

Table 16

Student Perceptions of Satisfaction for Student Loans' Program

Student satisfaction for program	n	mean	SD	% ^a
Student loans = opportunities for many people	480	3.67	1.23	67.7
Student loans = educational opportunities for me	480	3.42	1.45	58.8
I am satisfied with the student loans' program	480	2.40	1.29	28.8
The student loans = the quality of higher education	480	3.00	1.16	41.5
The HESLB has improved its service to student	480	3.38	1.08	57.0
The HESLB works efficiently.	480	2.51	1.14	24.0

Note. ^a Percentage 'agree' or 'strongly agree'

Results also show that 57% of respondents acknowledged that the HESLB has improved its service to students compared to when it was started. However, only 24% acknowledged ($M = 2.51$, $SD = 1.14$) that the HESLB functions efficiently. For more details, see Table 16.

About a quarter (25.8%) of participants agreed ($M = 2.38$, $SD = 1.37$) that student loans disburse on time. Similarly, only 15.6% of respondents augmented the statement that I receive student loans to finance 100% of my education. In the same manner only 15.8% acknowledged that I receive enough money from the HESLB for rent. It was only 9.4% that reported ($M = 1.78$, $SD = 1.04$) that were receiving enough money for the costs of living. Furthermore, only 18.0% declared ($M = 2.04$, $SD = 1.21$) that they receive enough money as student loans for textbooks. See Table 17.

Table 17

Student Perceptions of Student Loans Disbursement (N = 480)

Student Loans Disbursement	n	mean	SD	% ^a
Student loans disbursed on time	480	2.38	1.37	25.8
Student loans for 100% of tuition	480	1.97	1.24	15.6
I receive enough money of student loans for rent	480	2.00	1.18	15.8
I receive enough money (loans) for all costs –living	480	1.78	1.04	9.4
I receive enough money of student loans for textbooks	480	2.04	1.21	18.0

Note. ^a Percentage ‘agree’ or ‘strongly agree’

Finally results indicated that slightly more than half (57.3%) of participants showed their willingness to repay their student loans. However, 65.0% indicated that when they applied student loans they were willing and planning to repay. Similarly 74.2% designated ($M = 3.94$, $SD = 1.27$) that when I applied student loans from the

HESLB, I provided correct contact information so that the HESLB can easily find me for loans repayment after graduation. On contrary only 35.6% of the beneficiaries said that they are willing to repay their student loans with interests after graduation. The results showed that a few beneficiaries (8.6%) are repaying (M = 1.84, SD 1.11) their student loans with interest. Similarly, 9.0% affirmed that their paying (M = 1.78, SD 1.11) their student loans with interest every month. Finally, the results of this study showed that 68.7% of participants are intending (M = 3.72, SD 1.42) to repay their student loans. For more insight, see Table 18.

Table 18

Characteristics of Likelihood of Student Loans Repayment

Likelihood of student loan repayment	N	mean	SD	% ^a
I am willing to repay my student loans	480	3.32	1.32	57.3
When I applied loans I was willing and planning to repay	480	3.56	1.35	65.0
When I applied student loans I provided correct address	480	3.94	1.27	74,2
I will repay my loans with interests after graduation	480	2.67	1.45	35.6
I am currently repaying student loans with interest	480	1.84	1.11	8.6
I am currently repaying student loans with interest every month	480	1.78	1.11	9.0
I intended to repay student loans (reversed).	480	3.72	1.42	68.7

Note. ^a Percentage ‘agree’ or ‘strongly agree’

Research Question 2

The second research question guiding this study was: Are demographic variables such as age, gender, socio-economic status, geographical settings, and high school achievements predict the perceived likelihood of student loan repayment?

In order to respond to the above question, the researcher conducted categorical regression to measure the influence of demographic predictor variables such as age,

gender, socio-economic status, geographical settings, and high school academic achievements, on the dependent or criterion variable of the perceived likelihood or potential student loan repayment. The results that addressed this question are as follows:

Categorical regression analysis was performed because the independent variables were categorical. For CATREG, the SPSS default settings were used. The CATREG analysis was run using 473 cases; the 22 missing cases, or three percent, were not included using list wise deletion. List wise deletion is a method that removes any individual participant's data from an analysis if they are missing data on any variable in the analysis (Martin, 2014). The sample size was still adequate to provide sufficient power to detect meaningful effects.

The default setting for exclusion of missing data was $\leq 15\%$, which was consistent with George and Mallery's (2006) recommendation. The CATREG analysis was run employing 473 cases; 22 cases were omitted due to missing data and were eliminated list wise as aforementioned in the previous paragraph. Data were omitted based on the assumption that they were missing completely at random as it is reported in detail in Chapter three.

The CATREG equation was completed using perceived likelihood of student loan repayment as the dependent variable. Participants' age, gender, geographical settings, high school academic achievement, and socio-economic status were computed as independent variables. Categorical regression results were computed and analyzed once because the model was not statistically significant.

The CATREG included the independent variables: participants' age, geographical setting, gender, high school academic achievement, and socio-economic status. And

perceived likelihood repayment of student loans as dependent variable. The overall model was not statistically significant - five independent variables had no significant combined effect on overall likelihood of student loan repayment, $F(6, 440) = 1.304$; (two-tailed) $p = 0.254$ with an $R^2 = 0.017$ and an adjusted R^2 of 0.004. See Table 19 for correlations, coefficients, p values, and importance of the demographic variables.

Table 19

Correlations, Coefficients, p Values, and Importance of the Demographic Variables Perceived Likelihood of Student Loans Repayment (CATREG) (N = 473)

Variable	Standardized Coefficient Beta	Correlations			
		Zero-Order	Partial	Part	Tolerance
Gender	0.038	0.035	0.038	0.037	0.077
Age	0.054	0.046	0.054	0.053	0.144
SES	0.117	0.110	0.111	0.110	0.735
High School Achievement	0.025	0.016	0.025	0.024	0.024
Geographical Settings	0.010	0.036	0.009	0.020	0.020

Note. Dependent variable: Perceived likelihood of student loan repayment; Multiple $R = 0.132$; $R^2 = 0.017$; Adjusted $R^2 = 0.004$; $F = 1.304$; Sig. = 0.254.

For R^2 there are different opinions on what range of R^2 can be acceptable.

However, R^2 has the useful property that its value ranges from zero to one and represents a fraction or decimal. When R^2 is zero it indicates that the proposed model does not improve prediction over the mean model, and a value of one indicates that the prediction is perfect. Improvement in the regression model results in proportional increase in R^2 .

However, it has discovered that, one pitfall of R^2 is that it can only increase as predictors are added to the regression model. This increase is artificial when predictors are not actually improving the model's fit. Because of such phenomenon, the researcher has to

employ adjusted R^2 if the sample size is small. If the sample size is big you use unadjusted R^2 .

Gaur and Gaur (2009) pointed out that that R^2 is the square of R and provides the proportion of variance in the dependent variable accounted for by the set of independent variables selected for the regression model. R^2 is useful in the sense that it helps to find out how well the set of independent variables can predict the dependent variable. They added that “while in natural science research is not uncommon to get R squared values as high as 0.99, a much lower value (0.10 – 0.20) of R squared is acceptable in social science research” (p. 110). Similarly, Karen (2014) pointed out that there are situations in which a high R-squared is not necessary or relevant. When the interest is in the relationship between variables, not in prediction, the R-squared is less important (para. 2).

According to the criteria of the best model, there was neither statistically significant ($p = 0.254$) nor strength of relationship ($R^2 = 0.017$) in the CATREG. Thus, there was no need of continuing with the next stage of CATREG analysis.

Research Question 3

The third research question guided this study was: Do student perceptions of the HESLB program, such as their perception of student loans awareness, student loans eligibility criteria, knowledge of student loans, student loans disbursement, relationship between higher education and economic growth in Tanzania, satisfaction with the HESLB influence perceived likelihood of student loan repayment?

First and foremost, before running multiple liner regression analysis, a rule of thumb for sample size is that regression analysis must have at least 20 subjects per independent variable in the analysis. This study had 495 subjects in total but after the list

wise deletion was done the study remains with 473 subjects, which is equal to 95% of all participants. Because the study had only six independent variables this number was big enough to perform multiple linear regression analysis.

To investigate the influence of students' awareness of the cost-sharing program, student loans eligibility criteria, students' knowledge of student loans, student loans disbursement relationship between higher education and economic growth in Tanzania, satisfaction with the HESLB toward the perceived likelihood of student loan repayment SPSS version 22.00 was employed to meet tests of the required assumptions of performing multiple linear regression such as normality, linearity, homoscedasticity, and collinearity to provide validity to the results. Antonkis and Dietz (2011) stated that when assumptions are violated accuracy and inferences from the analysis are affected.

The first assumption is the normality. The term normality delivered from a more basic statistical concept of normal distribution. An assessment of the normality of data is a prerequisite of many statistical tests because normal data is an underlying assumption in parametric testing. In this study, the SPSS was run to find out the normality of data distribution by using P-P plot. The P-P plot indicated that the distribution had no significant outliers. All dots were close to the perfect line (diagonal).

The second assumption for running multiple linear regression model is linearity, which is defined as a linear function whose graph lies on a straight line, and which can be described by giving its slope and its y intercept. Osborne and Waters (2002) pointed out that multiple linear regression can accurately estimate the relationship between dependent and independent variables when the relationship is linear in nature. There are several ways of checking if a linear relationship exists between dependent and independent

variables. However, the best and easiest way is to create scatter plots by using the SPSS method where you plot the dependent variable against independent variables and visually you inspect the scatter plots to check for linearity (Lund Research, 2016).

When the researcher employed the SPSS to create scatter plots with standardized residuals for linearity, results indicated that there is a linear relationship in each pair of dependent and independent variables. There was no departure from normality; there was a random scatter about the horizontal line. Thus, the linearity assumption was met. Keith (2006) emphasized that if the linearity is violated all the estimates of the regression including regression coefficients, standard errors, and tests of statistical significance may be biased.

The third assumption is homoscedasticity. In this study homoscedasticity refers to equal variance of errors across all levels of the dependent and independent variables (Osborne & Waters, 2002). It means that researchers assume that errors are spread out consistently between the variables (Keith, 2006). The researcher used SPSS for creating a scatter plot to check if the amount of errors stays consistent along the fit line. The residuals plot had the same width for all values of predicted dependent variable along the fit line, which means this assumption was met.

The fourth assumption to be met for running multiple linear regression models is collinearity (multicollinearity in multiple regression). Multicollinearity is a phenomenon in which two or more predictor variables in multiple regression model are highly correlated (0.9 or greater) in the sense that one can be linearly predicted from the others with a substantial degree of accuracy. The multicollinearity should be avoided among interest variables. One of the best ways of testing the multicollinearity assumption is to

employ SPSS for checking collinearity statistics and correlation matrix. Collinearity statistics consist of tolerance and variance inflation factor (VIF). Tolerance measures the influence of one independent variable on all other independent variables. Tolerance levels for correlation range from zero (no independence) to one (completely independent) (Keith, 2006). $\text{Tolerance} = 1 - R^2 = 1/\text{VIF}$. The VIF is a reciprocal of tolerance: $\text{VIF} = 1/(1 - R^2)$.

The VIF is an index of the amount that the variance of each regression coefficient is increased over that with uncorrelated independent variables (Keith, 2006). When a predictor variable has a strong linear association with other predictor variables, the associated VIF is large and is evidence of multicollinearity (Shieh, 2010). When a variable has tolerance value of 0.10 or less and VIF values greater than 10 are a sign of the existence of multicollinearity in the regression model.

Correlation matrix is a statistical term that describes the degree of association. When two variables tend to change together is the evidence of being correlated, and the extent to which they are correlated is measured by means of the correlation coefficient (Cohen & Cohen, 1983). Correlation is measure on a scale of -1 to 1. The Pearson r coefficient was run to determine if any significant relationship existed between the independent variables (awareness, knowledge, eligibility criteria, relationship between higher education and economic growth, satisfaction, and disbursement of student loans) and dependent variable (perceived likelihood of student loan repayment). The results show that there is no strong significant relationship exists among the independent variables as well as the dependent variable. Table 20 provides the correlational matrix for these variables.

Table 20

Summary of Mean, Standard Deviation, and Correlation Matrix for Awareness, Knowledge, Eligibility Criteria, Relationship Between Higher and Economic Growth, Satisfaction, Disbursement of Student Loans, and Perceived Likelihood of Student Loans Repayment

Variable	Mean	SD	Likelihood Rep	Awareness	Knowledge	Eligibility Criteria	HE & Econ. Growth	Satisfaction	Disbursement
Likelihood Repayment	2.88	.66		.12**	.13**	.19**	.09*	.07	.06
Awareness	4.03	.85			.01	.09*	.29*	.22**	.07
Knowledge	2.23	1.10				.24**	.05	.14	.17
Eligibility Criteria	2.53	.94					.04	.33**	.31**
HE & Economic Growth	3.93	.63						.18	.02
Satisfaction	3.06	.77							.35
Disbursement of loans	2.03	.89							

Note. Likelihood Rep = Likelihood Repayment; HE & Econ. Growth = Higher education and economic growth.

Using SPSS in the correlation matrix table, we notice that there is no multicollinearity because our predictors are not strongly related. Furthermore, each variable in this research had tolerance value greater than 0.10 as well as VIF values less than 10.0. Thus, the multicollinearity assumption was met in this study.

Table 20 can be interpreted as follows: First, a significant positive correlation was found for perceived of likelihood of student loan repayment with students' awareness and relationship between higher education and economic growth. Second, a significant positive correlation was found for perceived of likelihood of student loan repayment with students' awareness and students' satisfaction of the HESLB program.

Third, a significant positive correlation was found for likelihood of student loan repayment with students' knowledge of student loans and the HESLB eligibility criteria for student loans. Fourth, a significant positive correlation was found for likelihood of student loan repayment with students' knowledge of student loans and students' satisfaction with the HESLB program. Fifth, a significant positive correlation was found for likelihood of student loan repayment with students' knowledge of student loans and disbursement of student loans. Sixth, a significant positive correlation was found for likelihood of student loan repayment with the HESLB eligibility criteria for student loans and students' satisfaction of the HESLB program.

Seventh, a significant positive correlation was found for the perceived of likelihood of student loan repayment with the HESLB eligibility criteria for student loans and disbursement of student loans. Eighth, a significant positive correlation was found for the perceived of likelihood of student loan repayment with relationship between higher

education and economic growth in Tanzania and students' satisfaction with the HESLB program. Furthermore, a positive significant correlation was found for the perceived likelihood of student loan repayment with students' satisfaction with the HESLB program and disbursement of student loans.

In contrary, there was no significant correlation found for student awareness of education loans with student loans disbursement. In the same manner, there was no significant correlation found for knowledge of student loans with a link between higher education and economic growth. Similarly, there was no significant correlation found for knowledge of student loans with students' satisfaction for the HESLB program.

Up to this juncture, we cannot draw any conclusion about the prediction of the likelihood of student loan repayment because correlation deals only with the relationships of variables. Surbhi (2016) pointed out that "correlation is used when the researcher wants to know ... whether the variable under study are correlated or not, if yes then what is the strength of their association." After working with correlation in this section, the following section deals multiple regression analysis to enable the researcher to draw conclusion on which variable are predictors of the likelihood of student loan repayment.

Multiple Regression Analysis

Multiple regression analysis is a statistical technique that uses several explanatory variables to predict the outcome of a response variable. The goal of MRA is to model the relationship between the explanatory and response variables. "It is used when investigator suspects that the outcome of interest may be associated with or depend on more than one predictor variable" (Marill, 2008, para. 2).

The multiple linear regression model indicates the overall model of the six independent variables significantly predicts perceived likelihood repayment of student loans ($R^2 = 0.055$, $R^2_{\text{adjusted}} = 0.043$, $F(6, 466) = 4.553$, $p < 0.001$). There is a slightly positive statistically significant relationship between eligibility criteria and perceived likelihood of student loan repayment. The results show also slightly positive statistically significant relationship between awareness of the HESLB program and perceived likelihood of student loan repayments. As the HESLB follows its eligibility criteria of granting student loans to the beneficiaries, the beneficiaries will be willing to repay student loans. All six independent variables of the cost-sharing program explain 5.5% of the variation in the perceived likelihood of student loan repayment. Furthermore, a closer examination of these MRA results in Table 21 specified that only two variables; eligibility criteria of the cost-sharing program; $\beta = 0.161$, $t(466) = 3.244$, $p = 0.001$ and awareness of the HESLB program, $\beta = 0.095$, $t(466) = 1.995$, $p = 0.047$ (at alpha 0.05) are statistically significantly contributed to the model.

These results signify that if student loans beneficiaries will be satisfied with the cost-sharing program for financing higher education in Tanzania according to the eligibility criteria set by the HESLB, likely they will be willing to repay the student loans after graduating from universities. Awareness of the HESLB program also was statistically significant at $\beta = 0.095$, $t(466) = 1.995$, $p = 0.047$.

Note that although two variables; eligibility criteria and awareness of the cost-sharing for financing higher education in Tanzania may have contributed to the model for predicting the perceived likelihood of student loan repayment, the significance of the

model of the likelihood of student loan repayment is much lower because all six variables were entered into the model.

To examine the research question three a multiple linear regression was conducted to assess if student perceptions such as awareness of student loans, students' knowledge of the cost-sharing program, the HESLB eligibility criteria for student loans, relationship between higher education and economic growth of Tanzania, students' satisfaction of the cost-sharing program, and disbursement of student loans are predictors of the likelihood of student loan repayment. Table 21 indicates that the HESLB eligibility criteria of student loans variable was statistically significant, $B = 0.161$, $p < 0.001$, this means that in every increment of one unit of the HESLB eligibility criteria increases the perceived likelihood of student loan repayment increases by 0.161. Likewise, every increment of one unit of students' awareness of the cost-sharing program increases the perceived likelihood of student loan repayment by 0.095. More discussion of this result will be addressed in Chapter five.

Table 21

Standard Multiple Linear Regression Model Analysis Results

Variable	B	SE	t	β	p	r	Zero-Order	Partial r
Awareness	0.074	0.037	1.995	0.095	0.047	0.121	0.138	0.092
Knowledge	0.054	0.028	1.883	0.088	0.060	0.127	0.024	0.087
Eligibility Criteria	0.113	0.035	3.244	0.161	0.001	0.185	0.117	0.049
HE and Economic Growth	0.056	0.050	1.116	0.053	0.265	0.087	0.072	0.052
Satisfaction	-0.021	0.043	-0.474	-0.024	0.636	0.071	0.173	-0.022
Disbursement	-0.001	0.037	-0.025	-0.001	0.980	0.063	0.070	-0.001

Note. $R^2 = 0.055$, $F(6, 466) = 4.55$, $p = 0.001$

Table 22

Summary of Correlation Matrix for Awareness, Knowledge, Eligibility Criteria, Relationship between Higher and Economic Growth, Satisfaction, Disbursement of Student Loans and Perceived Likelihood of Student Loans Repayment

Variable	Likel Rep.	Awareness	Knowledge	Eligib. Crit.	HE & E. Growth	Satisfaction	Disbursement
Likel Rep		.12 **	.13**	.19**	.09 *	.07	.06
Awareness			.01	.09*	.29*	.22**	.07
Knowledge				.24**	.05	.14	.17
Eligib Crit					.04	.33**	.31**
HE & E. Growth						.18	.02
Satisfaction							.35
Disbursement							

Note. Likel Rep = Likelihood Repayment; Eligib. Crit = Eligibility CriteriaHE & E. Growth = Higher education and economic growth, * (p = 0.05) and ** (p = 0.01)

The researcher reiterated the matrix correlation of the study for the research question three as he did for research question two. In both research questions some variables had association and some not. Variables had correlation as following: Awareness, knowledge, eligibility criteria of receiving student loans, link between higher education and economic growth had had positive correlation; eligibility criteria of receiving student loans had positive correlation with the knowledge about student loans; likewise, satisfaction of student loans and student loans disbursement had positive association with eligibility criteria of receiving student loans. The rest of the variables had no correlation with each other.

To sum up this section, the researcher demonstrated the difference between matrix correlation and MRA to draw the predictor variables of the study. Correlation and regression are two different mathematical concepts, although in most cases these two are studied together. Surbhi (2016) said that correlation is used when the researcher wants to know that whether the variables under study are correlated or not, if yes, what is the strength of their association, while for regression analysis, “a functional relationship between two variables is established so as to make future projections on events” or projects. According to Rahbar (2016), professor of biostatistics at Michigan State University, we can say that correlation coefficient r measures the strength of bivariate association while the primary function of regression analysis is to predict an equation that estimates the value of y for any given x . In short, we can say that correlation shows the linear relationship between two variables; it is employed for quantification of the association of the two variables. In contrast, regression analysis is employed to identify the effect of one unit change in independent variable (x) on dependent variable (y). However, both of them are not responsible for causality (Sarvashwa, 2016).

Because of the explanation above, the study had only two variables that were statistically significant predictors of student loan repayment as multiple linear regression analysis showed. These variables are student awareness of student loans ($p = 0.47$) and eligibility criteria for receiving student loans ($p = 0.001$).

Summary of Results

This section presents the summary of the research results step by step according to the research questions employed in this study:

Research question 1: What are student perceptions of the HESLB program for financing higher education in Tanzania? Major results for this question were as follows:

- The majority of students (85%) strongly agreed that they were aware of the HESLB program for financing higher education in Tanzania through student loans.
- Over three quarters (83.1%) of respondents agreed that they know that in order to qualify for student loans a beneficiary has to meet the HESLB criteria for loans.
- Results showed that neither universities nor the HESLB did dedicate their time to educate students on student loans policies.
- Less than a quarter (17.8%) agreed that every student who met the HESLB criteria for student loans receives loans.
- The majority of students (85%) strongly agreed/acknowledged that higher education is the most important factor for promoting economic growth in Tanzania.
- About three quarters of students (74.8%) acknowledged that their higher educational institutions prepare them to contribute to a knowledge based economy.
- Results showed that only 28.8% participants agreed that they are satisfied with the cost-sharing program for financing higher education in Tanzania.
- Only 35.6% agreed that they will repay their loans with interests after graduation.

Research question 2: Do demographic variables such as age, gender, geographical settings, high school academic achievement, and socio-economic status influence perceived likelihood of student loan repayment? Results of this question were as follows:

- Results showed that demographic variables such as age, gender, geographical settings, high school academic achievement, and socio-economic status were not statistically significant predictors of perceived likelihood of student loan repayment.

$F(5,440) = 1.304$, (two-tailed) $p \leq 0.254$ with $R^2 = 0.017$ and an adjusted $R^2 = 0.004$.

- The CATREG model predicting the perceived likelihood of student loan repayment was not statistically significant

Research question 3: Do student perceptions of the HESLB program such as their perception of student loans awareness, student loans eligibility criteria, knowledge of student loans, disbursement of loans, relationship between higher education and economic growth in Tanzania, satisfaction with the HESLB influence perceived likelihood of student loan repayment? Results of this question were as follows:

- The results of the study indicated that eligibility criteria of the HESLB for student loans were statistically significant predictor of perceived likelihood of student loan repayment; $\beta = 0.161$, $t(466) = 3.244$, (two-tailed) $p \leq 0.001$.
- Awareness also was statistically significant predictor of perceived likelihood of student loan repayment; $\beta = 0.095$, $t(466) = 1.995$, (two-tailed) $p = 0.047$.
- However, student perceptions of the HESLB program for financing higher education in Tanzania such as student knowledge of education loans, link

between higher education and economic growth, satisfaction with the cost-sharing program for financing higher education in Tanzania, and student loans disbursement were not statistically significant predictors of perceived likelihood of student loan repayment.

The analysis in this chapter provided the basis for the summary of results, discussion of the results, conclusions, implications, and recommendations for policy makers and further study found in Chapter five.

CHAPTER 5

SUMMARY, DISCUSSION, IMPLICATIONS, RECOMMENDATIONS AND CONCLUSIONS

This study explored student perceptions of the cost-sharing program for financing higher education in Tanzania, relationships between the selected demographics such as age, gender, geographical settings, high school academic achievement, and socio-economic status, as well as student perceptions of the program and perceived of likelihood student loan repayment. The study used descriptive and inferential statistics to analyze results. This chapter will present an overview of the study, introduction and background of the study, statement of the problem, purpose of the study, research questions, research methodology, discussion of the results related to literature and practice, theoretical framework, summary of results, implications, recommendations for policy-makers and further study, and conclusion.

Introduction and Background of the Study

Higher education tends to improve quality of life for individuals as well as society at large. Studies indicate that, compared to secondary graduates, college and university graduates have longer life spans, better access to health care, better dietary and health practices, greater economic stability and security, more prestigious employment and greater job satisfaction, less independence on government assistance, greater community

service and leadership, and less criminal activities and incarceration (Allen, 2007).

Allen (2007) pointed out that “higher education theoretically will also enable individuals to expand their knowledge and skills” express their thoughts eloquently in speech and in writing, “grasp abstract concepts and theories, and increase their understanding of the world and their community” (para. 5). However, it goes without saying that many students from low and middle socio-economic status are facing a challenge of attaining higher education because of its overwhelmingly high price. In the United States higher education comes with a price tag up to \$ 60,000.00 a year for a four years residential degree. Research shows that the costs of university per student have risen almost five times the rate of inflation since 1983 (The Economist, 2015). This phenomenon is not limited to the US but has become a worldwide phenomenon.

Concern for national well-being is as compelling in the countries of Sub-Saharan African as anywhere in the world (MacGregor, 2008). However, these countries face a great challenge regarding how to finance higher education in spite of the shortage of revenue to accommodate the increasing number of students in higher learning institutions. As one of the countries in this region Tanzania is struggling with the conundrum of how to enhance student enrollment rate in higher educational institutions through the cost-sharing program while controlling its costs.

In Tanzania, the cost-sharing program for financing higher education began back in 1956 when bursaries were given to students from low and middle socio-economic classes to pay for their education (Chatama, 2014). Local authorities helped to determine students with legitimate needs of bursaries. All costs were recovered by beneficiaries through their salaries (Ishengoma, 2004a). Financing higher education was the

responsibility of colonial rule as well as the local authorities.

After independence, the Tanzanian government adjusted the mode of bursary in the sense that beneficiaries were to attend six months National Service training and be paid only 40% of normal pay for 18 months and 60% of their salaries for the same period to recover their bursaries (Ishengoma, 2004a).

In 1974, the Tanzanian government abolished a bursary system and assumed all responsibilities for paying the costs of higher education. This time National Service was extended to 12 months. In addition, students were required to work at least two years after high school before attending higher educational institutions. Upon completion of study every student had to sign a contract to work for government for at least five years after graduation before he or she could consider working elsewhere (Ishengoma, 2004a).

In 1992, the Tanzanian government reestablished the cost-sharing program, phase I. Students were to pay the costs of transport from their homes to college/university and from college/university to their homes, application fees, students' union fees, caution money, registration fees, and examination fees (Ministry of Sciences, Technology, and Higher Education, 2004).

In 1994/1995 phase II was started. Now in addition all that students had to pay in phase I, they were also required to pay for meals and accommodation. Because not all students could afford to pay the costs of transport from their homes to college/university and from college/university to their homes, application fees, students' union fees, caution money, registration fees, examination fees, meals and accommodation, the government established students' loan program for eligible needy students. This phase was managed by Ministry of Science Technology and Higher Education (2004).

Phase III was introduced in 2004 by establishing the HESLB. This board was established under the Act of Parliament No 9 of 2004 as amended by Act Parliament No 9 of 2007 CAP 178. It was inaugurated by Honorable Minister for Higher Education, Science and Technology on 30th March, 2005 and commenced its operation in July 2005 (HESLB Strategic Plan 2008–2011). The board was entrusted by the government the responsibilities of disbursing student loans to students who are eligible and in need as defined by the Act of Parliament No 9 of 2004 and to collect repayment of all students' loan issued to beneficiaries since 1994 in order to make the scheme successful and sustainable (HESLB Strategic Plan 2008–2011).

Statement of the Problem

The increasing costs of higher education, combined with lower rates of growth in grant aid, and scholarships have resulted in additional reliance on student loans for attaining college/university education. The Tanzanian government has adopted the cost-sharing program as means of helping eligible and needy students pay for their higher education. It has established the HESLB to disburse loans to students and collect all loan repayments to ensure the sustainability of the funds for subsequent generations. However, many students are not satisfied with this program and the repayment of student loans is poor.

For these reasons this research investigated student perceptions of students for the program and whether the selected demographics such as gender, age, and socio-economic status as well as student perceptions of the cost-sharing program for financing higher education in Tanzania are statistically significantly related to potential repayment of student loans.

Purpose of Study

The purpose of this study was to investigate student perceptions of the cost-sharing program for financing higher education in Tanzania and whether selected demographics such as age, gender, geographical settings, high school academic achievement, and socio-economic status, on student perceptions of the cost-sharing program for financing higher education in Tanzania, may be related to perceived likelihood of student loan repayment.

In this study, the dependent variable was potential repayment of student loans and student perceptions of the cost-sharing program for financing higher education in Tanzania, as well as demographic variables constituted the independent, or predictor variables.

Research Questions

This quantitative study was conducted with the aim of responding to the following research questions:

1. What are student perceptions of the HESLB program for financing higher education in Tanzania?
2. Are demographic variables such as age, gender, geographical settings, high school academic achievement, and socio-economic status predictors of perceived likelihood of student loan repayment?
3. Are student perceptions of the HESLB program (e.g., their awareness of student loans availability, knowledge of student loans, eligibility criteria, loans disbursement, student acceptance of the relationship between higher education and

economic growth in Tanzania, and their satisfaction with the HESLB program) associated with perceived likelihood of student loan repayment?

Research Methodology

This quantitative study was conducted using descriptive, and inferential statistical methods. The study also employed counter-balanced item order for the survey to counteract the problems of fatigue, common method variance phenomena, multiple comparisons, and control the Type I error rate for the multiple comparisons (Newman, Newman, & Brown, 2006).

The study investigated student perception of the HESLB program for financing higher education in Tanzania and whether selected demographics such as age, gender, geographical settings, and socio-economic status as well as student perceptions for the program are related to potential repayment of student loans. The study was conducted with the help of 495 participants who responded to the survey instrument. Statistical analysis conducted using categorical regression to find out the impact of the selected demographic variables on the perceived of likelihood of student loan repayment. Similarly, multiple regression model employed to find out the association of the selected student perceptions on the perceived of likelihood of student loan repayment.

The data gathering process included two sections. Section one required responses to demographic questions on age, gender, location, zones, socio-economic status, incomes, academic level of students and their parents, and marital status. In the second section participants responded to items that investigated their awareness, and knowledge of student loans, eligibility criteria for student loans, disbursement of student loans, satisfaction of the HESLB program, and their views regarding a link between higher

education and economic growth. These perceptions comprised independent variables. In addition, section two measured the primary had dependent variable, perceived likelihood of student loan repayment.

Questions for the research instrument used Likert five point scales (Strongly disagree, Disagree, Neutral, Agree, and Strongly agree).

The instrument was designed so that participants were required to read each statement and then respond on the 5-point scale ranging from 1 (Strongly disagree) to 5 (Strongly agree).

Participants were randomly selected from five higher educational institutions of Tanzania. Representative sample was selected from each of these institutions. We had four universities from the main-land: St. Augustine University of Tanzania, the University of Arusha, the University of Dar es Salaam, and the University of Mzumbe, and one island university, Zanzibar University.

The final questionnaire featured two forms; form one and form two. Administering these two forms allowed counterbalancing of item-order across participants in an effort to control for potential interference between adjacent questions and to counteract survey fatigue.

The researcher sought to reduced participants' apprehension over their responses and minimize the chance they might edit their honest responses to provide their perceptions on the best answers by communicating that as survey there are no right or wrong answers. In developing the research instrument, the researcher also emphasized maintaining simplicity and avoiding complex syntax. Furthermore, the questionnaire included no double-barreled questions; each question addressed only one subject.

A pilot study was conducted to estimate the instrument's reliability, clarity, length, and validity. Suggestions from the pilot study were considered and appropriate changes to the instrument were implemented (Craighead, Ketchen, Dunn, & Hult, 2011; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

After obtaining Institutional Review Board approvals from the selected universities as well as Andrews University, the researcher went to Tanzania to administer questionnaires to participants at each selected university. Once data were collected, the researcher scanned and analyzed and then analyze them using the SPSS 22.0.

Summary of Results

The study had three objectives: First, to investigate student perceptions of cost-sharing program for financing higher education in Tanzania. Second, to determine if the selected demographics such as age, gender, geographical settings, high school academic achievement, and socio-economic status are statistically significant predictors of the perceived likelihood of student loan repayment. And third, to determine if student perceptions of cost sharing program for financing higher education are statistically significant predictors of the perceived likelihood of student loan repayment. Descriptive and inferential statistics were performed using the SPSS 22.0.

The targeted sample was 500 participants but a total of 495 (99%) were participated in the study. For various reasons a few surveys were not considered useable and thus, the final analysis considered only 480 as usable. With 480 surveys out of 495, the respond rate for the usable survey was 96.97%. These participants were from five universities of Tanzania. The Mzumbe University, The University of Arusha, The University of Dar es Salaam, The St. Augustine University of Tanzania, and The

Zanzibar University. Participants represented all Tanzanian educational zones. Gender representation was: male 54.1% and female 45.9%. The majority of participants were from the University of Dar es Salaam (47.3%), followed by the St. Augustine University of Tanzania (29%). A majority of students were education majors (52.5%) followed with business majors (15.8%).

Results showed that many students (85.7%) were aware that the Tanzanian government funds higher education through student loans. In addition, 83.1% knew that in order to get student loans, they must meet HESLB criteria.

Students claimed that neither higher education institutions (78.8%), nor the HESLB (76.3%) dedicated time to educate students on student loan policies, and 53% believe that it is a right of every qualified student to obtain free higher education.

Only 17.8% of participants acknowledged that everyone who meets HESLB criteria gets student loans. Similarly, only 30.8% participants indicated that majority from low socio-economic status receive student loans.

Results showed that not all orphan students get student loans to support 100% of the costs of higher education. Only 34.6% of students agreed that orphans get 100% loans to support their education. Furthermore, only about a quarter of participants (27.9%) designated that students of handicapped parents received 100% student loans.

Majority of students (85%) with $M = 4.16$ and $SD = 1.06$ agreed that higher education is an important factor for economic growth. With the same note 85.5% of students ($M = 4.14$ and $SD = 0.92$) agreed that higher education is a key for economic competitiveness. About three quarters of participant (75.7%, $M = 3.98$, $SD = 1.04$) agreed that higher education has to be subsidized for the sake of changing Tanzanian economic

status. Furthermore, nearly two third of participants (65.8%, $M = 3.67$ and $SD = 1.04$) indicated that Tanzanian government supports higher education for economic interests of the country.

Results of this study showed that students are not satisfied with the student loans program. For instance, only 28.8% ($M = 2.40$, $SD = 1.29$) showed that they were satisfied with the student loans program. Less than a quarter of students (24%, $M = 2.51$, $SD = 1.14$) acknowledged that the HESLB program works efficiently.

For loans disbursement, only 25.8% of participants agreed (2.38 , $SD = 1.37$) that student loans disbursed on time. A few students (15.6%, $M = 1.97$, $SD = 1.24$) agreed that they receive enough money to finance 100% of the costs of their education. Similarly, only 9.4% of participants acknowledged that they receive enough money for the costs of their living expenses.

As aforementioned in the research question two there was neither statistically significant ($p = 0.254$) nor strength relationship ($R^2 = 0.017$) in the CATREG. This means that in this study, the selected student demographics such as age, gender, high school achievement, geographical settings, and socio-economic status were not statistically significant predictors of the perceived likelihood of student repayment.

Finally, results showed that less than two third of participants (57.3%, $M = 3.32$, $SD = 1.32$) indicated that they are willing to pay their loans after graduation. However, only 35.6% of participants agreed ($M = 2.67$, $SD = 1.45$) that they would repay their loans with interest. A little bite more than two third (68.7%, $M = 3.72$, $SD = 1.42$) they affirmed that they were intending to repay their loans when they filled loan application forms.

Results verified that two independent variables were statistically significant predictors of the perceived likelihood of student loan repayment. Awareness and eligibility criteria of the HESLB for student loans were statistically significant at 0.047 and 0.001 alpha levels respectively. The rest of independent variables were not statistically significant predictors of the perceived likelihood of student loan repayment. Although the matrix correlations in this study showed that four variables (e. g. students' awareness of education loans, student knowledge about the loans, eligibility criteria of receiving student loans) had correlations with the perceived likelihood of student loan repayment, the researcher drew the conclusion based on multiple linear regression analysis, which indicated that only two variables in this study; students' awareness of education loans and eligibility criteria of receiving the loans were statistically significant predictors of the perceived likelihood of student loan repayment.

Discussion of Results

The purpose of this study was to determine student perceptions of the cost-sharing program for financing higher education in Tanzania and whether demographics such as age, gender, geographical settings, high school academic achievement, and socio-economic status as well as student perceptions of the program are predictors of perceived likelihood of student loan repayment.

In order to respond to research question one, the researcher employed descriptive statistics and for research questions two and three he conducted categorical regression, and multiple linear regression analysis respectively. Eight theories were used as a basis of evaluating the results of the study. This section carefully discusses the impact of the selected variables on the perceived likelihood of student loan repayment. In this study

the following variables were identified as possible predictors of perceived likelihood of student loan repayment: age, gender, geographical settings, high school academic achievement, and socio-economic status, awareness, eligibility criteria, student knowledge of student loans, student loans disbursement, relationship between higher education and economic growth, satisfaction with the HESLB program for financing higher education.

The results of this study confirmed that more knowledge and education for awareness of the HESLB program for financing higher education in Tanzania are needed to the beneficiaries of the program. Similarly, results suggest that age, gender, geographical settings, high school academic achievement and socio-economic status are not statistically significant predictors of the perceived likelihood student loan repayment. In contrary, awareness ($p = 0.047$) and eligibility criteria ($p = 0.001$) were denoted as statistically significant predictors of the perceived likelihood of student loan repayment.

The results of this study revealed that demographic characteristic such as age, gender, geographical settings, high school academic achievement, and socio-economic status are not predictors of perceived likelihood of student loan repayment. Let's start with age. Previously we have seen through literature review that age is a potential predictor of student loan repayment on the sense that as age increases, so does the perceived likelihood of not paying student loans (Christman, 2000; Flint, 1997; Harrast, 2004; Herr & Burt, 2005; Steiner & Teszler, 2003; Woo, 2002).

However, the results of this study revealed that the age of borrower has no influence to the perceived likelihood of student loan repayment. The results are supported with one of the study by Knapp and Seaks (1992) who did not found any statistical

significant relationship between age and student loan repayment. Haughwout, Brown, Donghoon, Scally, and van der Klaauw (2014) also supported that kind of finding that within past five years “the default rate has increased for all age groups, and it is somewhat elevated for those who left school between age 30-39” (p. 26). Woo (2002) in another study found that borrowers’ age was insignificant predictor to default. This position is also supported by Kesterman (2006) who argued that, age has nothing to do with default rate among student loans borrowers; instead default rate is affected by academic achievement as measured by GPAs.

Therefore, in this study it can be hypothesized that student loans borrowers’ age does not predict the perceived likelihood of student loan repayment.

Similarly, on the case of gender, the results of this research revealed that gender has no statistical significant as predictor of the perceived likelihood of student loan repayment. Some scholars like Podgursky et al. (2002) claimed that females are more likely to default less than males. In addition, Hofstede and Michael (2010) supported that position by restating that, male borrowers default more than female borrowers according to masculinity behavior as supported by cultural theory. Cultural theory states that the distribution of emotional roles between males and females are different, males are competitive, assertive, materialist, ambitious, power orientated, and they do not put value on relationships as well as quality of life. They concluded that it is easy for men to default from paying student loans. However, this study did not concur the cultural theory because gender was not denoted as a predictor of perceived likelihood of student loan repayment. Therefore, in this study it can be hypothesized that being a male or female

among student loans beneficiaries has no an influence on the perceived likelihood of student loan repayment.

Results of this research showed that geographical settings variable has no influence on perceived of likelihood of student loan repayment. These results are contrary to the findings revealed in a study conducted in US, which affirmed a mismatch between institutions located in states with higher levels of unemployment rate and burgeoning growth in minority populations have higher student loan default rates (Looney, 2011). This might not be a case in Tanzania because students are not admitted in universities according to their geographical locations.

Regarding the academic achievement theory, which suggests that academic achievement at both high school and higher educational levels is regarded as one of the strongest predictors of the student loan repayment, this study revealed otherwise that high school academic achievement is not strong predictor of the student loan repayment.

According to Kesterman (2006), the default rate is affected by academic achievement as measured by GPAs. He pointed out that students with higher GPAs tend to default less than student who attained lower GPAs. Similarly, another study supported this idea that “in general, the higher the high school class rank of borrower, the less likely the borrower is to default” (McMillion, 2004). More evidence revealed that borrowers at two-year schools, having a GED as opposed to a regular high school diploma was associated with a higher default rate (Christman, 2000). Again, previous studies that focused on borrower academic achievement noted its impact on default. It has been said that high pre-college and college GPAs, SAT scores, and ACT scores, as well as enrollment in hard science or business courses, continuous enrollment, and persistence in

college, college completion and graduate school completion were noted significantly associated with lower default rates (Flint, 1997; Gladieux & Perna, 2005; Herr & Burt, 2005; Ionescu, 2009; Knapp & Seaks, 1992; Podgursky et al., 2002; Volkwein & Szelet 1995). Furthermore, it is believed that students with low academic achievement are significantly more likely to be unemployed, to be dissatisfied with their education program and have some problems that interfere with repayment plan (McMillion, 2004).

The results of this study does not support the findings above due to the fact that the HESLB disburses student loans on need-based as well as merit-based qualification; in normal circumstances the board considers academic achievement of high school as an eligibility criterion of a student in order to be considered as beneficiary of student loans. In addition, for a student to renew a student loans agreement he or she must fulfill the requirements of satisfactory academic progress policies. Similarly, the same notion is stated by Tody (2012) for the improvement of American higher education and its program for funding it:

A point of leverage for the improvement of American undergraduate education is making student loans conditional on student performance, both at high school and in college. That change is necessary if voters take seriously the notion of 'investing' in the higher education of high school graduates. An incentive (in form of greater merit-based loans) should be provided to better students –on the reasonable assumption that better students are more likely than mediocre students to make economic and even civic contribution to American society in the twenty-first century –as well as better prospects for repaying taxpayers. (p. 196)

On the same note, the HESLB has set the academic achievement to be eligibility criterion which demands a student to have a high school performance of division one or two in order to be considered for student loans. The only exception is that student who pursues a degree in education may be granted student loans although his or her performance is categorized in division three. The policy of 2015/2016 of the HESLB on

student loans criteria stated that student “must have obtained outstanding academic performance of division I or II at advanced level secondary education or first class for assistant medical officers” (HESLB, 2015, p. 16). Other demographic characteristic, which was investigated in this study as a predictor of perceived likelihood of student loan repayment, was socio-economic background of beneficiaries.

The results of this study disclosed that socio-economic status is not statistically significant predictor of student loan repayment. This has discussed in detail in equity theory section.

This study revealed that a majority of students (85.7%, $M = 4.09$, $SD = 0.97$) were aware that Tanzanian government supports higher education through student loans. A majority of participants also (83.1%, $M = 3.97$, $SD = 1.00$) were aware that in order for student to receive student loans, HESLB criteria must be met. The results indicated that awareness was statistically significant ($p = 0.047$) predictor of the perceived likelihood of student loan repayment. The results augmented with another research, which pointed out that to make decisions about where to go to college, to pay for it, students and their families need clear, timely and comparable information about costs, financial aid, and typical outcome (The Institute for Access and Success, 2015).

Kantrowitz (2016) suggested that increasing national awareness of student loans is the first step in exercising restraint. It is therefore, imperative that the government, colleges, and universities start tracking the percentage of their students who graduate with debt each year. “This information can then be used to improve student loan counseling” (para. 12). The results of this study differed with another research, which was conducted in US and found that a few of student loan beneficiaries who were in a

state of default claimed that student loan “was not their loan” (National Consumer Law Center, 2012, p. 18). Overwhelmingly, the same research found that 47% of borrowers in that survey indicated that “they did not believe they should have to pay the student loans debt. An additional 10% answered yes or no when asked if they should have to pay the debt” (Nation Consumer Law Center, 2012, p. 19). This suggests that may be students in many countries students are not committed on repaying their education loans.

Furthermore, National Consumer Law Center (2012) reported that lack of information about borrowing was one of the most commonly cited characteristics associated with default rate. To sum up awareness that Tanzanian Government supports higher education through student loans is vital because from the beginning of operation, the HESLB encountered number of issues that were pointed to affect the board’s performance negatively. The setbacks, which some of them exist until this moment, including perception to students and general public that student loans are merely grants from the government (Dynarski, 2014). To verify this idea, the higher education student loans board in its report of 2008/2009 revealed that “loans issuance to higher education students since 1994/1995 but remain unclaimed for over 13 years and hence developing a wrong perception that, the said loans were grants, which has adversely affected loans repayment speed” (Higher Education Student Loans Board, 2010, p. 16). The Board said that as a way forward it “will continue to carry out public education to create awareness that the Board is issuing loans and not grants” (Higher Education Student Loans Board, 2010, p. 16).

It has been believed that student loans program in South Africa is one of the student loan programs, which has practically succeeded. The secret behind is that

since its inception in 1996 the National Student Financial Aid Scheme (NSFAS) has been doing well in all sections of operations including frequent public awareness campaigns that educate people through TV, radio, Internet, brochures, flyers, and higher education student public meetings, conferences and seminars, higher education exhibitions. (Merisotis & Gilleland, 2000, p. 18)

Mkono, the chairperson of the HESLB augmented this idea that “strategies used to strengthen loan repayment, among others, included awareness campaign to sensitize loan beneficiaries, employers, and the public in general on higher education loan repayment” (HESLB, 2010, p. 3). Public investment would be well spent in an effort to improve the information made available to students about student loans, and other options of funding higher education “and to find clearer and more effective ways to present that information” (Herr & Burt, 2005).

The second variable that found to be statistically significant predictor of the perceived likelihood of student loan repayment in this study was eligibility criteria (0.001). The results are related to what is found in literature that given magnitude of student loans as public investment, “there has been increased scrutiny on whether these funds are used efficiently and appropriate” (Herr & Burt, 2005, p. 4). Student loan beneficiaries and public in general will be gratified if they see that education loans are utilized in proper manner to help eligible students. It has also documented that rather than considering student loans borrowing in isolation, policymakers should consider that higher education remains a sound investment for most students (Avery & Turner, 2012). Furthermore, it has to be noted that “a robust student loan market can potentially improve economic efficiency by increasing the supply of highly skilled works” as the results of this study has confirmed and thus alleviate student loan default rates (Avery & Turner, 2012). The HESLB (2015) outlined that given the high demand for student loans viz a viz

a limited budget, priority shall be given to applicants who will be admitted to pursue national priority programs such as Health Science, Education (Science), Education (Mathematics), Civil and Irrigation Engineering, Petroleum and Gas Engineering. However, all applicants shall be subjected to means testing, and loans will be issued depending on means testing results (student neediness). Delaney augmented on this point that “while student loan debt is a complex problem that will require many solutions ... we also need to reform our laws to help those with the absolute greatest need” (para. 2).

The results are in agreement with the reasons of the existence of the HESLB according to its vision, mission, and core values. Its mission, vision and core values are as follows: Vision: “To be a center of excellence for provision of loans to needy and eligible students of higher learning institutions” (HESLB, 2016). Mission: “To put in place a well managed and sustained revolving student loans fund to enhance access to higher education needy and eligible Tanzanian students” (HESLB, 2016). And Core Values: The core values to guide the HESLB in reaching its objectives are: “team work, transparency, accountability, commitment, integrity, and equity” (HESLB, 2016). Again these results support the equity theory, which requires students to be treated fairly as aforementioned in theoretical framework section.

Equity in higher education has different meanings and connotations. Johnstone (2003a) asserted:

A core meaning is that higher education should be equitably accessible that is, accessible to all with interest, accessible to all with interest and academic ability or academic preparedness, are acceptable correlate to higher educational participation, whereas attributes such as the socio-economic class, occupation, race, religion, language or ethnicity of one’s parents or one’s gender are generally thought to be unacceptable correlate to participation. (p. 6)

For the purpose of this study, equity is defined as providing equal opportunities for access and success in higher education. It implies that circumstances beyond an individual's control such as place of birth, gender, ethnicity, religion, language, disability or parental income should not influence a person's access to higher education opportunities and ability to take advantages of it. World Bank (2006) asserted that while recognizing that individual responsibility and effort are the primary determinants of accessibility to higher education, public interventions are justified and needed in order to eliminate "disadvantages from circumstances that lie largely beyond the control of individual but that powerfully shape both the outcomes and the actions in pursuit of those outcomes" (p. 78).

On the other hand, inequity may lead to a loss of human capital in the sense that a talented young people but of low income that are denied entry into higher education represents a loss of human capital for society (World Bank, 2009). The results of this study revealed that the HESLB has failed to support eligible and need students to the expectations of students. A majority (78.3%) of students perceived that the cost-sharing program for financing higher education in Tanzania does not disburse student loans according to aspect of the equity theory. The results of this study showed a discrepancy between the objectives of the financial assistance policy and the loan scheme in one side and the real practice of loans disbursement on the other side. Only 21.7% indicated that students with lower socio-economic status receive 100% student loans to support their education.

The results of this study conquered with another study on equity issue, which stated that "the equity considerations of student loans are not less important than financial

efficiency. While loans can be an important tool to assist people meet their educational costs, poor individuals are less likely to borrow than middle class students” (Albrecht & Ziderman, 1993, p. 19). Another hindering block of getting student loans for poor individuals is caused with the complex of application form. The complexity of student loans application has noted even in developed countries such as the US. Dynarski and Scolt-Clayton (2006) pointed out that an application form, which must be filed if a student is to be considered for any federal student aid program is longer and more complicated than the one of federal tax return.

The results in the previous paragraphs are in agreement with other studies, which have been conducted. For instance, Makulilo (2009) found that in 2007 approximately, 68% of high socio-economic status students managed to access loans with comparison to only 32% of low socio-economic status students in public institutions and 67% against 33% in private institutions (See Table 1 and Table 2). Here the equity theory is not considered. The equity theory suggests that financial assistance must be offered to enable students of low socio-economic status to attend colleges and universities (Eicher, 1998). Equity involves both a quantitative assessment and subjective moral or ethical judgment that might bypass the letter of the law in the interest of the spirit of the law (Bronfenbrenner, 1973; Gans, 1973; Jones-Wilson, 1986).

It is obvious that if students are not satisfied with the way student loans are disbursed according to eligibility criteria set by the government the rate of repayment will be poor. After seeing how equity theory can affect the rate of student loan repayment, let’s consider the planned behavior theory with regard to student loan repayment.

The results of this study revealed that higher education is viewed as one of the

most important factors for promoting economic growth in Tanzania. A majority of participants (85%) designated that higher education is associated with the economic growth of the nation. about 80% of students support a proposition that employees with higher education degrees have positive influence on other employees' productivity. Similarly, 84.8% augment a proposition that higher education is the key factor for economic competitiveness as a country, 82.7% designated that higher education is a key factor for transitioning Tanzania as a nation from third world economic status to middle industrial economic class, finally 74.2% indorse that their higher educational institutions prepare them to contribute to knowledge based economy of Tanzania. These results support the human capital theory, which states that "it is [the] human resources of the nation, not its capital or material resources that ultimately determine the character and pace of its economic and social development" (Olaniyan & Okemakinde, 2008, p. 158). According to the results of this study, the Tanzanian government may reduce the student loan repayment default by controlling the beneficiaries' behavior by employing ethically the equity theory according to the eligibility criteria of receiving student loans set by the HESLB.

These results are in agreement with other studies. For instance, Johnstone (2003) argued that in countries with socio-political ideological backgrounds that consider higher education to be social entitlement, people do not easily accept cost-sharing program for financing higher education. Their ideology contends that society is the major beneficiary of higher education, and thus individuals should not be responsible for its costs. In this research 83% of participants believe this view. Similarly, the Asian Development Bank (2011) found that, opponents of cost-sharing program for financing higher education

argue that access to higher education “is a basic right and that those students who have been successful in meeting entry requirements should continue to receive free education” (p. 11). This perspective has been termed the ‘endowment effect’ as explained in chapter one of the present study. The negative overreaction toward cost-sharing schemes based on loans rather than scholarships and grants predicted by the ‘endowment effect’ will most likely be encountered in countries where higher education has traditionally been free of charge to all students (Teixeira et al., 2008).

This constitutes a possible reason that Tanzanian students think the government has to finance higher education for every academically qualified student. Gandhi (2008) added that behavioral economic theories predict that because students are loss averse and myopic they will value front-loaded subsidies provided over student loans. Furthermore, some theories distinguish between ‘public’ and ‘private’ good with respect to higher education. In this regard, a majority of participants (85%) in this study adapted to holistic view of both. Society and higher education, agreeing that higher education represents an important factor in national economic growth. This outlook maintains that higher education is ‘public good’. The term ‘public good’ was first used in the late 14th century and it comes from a translation of the Latin phrase “pro bono publico”. Sometimes construed as ‘for the public welfare’ (Tilak 2008).

The results of this study concur with what Levin (1987) found in the sense that the public benefits of higher education may outweigh its personal benefits several times over, and therefore higher education cannot be treated as a private good, or even as both a public and private good. Tilak (2008) added that it “can be argued that higher education is a public good beyond any doubt” (p. 453). The primary problem of this position is that

it overlooks the proverbial other side of the coin, which would be to consider higher education as a private good. Although manifestly higher education can be viewed as a public good, it remains possible to also view it as a private good. Several studies support this conception; e.g. household incomes headed by a college graduate are greater than those led by a high school graduate without a college degree. Furthermore, college graduates have a higher capacity to make useful; additionally, such college graduates have learned how to learn, and finally, these individuals experience higher life expectancies (Cohen, 2012).

Other study showed that when people consider higher education as pure public good they tend to rely solely on government to fund it. For instance in US it believed that, since 1950s loans granted by the government grew, until they overtook private loans by 1990s, higher education was seen as “public good” that should be attainable for anyone. Nobody seemed to notice that, before government involvement, it had attainable for anyone willing to work a part time job and throughout summer.

Redistributing the wealth to anything labeled a pure public good will cause not only the problem of rising price up, but people will be taxed in a vicious cycle to make up for the price increases that their initial tax subsidies before being labeled so (Buchanan, 2015). Marginson (2007) argued that “these conceptual weaknesses feed into conflicting and unstable policies on managing and funding public and private objectives in higher education” (p. 2).

Furthermore, Schoenenberger (2004) argued that “public production in case of rival and excludable goods is more difficult to justify” (p. 22). This implies that the government will not be in a good position of justifying the way it funds higher education

because higher education cannot be pure public good since it has significant externalities. In addition, Dill (2005) asserted that “public good in higher education ... clearly reflects the public interest” (p. 5).

For any means higher education should not be labeled as pure private good because doing so will lead the public withdraw in financing it. There are enough evidence reports that show that in many countries governments are not evolved much in financing higher education as it was in the past. Morgan, UNESCO chair of political economy and education (2014), augmented this idea that

rising costs of higher education to individuals ... in many countries have renewed debate about the value of higher education. These have however, focused on the private gain or rate of return of higher education to individual, rather than on its broad public benefits. (p. 38)

Higher education is now focusing more on training or information based delivery instead of developing higher order intellectual skills. On the other hand education is considered as pure private good people from lower socio-economic status will not afford to pay for it, and this will lead to an uneven distribution of income as rich will be more educated and thus potentially will earn more in the future.

This may lead to the neo-liberalization of higher education. Neo-liberalization of higher education is a phenomenon whereby higher education system is controlled by the influence of policy makers and politicians with the interests of economic development. Saunders (2008) declared that “as neo-liberalism increasingly became the dominant socio-economic policy ... and as its ideology became increasingly accepted, a parallel process of neoliberal development and infusion of economic rationality has occurred within higher education” (p. 54). This phenomenon is an ideology based on individual economic rationality and the idea that a weak state is better than strong state, and what is

private is necessary good and what is public is necessary bad (Apple, 2000). As a result, this concedes with large –scale changes in economics of academia. There is a global trend of cost-sharing in funding higher education that places a greater burden on individual students (Johnstone, 2004).

Neo-liberalism developed as an alliance of theorist and interest groups centered on cultural conservatism and economic liberalism under the governments of Margaret Thatcher in England, Ronald Reagan in United States, and Brian Mulroney in Canada (Morrow & Terros, 2003). It is believed that neo-liberalism in higher education sometimes is introduced by political leaders when they do not want government funds to be used for financing higher education. Neo-liberalism “aligning higher education to the perceived needs of the economy involves creating supposedly employment ready graduate whose skills and learning outcomes are able to be assessed in a way that an employer can easily understanding” (Holborow, 2007, p. 96).

This trend is putting sciences, technological and medical field in special value while the social sciences and humanities are devalued to some extent, except that they attract students due to low tuition. This is a response to neo-liberalism ideology, which influence, higher educational institutions increasingly encouraged to respond to market needs (Lawrence-Mazier, 2014). This study has showed that 85.4% of participants strongly agreed ($M = 4.14$, $SD = 0.92$) that higher education is one of the key factors for economic competitiveness. See Table 15 for more illustration.

Higher education needs to deal with all aspects of life not only for employments and economic growth. It should focus on a more holistic consideration of the entire development of human beings. Morgan (2014) declared that “if it is to retain the quality,

relevance, and social importance which underpin it, higher education must continue to prepare graduates for employment that both economically rewarding and socially useful” (p. 41). It has to foster wisdom and higher-order thinking, not just memorization and bytes of information (Giroux, 1999).

The relationship between higher education, productivity and economic growth has been a subject of research and analysis for long time. Psacharopoulos and Woodhall (1985) pointed out that “the concept that investment in human capital promotes economic growth actually dates back to the time of Adam Smith and early classical economists (1960s) who emphasized the importance of investing in human skills” (p. 15). Another study by Blundell, Dearden, Meghir, and Slaneest (1999) claimed that

more direct evidence on the importance of human capital for national productivity growth is provided by growth regression, where the education measures have been found to be significant explanatory variables, with higher education being a most relevant education variable for developed countries. (p. 18)

Another point of view is that “human capital emphasizes how education increases the productivity and efficiency of workers by increasing the level cognitive stock of economically productive human capability which is a product of innate abilities and investment in human beings” (Olaniyan & Okemakind, 2008, p. 479). In short, higher education can help economies keep up catch up with more technologically advanced societies. Higher education graduates are likely to be more aware that and better able to use modern technologies and are also likely to develop new tools, skills and do research for the enhancement of economic growth. In addition, their knowledge can improve the skills and understanding of non-graduate employees. Furthermore, their confidence and know how may create a knowledge based economy and thus generate entrepreneurship with positive effects on job creation (Bloom et al., 2005).

This study concurred with an African idea of establishing universities as we have seen previously that the public universities of Africa were regarded as ontologically embedded in the developmental state. There was a genuine belief that higher education “would play a critical role in promoting socio-economic development, ...the post-colonial states declared education as the priority of all priorities as it was considered as an investment for states’ development projects” (Assie-Lumumba, 2008). Having discussed as an important ingredient of the human capital, the following subsection will discuss the student perception of cost-sharing program for financing higher education in Tanzania with regard to prospect theory.

Having discussed the human capital theory and its relationship with economic growth, let’s now examine student perception of the cost-sharing program for financing higher education in Tanzania with connection of the prospect theory. The results of the study have revealed that a majority of participants would like the cost of higher education to be borne entirely by the Tanzanian government rather than by student loans. These kinds of results are supported with behavioral economics, which proposes that decision to attend higher education and to select a particular program is surrounded with uncertainty. Vossenstyne (2005) said that potential students are uncertain about the contents of a study program, whether they will find a suitable job after graduation. Because students do not know what they exactly buying education is sometimes referred to as service sold in a trust market. Winston (1997) added that “buying a college education is more like buying a cancer cure than a car or house” (p. 5).

Behavioral theories suggest that when loss aversion is at work, people focus on potential losses and down play the forego benefits resulting from limiting loss, especially

if the opportunity benefits are off-screen (Gandhi, 2008). There is enough considerable literature body, which suggests that students are myopic in making choice for financing higher education (Boatman, 2014; Cho, 2015). “The consequence of myopia is that students hyperbolically discount both the growth rate of their future earnings and the earning itself, resulting in a massive tendency towards undervaluing the total returns of education” (Gandhi, 2008). It believed that

the stronger behavioral response to up front subsidies occur because myopic loss averse students do not undervalue up front subsidies like grants and tax benefits (assuming they can realize the benefits from non-refundable credits). In contrast, myopic loss-averse students will fail to fully internalize the value of dilatory aid from loan subsidies. (Gandhi, 2008)

Loss aversion refers to a tendency of individuals to weigh losses more heavily than gains. As we have seen previously in the conceptual framework of this study losses loom larger than gains. “This fact is incorporated into prospect theory by a value function that is steeper in the loss domain than in gain domain” (Langer & Waller, 2003, p. 7).

Similarly, Gandhi (2008) pointed out that

loss aversion deposits that losses generate more disutility than equivalent gains do utility, such that people exhibit biases against losses like out-of-pocket and debt. Roughly speaking people are twice as displeased with losses as they are pleased with equivalent gains. (p. 139)

Studies by Leslie and Brinkman revealed that “at least 20% of enrollment by lower income and 13% of enrollment by middle enrollment income students is because of the availability of grant aid” (Gandhi, 2008, p. 140). In many cases if students are not rational but exhibit myopic loss averse behavior, up front subsidies to higher education may affect behavior more effectively than loan subsidies that are doled over time.

Traditionally, it is believed that the net effect of the gains and losses involved with each choice are combined to present an overall evaluation of whether a certain

choice is desirable. However, the research done by Kahneman and Tversky in 1979 that present the idea called prospect theory found that people value gains and losses differently, and as such base their decisions on perceived gains rather than perceived losses. This implies that if a person is given two equal choices, one expressed in terms of possible gains and the other one in possible losses, he or she will choose the former one, even when both choices achieve the same economic results. People are more affected by losses than by gains. Consumers focus on gains and losses in making decision and they hate losing a dollar than they like gaining a dollar.

Results concerning fairness of student loans disbursement were as following: About 82% of students indicated that not every student who meets the HESLB's criteria gets education loans. Similarly, 47.3% of participants designated that students get education loans depending on whom you know among HESLB officials. In addition, results show that 68.5% of students claim that most of students from low socio-economic status do not get education loans. Furthermore, 76.5% of students claim that most of students who get student loans come from high socio-economic status. This defeats the purpose of establishing the cost-sharing program for financing higher education in Tanzania. Having discussed the fairness of student loans disbursement, let us now look at TPB and how it relates with student loan repayment.

As aforementioned, TPB uses attitudes, subjective norms, and perceived behavior control to predict intention with high accuracy. The theory assumes that a person's intention, when combined with perceived behavioral control, will enhance predict behavior with great accuracy (Ajzen, 1991). In addition, the theory considers volitional control as variable. Volitional control, by definition, means a person must have the

resources, opportunity and support available to perform a specific behavior (Ajzen, 1991).

For the issues of student loans, attitudes can have both positive and negative effects on loans repayments as well as defaulting. Positive attitude is considered to be an important predictor of student loan repayment. Positive attitude achieved towards student loans when students realize that student loans have enabled them or will enable them to reach their beneficial goals in their lives. Several studies have found that student loans are very helpful to students because of the benefits that students achieve through borrowing (Baun & O'Malley, 2003; Christman, 2000). In contrary, other studies have revealed that borrowing have negative effects, with borrowers feeling burdened and less satisfied concerning the benefits of borrowing. For instance African American students and those coming from low-income families report feeling burdened by their loans (Abu Bakar, Masud, & Jusoh, 2006).

In this study, 71.2 % of respondents indicated less satisfied while only 28.8% designated satisfaction. Another research showed that students possessed negative attitude toward debt and default owing to dissatisfaction with student loans program as well as the institutions they attended, which subsequently cause them to default on their own student loans (Christman, 2000). The present study did not affirm that finding, in the sense that students' satisfaction of the cost-sharing program in Tanzania was not a strong predictor of the perceived of likelihood of student loan repayment.

The results obtained from this study show that about three quarters (74.2%) of student designate that student loans are not disbursed on time. This finding concurred the real situation in Tanzania where the research was conducted. For instance, recently Mtambalike (2012) reported that the issue of student loans disbursement was discussed in

Tanzania Parliament House, and the members of Parliament suggested that the government must ensure that students receive their stipend from their student loans on time to deter them, especially girls, from pursuing alternative means of support such as having multiple partners for simple substance. Students complained that “the HESLB is notorious for delaying the disbursement of loans, especially for first year students, causing protests at universities at the beginning of each academic year” (Sylvester, 2013).

Results indicated that 69.6% of students claimed that earning a higher education degree does not contribute to an individual’s good citizenship. This position is contrary to what many studies suggest, that people with higher education degrees are likely to be good citizens. For example, Krislov and Volk (2014) asserted that the mission of higher education “includes training graduates for their future as mature and reasoning citizens, able to understand their lives, work, and interests, as well as the needs of their communities, their nation, and the larger world” (p. 3). Finding different results from what literature suggests may be due to the fact that some people in the country who are well educated still abuse their power by misusing public offices for personal gains and involve in grand corruption (Hellman & Ndumbaro, 2002).

Student perceptions regarding contribution of higher education to economic growth were as follows: The results showed that 85% of students acknowledge that higher education is the most important factor for promoting economic growth in Tanzania; similarly, 80% of students support the proposition that employees with higher education degrees have a positive influence on other employees’ productivity. In addition, 84.8% endorse the proposition that higher education is the key factor for economic competitiveness for the country, and 82.7% designated that higher education is a key

factor for transitioning Tanzania as a nation from third world economic status to middle industrial economic class. Finally, 74.2% agree that their higher educational institutions prepare them to contribute to the knowledge based economy of Tanzania.

The first four propositions are supported by human capital theory while the fifth one is supported by the assumption of a knowledge based economy phenomenon. As the researcher stated previously, human capital theory defines productivity capacity in terms of the knowledge, understanding, talents and skills possessed by an individual or society (Arai, 1998; Paulsen & Peseau, 1998; Schultz, 1961; Thurow, 1970; Woodhall, 1995). Human capital theorists believe that “it is [the] human resources of the nation, not its material resources that ultimately determine the character and pace of economic and social development” (Olamayan & Okemakenda, 2008, p. 158). Human capital is essential to every economic system globally. Furthermore, higher education plays a vital role in economic growth in the sense that it is the primary source of the KEI (see illustration in Figure 1). Brossard and Foko (2011) concurred with this idea that higher education alleviates poverty by providing the experts needed to spur economic growth.

Regarding student’s field of study of student, 65.2% of participants agreed that by investing in higher education, the Tanzanian government is supporting its interests in particular areas of studies for economic growth. This is in agreement with the objectives for establishing the cost-sharing program for financing higher education in the country.

Concerning research question two; results showed that there were no statistically significant relationships between the selected demographics such as age, gender, high school achievements or socio-economic status, and potential repayment of student loans.

Similarly there were no statistically significant relationships between student perceptions and potential repayment of student loans except for awareness and satisfaction variables.

As pointed out previously in this section, results suggest that age, gender, high school achievements, and socio-economic status are not statistically significantly related to potential repayment of student loans. In contrast, satisfaction is statistically significantly related to potential repayment of student loans.

This result runs contrary to researcher's expectations that age, gender, high school achievements, and socio-economic status could be positively or negatively related to potential repayment of student loans. Many studies have shown that age represents a statistically significant factor in student loans defaults. For example, Christman and Harrast (2000; 2004) found that the likelihood of loan default increases with student age even after controlling for other factors such as income. According to Harr and Burt (2005), older students are more likely to default than younger students because older students have more financial commitments, compared to younger students such as family support, which leads into having less money available for student loan repayment. The finding in this study may be due to the fact that only a few students (17.8%), regardless of their ages, indicated that everyone who met eligibility criteria of the HESLB for student loans received them.

Furthermore, related literature shows that students who attend proprietary or less than four-year institutions tend to borrow more, to come from low income families, and belong to racial or ethnic minority groups-characteristics associated with increased likelihood of default (Gladieux & Perno, 2005; Goodwin, 1991).

One explanation for these results may relate to the smaller sample of higher

economic status participants, which was a fraction of the number of low and middle socio-economic status participants. As shown by Pedhazur (1991), the larger the sample size, the higher the number of potential significant predictors. In this study only six out of 495 participants (1.21%) indicated to belonging to high socio-economic status, a very small with a sample.

On the other hand, results showed that students' awareness of the cost-sharing program for supporting higher education was statistically significant predictor of the perceived likelihood of student loan repayment. A related study indicated that "an individual students' loans borrower with a positive attitude towards repayments measured as excellent, default less than students' loans borrower with a negative attitude towards repayment measured as fair" (Nyahende, 2013, p. 39). Similarly, Nyahende (2013) found that "an individual students' loans borrowers with a positive attitude towards repayment measured excellent, default less than students' borrowers with a negative attitude toward repayment measured as fair." Furthermore, another pertinent study suggested that "students who feel more burdened by their debt and less satisfied that the benefits of borrowing outweighed the costs" tend to default (Gross et al., 2009, p. 26)

Potentially relevant to the results of this study, a substantial research literature indicates that satisfaction plays an important role in organizational commitment as well as job performance. For example, Tsai, Cheng, and Chang (2010) found that job satisfaction directly affects organizational commitment in positive way. In another study, "The relationship between job satisfaction and job performance was found to be ... higher for complex ... jobs than for less complex jobs." The continued, "it does appear that job satisfaction is, in fact, predictive of performance, and the relationship is even

stronger for professional jobs” (Saari & Judge, 2004, p. 398). In contrary, the results of this study revealed that there is no statistically significant relationship between student satisfaction of the cost-sharing program for financing higher education in Tanzania and the perceived of likelihood of repayment of student loans. One possible explanation for this discrepancy could be a weak conceptual or theoretical link between job satisfaction, as typically defined and measured, and student satisfaction with the HELSB’s cost-sharing program for financing higher education, as defined and measured within this investigation.

Limitations

Various limitations were noted in this study. Some are as follows:

1. The sample composition of this study was formulated from only governmental and religiously affiliated higher educational institutions only. Therefore, students’ voices from private institutions were not represented in this study.
2. The socio-economic status variable as one of demographic characteristics, seemed to be subject to a truncated range. There were only six (1.21%) students in this study who indicated that they came from high socio-economic status. This observation may be one reason that the relationship between socio-economic status and the perceived likelihood of student loan repayment was not statistically significant.
3. This study employed a quantitative research method that potentially suffers the limitations of requiring participants to respond using particular categories; in this case students were required to respond to the questions using five-point Likert-type scale. This may have limited the range of responses as well as the possible topics that could have been relevant to the dependent variable. Participants were limited to the text in the survey

itself for directions about how to respond to each item. There may have inadequate sufficiency of measurement.

Implications

The results of this study prompt several implications that may help to improve the cost-sharing program for financing higher education in Tanzania. Student loans schemes for financing higher education have been investigated in various countries (Barr, 2001; Chapman, 2002; Johnstone, 2007). These studies have generally found that many student loans strategies largely fail to recover the cost of such loans from beneficiaries with few exceptions such as in Australia and South Africa (Chapman, 2002; Jackson, 2002; Marisotis & Gilleland, 2000). In an effort to broaden the knowledge base regarding how and why some student loan programs succeed while many do not, this study dealt specifically with the cost-sharing program for financing higher education in Tanzania.

Three research questions were employed to: first, investigate student perceptions for the cost-sharing program for financing higher education in Tanzania; second, examine whether selected demographics such as age, gender, geographical settings, high school academic achievement and socio-economic status were statistically significant predictors of the perceived likelihood of student loan repayment; third, understand if the student perceptions of various aspects of the cost-sharing program for financing higher education in Tanzania such as student loans awareness, eligibility criteria of the HESLB to receive loans, knowledge about student loans, student loans disbursement, relationship between higher education and economic growth, and satisfaction with the HESLB program were statistically significant predictors of the perceived likelihood of student loan repayment. In this case, knowledge about student loans, student loans disbursement, relationship

between higher education and economic growth as well as satisfaction of the HESLB program were not statistically significant predictors of the perceived likelihood of student loan repayment. However, eligibility criteria of the HESLB for student loans and student loans awareness were denoted as statistically significant predictors of the perceived likelihood of student loan repayment.

As described previously, descriptive statistics, categorical regression modeling and multiple linear regression modeling were used to explore student perceptions of the cost-sharing program and their influence on the perceived likelihood of student loan repayment.

The results relevant to research question one showed that a majority of students indicated that higher education is one of the important factors contributing to economic growth (85.0%) and a key to economic competitiveness (85.4%) for the nation. This suggests that the government has an obligation to fund higher education for eligible students. In addition, the results from this study broadly agreed with other studies that higher education is perceived statistically to be related to the country's economic growth as expected based on human capital theory.

Somewhat surprisingly, in addressing research question two, the results showed that demographical characteristics such as age, gender, geographical settings, high school academic achievement, and socio-economic status were not statistically significant predictors of the perceived likelihood of student loan repayment according to the relevant categorical regression model. However, in exploring research question two regarding student perceptions of various characteristics of the cost-sharing program for financing higher education in Tanzania, results indicated that awareness of student loans and

eligibility criteria of the HESLB for student loans disbursement were statistically significant predictors ($p < 0.05$ and $p < 0.001$, respectively) of perceived likelihood of student loan repayment.

The results from this study extend the body of literature regarding student perceptions of the cost-sharing program for financing higher education and their influence on the perceived likelihood of student loan repayment. These results are vital for the HESLB, colleges, universities and the Tanzanian government to understand, because they highlight the influence of student perceptions on student loan repayment. One possible implications of this research is that if the HESLB works effectively according to its vision, mission, and core values, beneficiaries will honor its integrity and repay their loans.

Recommendations

The following are recommendations for policy-makers and practitioners, and academics.

Recommendations for Policy-Makers and Practitioners

The results of the study suggest the following recommendations for policy-makers, and practitioners:

1. The Tanzanian government may establish an income-contingent repayment plan for student loans beneficiaries. This plan is designed to make repayment of student loans easier for beneficiaries who intend to pursue jobs with lower salaries. Such plans accomplish this by pegging the monthly payments to the borrower's income, family size, and total amount borrowed. This can be adjusted annually depending on changes in

annual income and family size. The maximum repayment period is 25 years. After that period, any remaining debt will be forgiven. Such a strategy may reduce the number of student loan defaulters. As seen from the literature review, students may be more likely to acquire student loans under income contingent repayment conditions than under a mortgage-type repayment system.

2. It is advised that the Tanzanian government should work closely with the HESLB as well as higher educational institutions to make sure that student loans are disbursed on time and the amount of money given to students is reviewed annually to suit the cost of living. Because student loans awareness was statistically significant predictor of the perceived likelihood student loan repayment, there may be a need for educating students and their parents more than before (when unsustainable outright scholarships and grants were available to finance higher education) about the importance of cost-sharing program for financing higher education in Tanzania.

3. In addition, the cost-sharing program may improve if the HESLB and higher educational institutions of Tanzania allocate time to educate students about student loan policies and their implications. These representative might also clearly explain the consequences of student loan delinquencies and defaults. The HESLB should create an effective program to promote awareness of student loans to students prior to their pursuing higher education. Furthermore, education is needed to enable beneficiaries as individuals to realize that they have responsibilities for contributing to the costs of their higher education with the support of the government.

Recommendations for Academic Purposes

Based on the results of this investigation, the researcher suggests the following recommendations for further research:

1. There is a need for conducting further research employing mixed methods to provide a richer context for interpreting the feelings of students about the cost-sharing program for financing higher education in Tanzania and to improve the applications of the current research. Quantitative research methods enable a study to be generalized. On the other hand, qualitative research methods would allow exploration of the feelings of students about the cost-sharing program. One of the most advantageous characteristics of conducting mixed methods research is the possibility of triangulation. Triangulation will improve the results of this study by allowing cross verification of the same information derived from different methods. Relatively few studies have been conducted that employed qualitative methods to address the issues related to student loans (Cho, Xu, & Kiss, 2015).

2. Although the present study did not find such an association, further research needs to be conducted to clarify possible relationship between students' academic performance (as one of the independent variables to consider) using GPA and perhaps other operational definitions, and the perceived likelihood of student loan repayment, because many many studies have found negative correlation between GPAs and default rates (Flint, 1997; Gladieux & Perna, 2005; Herr & Burt, 2005; Ionescu, 2009; Knapp & Seaks, 1992; Podgursky et al., 2002, Volkwein & Szelet, 1995).

3. There is a need for additional research to investigate additional potential independent variables related to student loans awareness, and eligibility criteria of the of

the HESLB for financing higher education in Tanzania. Such investigations could help the HESLB improve their student loans strategies and perhaps enhance the perceived likelihood of student loan repayment, because in the present study, eligibility criteria emerged as the best predictor of the perceived likelihood of student loan repayment followed by student loans awareness.

Conclusion

Overall, this study suggests that higher education is one of the essential key factors to encourage economic growth in Tanzania. The results of this study concurred with the original rationale for establishing public universities in Africa, which were regarded as ontologically embedded in the developmental state. It was found that demographics such as age, gender, geographical settings, high school academic achievement, and socio-economic status were not statistically significant predictors of the perceived likelihood of student loan repayment. Furthermore, it was found that awareness of student loans and eligibility criteria of the HESLB were statistically significant predictors of the perceived likelihood of student loan repayment. Furthermore, there is a need for conducting further research employing mixed methods to provide a richer context for interpreting the feelings of students about the cost-sharing program for financing higher education in Tanzania and to refine the implications and applications of the current research.

APPENDIX A
LETTERS

Andrews University

Office of Research & Creative Scholarship

May 14, 2014

Protas A. Makimu

Tel: (269) 635-2544

Email: makimu@andrews.edu; pmakimu@gmail.com

RE: APPLICATION FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS

IRB Protocol Application Type: Original Dept.: Leadership

Review Category: Exempt Action Taken: Approved Advisor: Jay L. Brand

Title: Student Perceptions of the Cost-Sharing for Higher Education in Tanzania.

Your IRB application for approval of research involving human subjects entitled: "Student Perceptions of the Cost-Sharing for Higher Education in Tanzania" IRB protocol # 14-011 has been evaluated and determined Exempt from IRB review for Mzumbe University, University of Arusha, University of Dar es Salaam, St. Augustine University of Tanzania, and Zanzibar University. You may now proceed with your research.

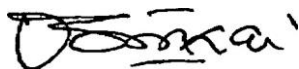
Please note that any future changes made to the study design and/or informed consent form require prior approval from the IRB before such changes can be implemented. In case you need to make changes please use the attached report form.

While there appears to be no more than minimum risks with your study, should an incidence occur that results in a research-related adverse reaction and/or physical injury, this must be reported immediately in writing to the IRB. Any research-related physical injury must also be reported immediately to the University Physician, Dr. Reichert, by calling (269) 473-2222.

We ask that you reference the protocol number in any future correspondence regarding this study for easy retrieval of information.

Best wishes in your research.

Sincerely,



Mordekai Ongo

Research Integrity & Compliance Officer

Institutional Review Board - 4150 Administration Dr Room 322 - Berrien Springs, MI 49104-0355

Tel: (269) 471-636] Fax: (269) 471-6543 E-mail: irb@andrews.edu

UNIVERSITY ARUSHA

WÆciüðtic .%.utnatl Deuetcpnuzt

Directorate of External Linkage & Extension Services

P. O. Box 7. Usa River, Tãnzania

Tel. +255-2*2553626

Fax +255-27-2553926

E-mail: linkage@universityofamsha.ac.e

Website: wmv.universitvofarusha.ec.tz.

January 15, 2014

Dear Sir/Madam;

Re: Institutional Consent Letter for Protas Makimu

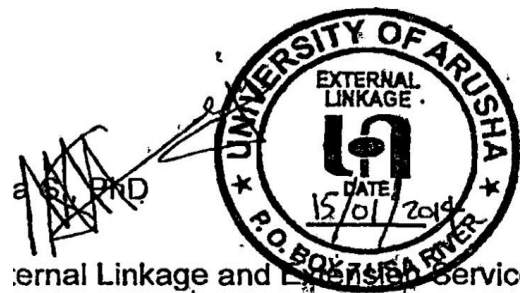
In reference to the héâding above, the^v nãmed student contacted me by email dated January 7, 2014. He asked me for approval to collect rešearch dáta as a part of fuJfilment for his PhD program on Leadership. After consultations, the University of Arusha is hereby giving consent for the study entitled, "Student Perceptioñs of the Cast-Sharing Program for Financing Higher Education in Tanzania," by Protas A. Makimu.

I hereby give consent for the study to be conducted at University of Arusha. Upon arriyàl, the candidaté will be given orienfation so as to abide with University of Arusha code of ethics for researchers-.

Kindest Regards

Mussa Muneja

Director of Extension and Linkage Services



A Seventh-day Adventist Institution of Higher Learning

ST. AUGUSTINE UNIVERSITY OF TANZANIA
DIRECTORATE OF POSTGRADUATE STUDIES, RESEARCH AND
CONSULTANCY



P.O. BOX 307 MWANZA, TANZANIA January 31, 2014

Institutional Review Board
Andrews University
4150 Administrative Drive, Room 322
Berrien Springs, MI 49104-0355

Dear Sir/Madam

Re: Protas A. Makimu

I am writing on behalf of St. Augustine University of Tanzania to approve a request of Mr. Protas Makimu to conduct a survey at our University on "Student Perceptions of Cost-Sharing Program for Financing Higher Education in Tanzania."

We shall give him the cooperation he needs.

If you have any questions or in need of clarifications, you can contact me at hbandiho@yahoo.com or +255-754-0512699 .

 Sincerely,

Dr. Hellen A. Bandiho

Director, Postgraduate Studies, Research, and Consultancy



MZUMBE UNIVERSITY

OFFICE OF THE VICE CHANCELLOR

Tel: +255 (0) 23 2604380/1/3/4

P.O.BOX 63

Fax: +255 (0) 23 2604382 MZUMBE Celt: +255 (0) 754 694029 MOROGORO, TANmNIA

E-mail: drps@mzumbe.ac.tz

Website: www.mzumbe.ac.tz

Ref.No. MU/DRPS/PhD/39/112

1 9th March, 2014

Institutional Review Board

Andrews University

4150 Administrative Drive

Room 322 Berrien Springs. MI 49104-0355

U.S.A

RE: STITUTIONAL CONSENT

Mzumbe University acknowledges receipt of your letter dated March 3rd, 2014 requesting our consent for Mr. Protas Makimu, your PhD student at the Department of Leadership of Andrews University, to conduct research entitled "Student Perceptions of the Cost-Sharing Program for Financing Higher Education in Tanzania" for his doctoral dissertation.

By this letter, we are glad to inform you that his request is granted. Mzumbe University offers him consent to collect data at our campus. We believe that in the due course of collecting data, Mr. Protas Makimu will adhere to the norms and ethics for research. It is his responsibilities to ensure that national standards and regulations for a person doing research are followed and that the official papers for the same are in place and displayed when needed by relevant authorities. It is the responsibility of the candidate himself and his sponsors to bear the costs of research and accommodation. Mzumbe University will not be concerned with any costs thereby incurred. As a matter of morals and good practice, we expect the candidate to introduce himself to the university management upon his first arrival at the campus prior to starting of the research. Thereafter, the candidate will proceed to the Directorate of Research, Publications and Postgraduate Studies for further directives and issuance of the letter of introduction to Deans and Directors who will receive him to their respective units of management for conducting research.

We wish the candidate a good preparation and pleasant flight to Tanzania.

Sincerely yours,



Dr. Romanus Dimoso (PhD)

For: VICE

CHANCELLOR cc.

I. DVC(A),

DVC(A&F).

UNIVERSITY OF DAR ES SALAAM

DIRECTORATE OF RESEARCH

P.O. Box 35091 ■ DAR ES SALAAM ■ TANZANIA

General Line: 2410500-8 Ext. 2084
Direct Line: 2410727
Website: www.udsm.ac.tz



Fax: 255 022 2410743
255 022 2410023
E-mail: research@udsm.ac.tz

Our Ref. AB3/31

2nd May 2014

Institutional Review Board
Andrew University,
4150 Administrative Drive,
ROOM 322 Berrien Springs,
MI 49104-0355,
United State of America.
Email: irb@andrew.edu

RE: Permission to Conduct Survey at the University of Dar es Salaam

Kindly refer to your letter requesting for permission to conduct survey at the University of Dar es Salam for your PhD titled: "Students Perceptions of Cost-Sharing Program for Financing Higher Education in Tanzania".

Kindly be informed that, permission has been granted and you will be hosted by the University of Dar es Salaam School of Education at the Department of Educational Foundations Management and Lifelong Learning.

A handwritten signature in black ink, appearing to read 'R.Y.M. Kangalawe'.

Prof. R.Y.M. Kangalawe
DIRECTOR OF RESEARCH

cc: DVC — Academic cc: DVC — Research and
Knowledge Exchange

UDSM is an Equal-Opportunity Institution of Higher Learning





DEPUTY VICE CHANCELLOR'S OFFICE (ACADEMIC)

E-mail: info@zanvarsity.ac.tz
: dr_miraji@yahoo.com

Ref. No: ZU/DVC/AC/GEN.22/43

04th June, 2014

To: The Institutional Review Board,
Andrew University,
4150 Administrative Drive,
Room 322,
Berrien Springs, M149104-0355.

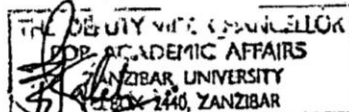
Dear Sir,

RE: PERMISSION TO CONDUCT RESEARCH WITH OUR STUDENTS

The Zanzibar University Administration has approved to request of Mr. Protas A. Makimu to conduct research on "Student Perceptions of Cost-Sharing programme for Financing Higher Education in Tanzania".

The University Administration would require from him to provide us with a copy of his completed research programme.

Yours sincerely,



.....
Dr. Miraji L. Saleh
Deputy Vice-Chancellor (Academic)

APPENDIX B
QUESTIONNAIRE

STUDENT PERCEPTIONS OF THE COST-SHARING PROGRAM FOR FINANCING HIGHER EDUCATION IN TANZANIA - Form 1

- Please completely darken the circle that indicates your level of agreement or disagreement with the following statements based on your experience with the cost-sharing program for financing higher education in Tanzania.

	Strongly Disagree	Cannot decide Neutral	Strongly Agree
Section A:			
1. I am aware that the Tanzanian government supports higher education through student loans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I am aware that in order to get student loans you must meet the HESLB criteria.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. The contract between the HESLB and students clearly explains the terms for repayment of student loans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I am aware that student loans have to be paid back with interest after graduation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Students can easily appeal if they are dissatisfied with the HESLB means testing (the process used to determine if students qualify to receive financial assistance for higher education).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. The government cannot take full responsibility for funding higher education for every student.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Section B:			
1. I clearly understand the difference between student loans and educational grants.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Typically, university students in Tanzania think of a student loan as an educational scholarship.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I clearly understand that student loans have to be repaid after graduation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Our university dedicates time to educate students about student loan policies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. The HESLB dedicates time to educate students about their student loan policies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. It is the right of every qualified student to obtain free higher education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please answer the following questions based on your experience with the cost-sharing program for financing higher education in Tanzania.

1. What is the "grace period" before repayment of student loans?
 - Less than a year after graduation
 - Exactly one year after graduation
 - More than one year after graduation
2. Should student loans be completely paid within 10 years after a student's graduation?
 - Yes
 - No
 - Don't know

- Please completely darken the circle that indicates your level of agreement or disagreement with the following statements based on your experience with the cost-sharing program for financing higher education in Tanzania.

	Strongly Disagree	Cannot decide Neutral	Strongly Agree
Section C:			
1. Every student should have equal access to student loans from HESLB regardless of his or her field of study.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Education students who major in Mathematics should receive scholarships to pay for their education rather than student loans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Students studying liberal arts should finance their own higher education without relying on student loans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Students studying the sciences deserve to receive student loans even if their families are economically well-off.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Section D:			
1. Orphan students (those currently without their biological parents) receive loans to finance 100% of their education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Physically challenged (or physically handicapped) students receive loans to finance 100% their education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Students with parents who have physical challenges (physically handicapped) receive loans to finance 100% of their education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Every student with low socio-economic status gets student loans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I do not receive student loans because the HESLB assumes that I come from a family with high socio-economic status.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Section E:			
1. Every student can easily access the forms for student loan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Some students fail to complete online forms for student loans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. It is expensive to fill out student loan forms online.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Section F:			
1. I receive funds from my HESLB student loans on time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I receive funds from my HESLB student loans late.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I received student loans to finance 100% of my education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I receive enough money from my HESLB student loans to pay my rent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I receive enough money from my HESLB student loans to pay all costs of living.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. My student loan from the HESLB provides enough money for my textbooks.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. My HESLB student loan does not provide me with adequate income.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Neutral	Cannot decide	Agree	Strongly Agree
Section G:						
1. Earning a higher educational degree contributes to someone being a good citizen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. My higher education will benefit me personally more than society as whole.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. My higher education will benefit society as whole more than me personally.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Section H:						
1. Higher education is the most important factor for promoting economic growth in our country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Employees with higher education degrees have a positive influence on other employees' productivity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Higher education is the key factor for economic competitiveness of the country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Higher education is the key factor for transitioning our nation from 3rd world economic status to middle industrial economic class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. My educational institution prepares students to contribute to the knowledge based economy of Tanzania.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. My educational institution prepares students to compete in the global markets of today's international economy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Section I:						
1. The adoption of cost-sharing policies for higher educational institutions is imperative (absolutely necessary) for the economic growth of Tanzania.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. In order to reach the goal of transforming the nation from 3rd world economic status to industrial economic status by 2025, the Tanzanian government must subsidize the costs of higher education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. By investing in higher education, the Tanzanian government is receiving its interest in particular areas of study for economic growth.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Section J:						
1. The cost-sharing program (student loans) for Tanzania's higher education system has created educational opportunities for many people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. The cost-sharing program (student loans) for Tanzania's higher education system has created educational opportunities for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I am satisfied with the cost-sharing program for financing higher education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. The cost-sharing program has increased the quality of education that universities provide.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Section K:						
1. Every student who meets the HESLB criteria gets student loans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Student loans disbursement depends on whom you know among HESLB officials.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. The majority of students from low socio-economic status receive student loans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. The majority of students from high socio-economic status do not receive student loans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Section L:						
1. My family is willing to repay any government loans for my higher education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I am willing to repay any student loans provided for my higher education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. My family is paying all loans from the government for my higher education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Repayment of student loans should depend on the availability of a job after graduation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Section M:						
5. The HESLB's current policies for disbursement of student loans are a major cause of student strikes at this university.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Students at my institutions of higher education have never been involved in a strike because of student loan policies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. There are some communication difficulties between our institution and HESLB regarding the issue of student loans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. The HESLB has improved its services to students compared to when it first started.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. The higher education student loans board functions efficiently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. The HESLB needs to update all of its policies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. It would be a good idea if the government could offer grants for higher education to all students instead of student loans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Students at my higher educational institution get involved in strikes because of policies related to student loans more than once per year.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Students at my higher educational institution get involved in strikes because of policies related to student loans less than once per year.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. The establishment of the HESLB's cost-sharing program (for student loans) has increased the cost burden of higher education for many people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. The establishment of the HESLB's cost-sharing program (for student loans) has increased the cost burden of higher education for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section L (continued):

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
5. I am afraid that I will not be able to repay my student loans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I have not been able to repay my student loans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. When I applied for student loans from the HESLB, I was willing and planning to repay the loans after I graduated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. When I applied for student loans from the HESLB, I did not intend to pay them back after I graduated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. When I applied for student loans from the HESLB I provided correct contact information so that the HESLB can easily find me for repayment after I graduate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I will repay my student loans with interest when I graduate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I am currently repaying my student loans with interest.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I am currently repaying my student loans with interest every month.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section M: Please respond honestly to the following items:

Example: Age = 25

Age 1. Age

2. Gender: Male Female

3. I come from: Rural area Urban area

4. Which zone of the country do you come from?
 Central Zone (Dodoma, Manyara, and Singida)
 Eastern Zone (Coast, Dar es Salaam, and Morogoro)
 Highlands Zone (Iringa, Mbeya, Njombe, Rukwa, and Ruvuma)
 Lake Zone (Geita, Kagera, Mara, and Mwanza)
 Northern (Arusha, Kilimanjaro, Simiyu, and Tanga)
 South Eastern (Lindi and Mtwara)
 Western (Katavi, Kigoma, Tabora, and Shinyanga)
 Islands (Pemba and Zanzibar)

5. To what type of family do you belong? Low socio-economic Middle socio-economic High socio-economic

6. What is your estimated family income in Tshs?
 Low (2,400,000-36,000,000)
 Medium (37,000,000-60,000,000)
 High (Above 60,000,000)

7. What type of school did you attend for O' Level (Form I - Form IV)?
 Government Private

8. What type of school did you attend for A' Level (Form V - Form VI)?
 Government Private

9. At what level did you pass your final form six examinations?
 Division One Division Two Division Three

10. What education level is:
 a. Your father No formal education Standard 4 Form 4 Form 6 Undergraduate Graduate Postgraduate
 b. Your mother No formal education Standard 4 Form 4 Form 6 Undergraduate Graduate Postgraduate

11. What is the highest level of education reached by anyone in your family or extended family?
 No formal education Standard 4 Form 4 Form 6 Undergraduate Graduate Postgraduate

12. How many family members have reached the education level specified in question 11 above?
 0 1 2 3 4 5 6 7 8 9 or more

STUDENT PERCEPTIONS OF THE COST-SHARING PROGRAM FOR FINANCING HIGHER EDUCATION IN TANZANIA - Form 2

Please completely darken the circle that indicates your level of agreement or disagreement with the following statements based on your experience with the cost-sharing program for financing higher education in Tanzania.

Section A:

- | | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1. My family is willing to repay any government loans for my higher education. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. I am willing to repay any student loans provided for my higher education. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3. My family is paying all loans from the government for my higher education. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4. Repayment of student loans should depend on the availability of a job after graduation. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5. I am afraid that I will not be able to repay my student loans. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6. I have not been able to repay my student loans. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7. When I applied for student loans from the HESLB, I was willing and planning to repay the loans after I graduated. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8. When I applied for student loans from the HESLB, I did not intend to pay them back after I graduated. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9. When I applied for student loans from the HESLB I provided correct contact information so that the HESLB can easily find me for repayment after I graduate. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10. I will repay my student loans with interest when I graduate. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 11. I am currently repaying my student loans with interest. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 12. I am currently repaying my student loans with interest every month. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Section B:

- | | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1. Every student who meets the HESLB criteria gets student loans. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. Student loans disbursement depends on whom you know among HESLB officials. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3. The majority of students from low socio-economic status receive student loans. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4. The majority of students from high socio-economic status do not receive student loans. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Section C:

- | | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1. The cost-sharing program (student loans) for Tanzania's higher education system has created educational opportunities for many people. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. The cost-sharing program (student loans) for Tanzania's higher education system has created educational opportunities for me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Section C (continued):

- | | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 3. I am satisfied with the cost-sharing program for financing higher education. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4. The cost-sharing program has increased the quality of education that universities provide. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5. The HESLB's current policies for disbursement of student loans are a major cause of student strikes at this university. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6. Students at my institutions of higher education have never been involved in a strike because of student loan policies. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7. There are some communication difficulties between our institution and HESLB regarding the issue of student loans. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8. The HESLB has improved its services to students compared to when it first started. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9. The higher education student loan board functions efficiently. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10. The HESLB needs to update all of its policies. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 11. It would be a good idea if the government could offer grants for higher education to all students instead of student loans. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 12. Students at my higher educational institution get involved in strikes because of policies related to student loans more than once per year. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 13. Students at my higher educational institution get involved in strikes because of policies related to student loans less than once per year. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 14. The establishment of the HESLB's cost-sharing program (for student loans) has increased the cost burden of higher education for many people. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 15. The establishment of the HESLB's cost-sharing program (for student loans) has increased the cost burden of higher education for me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Section D:

- | | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1. The adoption of cost-sharing policies for higher educational institutions is imperative (absolutely necessary) for the economic growth of Tanzania. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. In order to reach the goal of transforming the nation from 3rd world economic status to industrial economic status by 2025, the Tanzanian government must subsidize the costs of higher education. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3. By investing in higher education, the Tanzanian government is receiving its interest in particular areas of study for economic growth. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Strongly Disagree Cannot decide Strongly Agree
 Disagree Neutral Agree

Section L (continued):

5. Students can easily appeal if they are dissatisfied with the HESLB means testing (the process used to determine if students qualify to receive financial assistance for higher education). Strongly Disagree Cannot decide Strongly Agree
6. The government cannot take full responsibility for funding higher education for every student. Disagree Neutral Agree

Section M:

Please answer the following questions based on your experience with the cost-sharing program for financing higher education in Tanzania.

1. What is the "grace period" before repayment of student loans?
 Less than a year after graduation
 Exactly one year after graduation
 More than one year after graduation
2. Should student loans be completely paid within 10 years after a student's graduation?
 Yes No Don't know

Section N: Please respond honestly to the following items:

Example: Age = 25

Age 1. Age

0 1 2 3 4 5 6 7 8 9

2. Gender: Male Female
3. I come from: Rural area Urban area
4. Which zone of the country do you come from?
 Central Zone (Dodoma, Manyara, and Singida)
 Eastern Zone (Coast, Dar es Salaam, and Morogoro)
 Highlands Zone (Iringa, Mbeya, Njombe, Rukwa, and Ruvuma)
 Lake Zone (Geita, Kagera, Mara, and Mwanza)
 Northern (Arusha, Kilimanjaro, Simiyu, and Tanga)
 South Eastern (Lindi and Mtwara)
 Western (Katavi, Kigoma, Tabora, and Shinyanga)
 Islands (Pemba and Zanzibar)

5. To what type of family do you belong? Low socio-economic Middle socio-economic High socio-economic
6. What is your estimated family income in Tshs?
 Low (2,400,000-36,000,000)
 Medium (37,000,000-60,000,000)
 High (Above 60,000,000)
7. What type of school did you attend for O' Level (Form I - Form IV)?
 Government Private
8. What type of school did you attend for A' Level (Form V - Form VI)?
 Government Private
9. At what level did you pass your final form six examinations?
 Division One Division Two Division Three
10. What education level is:
 a. Your father No formal education Standard 4 Form 4 Form 6 Undergraduate Graduate Postgraduate
 b. Your mother No formal education Standard 4 Form 4 Form 6 Undergraduate Graduate Postgraduate
11. What is the highest level of education reached by anyone in your family or extended family?:
 No formal education Standard 4 Form 4 Form 6 Undergraduate Graduate Postgraduate
12. How many family members have reached the education level specified in question 11 above?:
 0 1 2 3 4 5 6 7 8 9 or more

• 13. What is the name of the degree you are pursuing?

- Bachelor in Agricultural Sciences
- Bachelor in Animal Sciences
- Bachelor in Arts & Design
- Bachelor in Business
- Bachelor in Communication Media
- Bachelor in Computer Sciences
- Bachelor in Education
- Bachelor in Engineering Sciences
- Bachelor in Environmental Engineering
- Bachelor in Ethic Studies
- Bachelor in Law
- Bachelor in Liberal Arts
- Bachelor in Medical Studies
- Bachelor in Music
- Bachelor in Religious and Theology
- Bachelor in Tourism
- Bachelor in other areas

14. Which year are you now?

- 1st year
- 2nd year
- 3rd year
- 4th year
- 5th Year
- 6th Year
- Completed

15. When do you anticipate graduating?

- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- After 2019

16. What is your faith affiliation?

- Roman Catholic
- Seventh-day Adventist
- Islam
- Indigenous
- Lutheran
- Pentecostal
- Anglican
- Presbyterian
- Moravia
- Other (please specify) _____

17. What is your marital status?

- Married
- Single
- Widow(er)
- Separated
- Divorced

18. What is the name of your University?

- Mzombe University
- St. Augustine University of Tanzania
- University of Arusha
- University of Dar es Salaam
- Zanzibar University

19. How do you finance your higher education? (Choose all that apply)

- Myself
- My family
- Student loans
- Other sources

20. Number of siblings

21. Number of siblings in university

22. Do your siblings get student loans?

- Yes
- No
- Not Applicable

23. Number of siblings with student loans

24. Number of my father's wives

- 13. What is the name of the degree you are pursuing?
 - Bachelor in Agricultural Sciences
 - Bachelor in Animal Sciences
 - Bachelor in Arts & Design
 - Bachelor in Business
 - Bachelor in Communication Media
 - Bachelor in Computer Sciences
 - Bachelor in Education
 - Bachelor in Engineering Sciences
 - Bachelor in Environmental Engineering
 - Bachelor in Ethic Studies
 - Bachelor in Law
 - Bachelor in Liberal Arts
 - Bachelor in Medical Studies
 - Bachelor in Music
 - Bachelor in Religious and Theology
 - Bachelor in Tourism
 - Bachelor in other areas

- 14. Which year are you now?
 - 1st year
 - 2nd year
 - 3rd year
 - 4th year
 - 5th Year
 - 6th Year
 - Completed

- 15. When do you anticipate graduating?
 - 2014
 - 2015
 - 2016
 - 2017
 - 2018
 - 2019
 - After 2019

- 16. What is your faith affiliation?
 - Roman Catholic
 - Seventh-day Adventist
 - Islam
 - Indigenous
 - Lutheran
 - Pentecostal
 - Anglican
 - Presbyterian
 - Moravia
 - Other (please specify) _____

- 17. What is your marital status?
 - Married
 - Single
 - Widow(er)
 - Separated
 - Divorced

- 18. What is the name of your University?
 - Mzumbe University
 - St. Augustine University of Tanzania
 - University of Arusha
 - University of Dar es Salaam
 - Zanzibar University

- 19. How do you finance your higher education? (Choose all that apply)
 - Myself
 - My family
 - Student loans
 - Other sources

- 20. Number of siblings
 -
 -
 - 0
 - 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
 - 9
- 21. Number of siblings in university
 -
 -
 - 0
 - 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
 - 9

- 22. Do your siblings get student loans?
 - Yes
 - No
 - Not Applicable

- 23. Number of siblings with student loans
 -
 -
 - 0
 - 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
 - 9

- 24. Number of my father's wives
 -
 -
 - 0
 - 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
 - 9

APPENDIX C
TANZANIAN MAP



Source: Magellan Geographix, 1997.

APPENDIX D

TANZANIAN HIGHER EDUCATION INSTITUTIONS
RECOGNIZED BY TCU

PUBLIC UNIVERSITIES						
	Institution	Acronym	Establishment	University Status	Former Name(s)	Region
CR1/001	University of Dar es Salaam	UDSM	1961	1970	University College, Dar es Salaam	Dar es Salaam
CR1/002	Sokoine University of Agriculture	SUA	1965	1984	Faculty of Agriculture UDSM	Morogoro
CR1/003	The Open University of Tanzania	OUT	1992	1992	-	Dar es Salaam
CR1/004	Ardhi University	AU	1956	2007	Ardhi Institute & UCLAS	Dar es Salaam
CR1/010	STATE University of Zanzibar	SUZA	1999	1999	-	Zanzibar Urban
CR1/011	Mzumbe University	MU	1975	2001	Institute of Development Management	Morogoro
CR1/015	Muhimbili University of Health & Allied Sciences	MUHAS	1963	2007	Dar es Salaam school of Medicine & MUCHS	Dar es Salaam
CR1/016	Nelson Mandela African Institute of Science & Technology	NM-AIST	2009	2010	-	Arusha
CR1/019	University of Dodoma	UDOM	2007	2007	-	Dodoma
CR1/025	Katavi University of Agriculture	KUA			-	Katavi
CR1/026	Mbeya University of Science and Technology	MUST	1986	2012/13	Mbeya Technical College & MIST	Mbeya

PRIVATE UNIVERSITIES						
Reg #	Institute	Acronym	Establishment	Affiliation	Former name(s)	Region
CR1/005	Hubert Kairuki Memorial University	HKMU	1997	MMHEN	Mikocheni International University	Dar es Salaam
CR1/006	International and Technological University	IMTU	1997	VEF	-	Dar es Salaam
CR1/007	Tumaini University Makumira	TUMA	1997	Lutheran	Lutheran Theological College Makumira	Arusha
CR1/008	St. Augustine University of Tanzania	SAUT	2002	Catholic	Nyegezi Social Training Institute	Mwanza
CR1/009	Zanzibar University	ZU	2002	Islamic	-	Zanzibar Urban
CR1/012	Mount Meru University	MMU	2005	Baptist	International Baptist Theological Seminary of Eastern Africa	Arusha
CR1/013	University of Arusha	AoU	2006	Seventh-day Adventist	Tanzania Adventist College	Arusha
CR1/014	Teofilo Kisanji University	TEKU	2007	Moravian	-	Mbeya
CR1/017	Muslim University of Morogoro	MUM	2004	Islamic	-	Morogoro
CR1/018	St. John's University of Tanzania	SJUT	2007	Anglican	-	Dodoma
CR1/020	University of Bagamoyo	UB	2010	TANLET & LHRC	-	Cost
CR1/021	Eckemforde Tanga University	ETU	2010		-	Tanga
CR1/022	Catholic University of Health and Allied Sciences	CUHAS	1994	Catholic	-	Mwanza
CR1/023	ST. Joseph University in Tanzania	SJUIT	2011	Catholic	-	Dar es Salaam
CR1/024	United African University of Tanzania	UAUT	2012	Korea Church Mission	-	Dar es Salaam
CR1/027	Sabastian Kolowa Memorial University	SEKOMU	2012	Lutheran	Sabastian Kolowa University College	Tanga
CR1/028	Tanzania International University	TIU			-	Dar es Salaam

**UNIVERSITY COLLEGES AND CENTERS RECOGNIZED BY
TANZANIA COMMISSION FOR UNIVERSITIES (TCU)**

Reg. #	Institution	Acronym	Type of Institution/Center	Region
CR2/012	Archbishop Mihayo University College of Tabora	AMUCTA	Private University College under St. Augustine University Tanzania	Tabora
CR2/009	Public University College under University of Dar es Salaam	DUCE	PUBLIC University College under University of Dar es Salaam	Dar es Salaam
CR2/001	Iringa University College	IUCo	Private University College under Tumaini University makumira	Iringa
CR2/014	Jordan University College	JUCO	Private University College under Under St. Augustine University Tanzania	Morogoro
CR2/015	Josiah Kibira University College	JOKUCO	Private University College under St. Augustine University Tanzania	Kagera
CR2/011	Kampala International University (Dar es Salaam Constituent College)	KIU -DAR	Private University Constituent College of Kampala International University of Uganda	Dar es Salaam
CR2/002	Kilimanjaro Christian Medical College	KCMCo	Private University College under Tumaini University Makumira	Kilimanjaro
CR2/006	Mkwawa University College of Education	MUCE	Public University College under University of Dar es Salaam	Iringa
CR2/005	Moshi University College of Cooperative and Business Studies	MUCCOBS	Public University under Sokoine University of Agriculture	Kilimanjaro
CR2/007	Mwenge University College of Education	MWUCE	Private University College under St. Augustine University Tanzania	Kilimanjaro
CR2/008	Ruaha University College	RUCO	Private University College under St. Augustine University Tanzania	Iringa
CR2/013	St. Francis University College of Health & Allied Sciences	SFUCHAS	Private University College under St. Augustine University Tanzania	Morogoro
CR2/017	St. Joseph University College of Agricultural Sciences and Technology	SJUCAST	Private University College under St. Joseph University in Tanzania	Ruvuma
CR2/018	St Joseph University College of Information Technology	SJUCIT	Private University College under St. Joseph University in Tanzania	Ruvuma
CR2/019	St. Joseph University College of Management and Commerce	SJUCMC	Private University College under St. Joseph University in Tanzania	Njombe
CR2/010	Stefano Moshi Memorial University College	SMMUCO	Private University college under Tumaini University Makumira	Kilimanjaro
CR2/016	Stella Maris Mtwara University College	STeMMCO	Private University College under St. Augustine University Tanzania	Mtwara
CR2/003	Tumaini University Dar es Salaam College	TURDACO	Private University College under Tumaini University Makumira	Dar es Salaam
CR2/004	University College of Education Zanzibar	UCEZ	Public University College under International University of Africa	Mjini Magharibi
CR3/002	Aga Khan University –Tanzania Institute of Higher Education	AKU-THE	Private Center under Aga Khan University of Pakistan	Dar es Salaam
CR3/003	Jomo Kenyatta University of Agriculture and Technology, Arusha Center	JKUAT-AG	Private Center under Jomo Kenyatta University of Agriculture &Technology of Kenya	Arusha
CR3/010	Mzumbe University –Dar es Salaam Center	MUD	Public Center under Mzumbe University	Dar es Salaam
CR/011	Mzumbe University –Mbeya Center	MMUM	Public under Mzumbe University	Mbeya

CR/006	St. Augustine University – Bukoba Center	SAB	Private Center under St. Augustine University of Tanzania	Bukoba
CR3/005	St. Augustine University –Dar es Salaam Center (Msimbaziz) Center	SAM	Private Center under St. Augustine University of Tanzania	Dar es Salaam
CR3/004	St. Augustine University –Songea Center	SAS	Private Center under St. Augustine Center	Ruvuma
CR3/009	St. John University of Tanzania – Msalato Center	SJM	Private Center under St. John University of Tanzania	Dodoma
CR3/008	St. John University of Tanzania – St. Marks of Dar es Salaam	SJD	Private under St. John University of Tanzania	Dar es Salaam
CR3/013	Stefano Moshi Memorial University College –Mwika Center	SMM	Private Center under Stefano Moshi Memorial College	Kilimanjaro
CR3/014	Stefano Moshi Memorial College –Town Center	SMT	Private Center under Stefano Moshi Memorial College	Kilimanjaro
CR3/013	Tumaini University –Mbeya Center	MKM	Private Center under Tumaini University Makumira	Mbeya
CR3/007	University of Arusha –Buhare Center	UAB	Private Center under University of Arusha	Mara
CR3/001	University of Dar es Salaam – Marine Institute Zanzibar	IMS	Public Center under University of Dar es Salaam	1Mjini Magharibi

APPENDIX E

GUIDELINES AND CRITERIA FOR ISSUANCE OF STUDENTS
LOANS AND GRANTS FOR THE 2015/2016 ACADEMIC YEAR

HIGHER EDUCATION STUDENT LOANS BOARD



GUIDELINES AND CRITERIA FOR ISSUANCE OF STUDENTS' LOANS AND GRANTS FOR THE 2015/2016 ACADEMIC YEAR

BACKGROUND

As part of implementation of the Education and Training Policy 2014, the Higher Education Students' Loans Board (HESLB) that was established under Act No. 9 of 2004 (as amended) and commenced operations in July, 2005, will continue to issue loans to eligible students as per its mandate and procedures. Among other things, the Board has been entrusted by the Government with the responsibility to issue loans to students pursuing Diploma in Science/Mathematics with Education and Diploma in Primary Education (Science/Mathematics)/ Higher Diplomas and Degree studies at accredited Higher Education Institutions in and outside the country, issue grants to Medical related programmes and other programmes as may be approved by the Government and to collect repayment for all loans issued to students since 1994, so as to make the scheme successful and sustainable.

According to the Act, **eligible and needy** Tanzanian students who secure admission in Higher Education Institutions to pursue academic programmes that lead to attainment of Diploma in Science/Mathematics with Education and Diploma in Primary Education (Science/Mathematics)/Higher Diplomas or Degrees may seek loans and grants from HESLB to meet **part of, or all costs of their education**. Cost – sharing in higher education is construed to mean a shift in shouldering at least part of the costs of education from the Government, which had hitherto been the main financier, to the beneficiaries.

Section 6 (b) of the Act gives powers to the Board “to formulate mechanisms for determining eligible students for issuance of Loans. Section 6 (c) empowers the Board “to administer and supervise the whole process of issuance and repayment of loans”. On the basis of budget limitation, Section 7 (1) empowers the Board to determine maximum number of eligible students to be given loans in any particular year; while section 7 (h) empowers the Board to determine other criteria and conditions governing the issuance of loans, including rate of interest and recovery of loans.

On the strength of these legal powers, these Guidelines and Criteria are hereby issued to prospective loan and grant applicants and the public at large to guide the whole process of application and issuance of loans for the **2015/2016** academic year.

PART A: ISSUANCE OF STUDENT LOANS

1.0 PROVISION OF LOANS UNDER THE ACT

Provision of students' loans falls under section 16 and 17 of the Act No. 9 of 2004. Section 16 (1) of the Act provides that:

1.1 Subject to the provisions of the Act, the Board may provide, on a loan basis, **financial assistance** to any **eligible student who is in need** of the loans and **who has applied for such assistance** as is required to meet all or any number of the students' welfare costs of Higher Education.

The Phrase "Financial Assistance" implies that parents or guardians have the primary obligation of meeting higher education costs of students.

1.2 For purpose of these Guidelines, **NEEDY** applicant means:

- A poor orphan (who has lost both parents)
- A poor applicant with disability or applicant whose parents have disability.
- A poor applicant who has lost one parent.
- An applicant from poor family.

1.3 Loans **for Degree students** may be issued to cover either partially or fully the following items:

- i. Meals and Accommodation charge
- ii. Books and Stationery expenses
- iii. Special Faculty Requirement expenses
- iv. Field Practical Training expenses
- v. Research expenses
- vi. Tuition Fees

2.0 ELIGIBILITY FOR LOANS FOR THE 2015/2016 ACADEMIC YEAR

Eligible students for loans in the **2015/2016** academic year must meet the following conditions (for Higher Diploma or First Degree students):-

2.1 Must be a Tanzanian (as defined by HESLB Act No. 9 of 2004, as amended).

2.2 Must have applied for a loan through the OLAS.

2.3 Must have been admitted into **a fully** accredited/registered Higher Learning Institution as a candidate for a Higher Diploma /First Degree on full time basis through

Central Admission System (CAS) or other accepted system in programmes recognized by TCU and NACTE.

2.4 Must be a continuing student who has passed the examinations necessary to enable him/her to advance to the next year or stage of study.

2.5 Must be a person who is not fully funded by other organizations or sources.

2.6 Must be first time direct applicants who are form six leavers. These will include only applicants who completed their Advanced Secondary Education (form six) between **2013** and **2015** and must have not been employed.

OR

A first time direct applicants under the Technical and Vocational Education and Training (TVET). These include only applicants who completed their National Technical Assistance (NTA) level six (6) between **2013** and **2015** as well as applicants who completed their Diploma in Teacher Education between **2013** and **2015** years.

OR

A first time indirect applicants admitted into Health Sciences, Education (Science) and Education (Mathematics) programmes only. These include also applicants who completed their Advanced Secondary Education (form six), NTA level six (6), and or those who completed their Diploma in Teacher Education more than three years ago.

OR

A first time equivalent qualifications applicants admitted into Health Sciences, Education (Science) and Education (Mathematics) programmes only. These include all applicants who are holders of other Diplomas recognized by NACTE; Diplomas from outside Tanzania accredited by NACTE; degree holders intending to join other degree programmes and form six leavers who have attended a one year certificate course which is recognized by NACTE.

2.7 Given the high demand for student loans viz a viz a limited budget, priority shall be given to applicants who will be admitted to pursue

National Priority Programmes. Except Health Sciences, Education (Sciences), Education (Mathematics), Diploma in Science/Mathematics with Education and Diploma in Primary Education (Science/Mathematics), Civil and Irrigation Engineering, Petroleum and Gas engineering, all applicants shall be subjected to Means Testing and loans will be issued depending on the Means Testing Results (Student neediness).

National Priority Programmes for the time being shall be into two clusters as follows:

Cluster No. I (Loans given on 100% basis)

2.7.1 Education (Science) and Education (Mathematics);

2.7.2 Health Sciences (Doctor of Medicine, Dental Surgery, Veterinary Medicine, Pharmacy, Nursing, Midwifery, BSc in Prosthetics and Orthotics, BSc in Physiotherapy, BSc in Health Laboratory Sciences, BSc in Medical Laboratory Sciences and BSc in Radiotherapy Technology);

2.7.3 Civil and Irrigation Engineering;

2.7.4 Petroleum and Gas engineering;

2.7.5 Diploma/Higher Diploma in Science/Mathematics with Education and Diploma in Primary Education (Science/Mathematics).

Cluster No. II (Loans given on Means Testing basis)

2.7.6 Education Non-Science and Non Mathematics with two teaching subjects.

2.7.7 Engineering Programmes (Civil, Mechanical, Electrical, Mining, Mineral and Processing, Textile, Chemical and Processing, Agriculture, Food and Processing, Automobile, Industrial, Electrical and Electronics, Electronics and Telecommunication, Computer, Computer Science Software, Information Systems and Network, Environmental, Municipal and Industrial Services, and Bio-Processing and Post- Harvest)

2.7.8 Agricultural and Forestry Sciences Programmes (Agriculture General, Agronomy, Horticulture, Agricultural Economics and Agribusiness, Forestry, Aquaculture, Wildlife Management, and Food Science and Technology)

2.7.9 Animal Sciences and Production

2.7.10 Sciences Programmes (BSc General, BSc in/with Applied Zoology, Botanical, Chemistry, Physics, Biology, Microbiology, Molecular Biology and Biotechnology, Fisheries and Aquaculture, Aquatic Environmental sciences and Conservation, Geology, Petroleum Geology, Petroleum Chemistry, Mathematics, Mathematics and Statistics, Environmental Science and management, Environmental Health, Biotechnology and Laboratory, Wildlife and Conservation and Computer)

2.7.11 Land Sciences Programmes (Architecture, Landscape and Architecture, Interior Design, Building Survey, and Land Management and valuation)

2.8 Overseas students under bilateral agreements between the Government of the United Republic of Tanzania and other Governments.

2.9 Students studying at the Open University of Tanzania for a maximum period of six (6) years (through Means Testing). Students admitted at the Open University of Tanzania will be eligible for only two loanable items (tuition fee, and Books and Stationery).

2.10 All other candidates admitted into programmes other than Health Sciences, Education (Mathematics), Education (Sciences), Civil and Irrigation Engineering and Petroleum and Gas Engineering on the basis of indirect or equivalent qualification entrance to HEI shall not be eligible for loans.

2.11 Diploma in Science/Mathematics with Education and Diploma in Primary Education (Science/Mathematics) students.

For Diploma in Science/Mathematics with Education or Diploma in Primary Education (Science/Mathematics) students who are eligible for loans in the 2015/2016 academic year must meet the following conditions:

2.11.1 Must be Tanzanian

2.11.2 Must have applied for a loan through the Online Loan Application System (OLAS).

2.11.3 Must have been admitted at the University of Dodoma under special programme to pursue Diploma in Science/Mathematics with Education or Diploma in Primary Education (Science/Mathematics).

2.11.4 Must have completed form four or NTA Level 4 between the year 2010 and 2014.

2.11.5 Must have passed at division I, II or III in their form four National Examinations or obtained not less than a C in their NTA Level 4 for Science related Programmes.

2.11.6 Must be, not more than thirty five (35) years of age at the time of application for loans.

2.11.7 Must be a person who is not fully funded by any other organization or sources.

2.11.8 Must be willing to sign a bond to serve as a Science/Mathematics Teachers within the Country for a period of not less than five years.

2.12 Loans for Diploma in Science/Mathematics with Education students may be issued to cover either partially or fully the following items:

- i. Meals and Accommodation charges
- ii. Books and Stationery expenses
- iii. Field Practical Training expenses
- iv. Tuition Fees

2.13 Higher Diploma in Science/Mathematics with Education.

For Higher Diploma in Science/Mathematics with Education students who are eligible for loans in the 2015/2016 academic year must meet the following conditions: -

2.13.1 Must be Tanzanian

2.13.2 Must have applied for a loan through the Online Loan Application System (OLAS).

2.13.3 Must have been admitted at Monduli, Kleruu and Korogwe Teachers Training Colleges under special programme to pursue Higher Diploma in Science/Mathematics with Education.

2.13.4 Must have completed form Six or NTA Level 6

2.13.5 Must be a person who is not fully funded by any other organization or sources.

2.13.6 Must be willing to sign a bond to serve as a Science/Mathematics Teachers within the Country for a period of not less than five years.

2.14 Loans for Higher Diploma in Science/Mathematics with Education students may be issued to cover either partially or fully the following items;

- i. Meals and Accommodation charges
- ii. Books and Stationery expenses
- iii. Field Practical Training expenses
- iv. Tuition Fees

2.15 Law School of Tanzania Students.

For Law School students who are eligible for loans in the 2015/2016 academic year must meet the following conditions: -

2.15.1 Must be Tanzanian.

2.15.2 Must have been a beneficiary of loans before joining the law school.

2.15.3 Must have applied for a loan through the Online Loan Application System (OLAS).

2.15.4 Must have been admitted at Law School of Tanzania.

2.15.5 Must be a person who is not fully funded by any other organization or sources.

2.15.6 Must have graduated LLB Degree not more than four years back (i.e. from 2012 to 2015).

2.15.7 Loans will be issued based on Means Testing Results.

2.15.8 Must have started to repay previous loan installments at least for unbroken period of twelve months, or a lump sum of twelve installments if he/she was a loans beneficiary who has completed a grace period of one year.

2.16 Loans for Law School students may be issued to cover either partially or fully the following items;

- i. Meals and Accommodation charges
- ii. Books and Stationery expenses
- iii. Field Practical Training expenses
- iv. Tuition Fees

2.17 Postgraduate students Academic Staff

In order to enhance adequacy of academic staff in local Higher Education Institutions, a limited number of loans will be available to academic staff pursuing Masters and PhD courses. Loan applicants for Masters or PhD programmes must meet the following conditions:

2.17.1 Must be a Tanzanian

2.17.2 Must have been admitted to a fully accredited/registered Higher Education Institution in Tanzania.

2.17.3 A person who is not fully funded by other organizations or sources.

2.17.4 Must have applied for Loans through the Online Loan Application System (OLAS).

2.17.5 Must hold a first degree or Advanced/Higher Diploma with a minimum of Upper Second Class (for applicants pursuing Master's Degrees) or Master's Degree with minimum of Upper Second Class (for applicants pursuing PhD degrees).

2.17.6 Must be an academic staff on full time basis at an accredited/registered Higher Education Institution in Tanzania.

2.17.7 Must have been officially nominated by the employer and obtained endorsement by the Chancellor/Principal/Provosts/Rectors. Research and consultancy or Deputy Vice Chancellors/Principal/Provosts/Rectors for Finance and Administration, of the respective institution.

2.17.8 The employer must have signed the Financing Agreement between the Higher Education Students' Loans Board and Higher Education Institution.

2.17.9 She/he must have started to repay previous loan installments at least for unbroken period of twelve months, or a lump sum of the same installments if he/she is already a student loans beneficiary.

2.18 Postgraduate students admitted at the Nelson Mandela African Institute of Science and Technology (NM-AIST) which, is established as one in a network of African Institutions of Science and Technology (AISTs) in Sub-Saharan Africa (SSA).

From the academic year 2014/15, the Higher Education Students' Loans Board started to issue loans to postgraduate students admitted to pursue Science related programmes for Master and PhD courses at the NM-AIST. Loan applicants for Masters or PhD Science related programmes must meet the following conditions:

2.18.1 Must be a Tanzanian

2.18.2 Must have been admitted at the NM-AIST to pursue Masters or PhD program in one of under listed priority sectors:

- a) Health related Sciences,
- b) Engineering,
- c) Agricultural Sciences,
- d) All other Sciences related programmes, (e. g. Land Sciences).

2.18.3 Must have applied for Loans through the Online Loan Application System (OLAS).

2.18.4 Must have been an employee in Public Institutions and worked for a minimum of 2 years.

2.18.5 Must be guaranteed by the employer with respect to repayment of the loan.

2.18.6 Must have started to repay previous loan instalments at least for unbroken period of twelve months, or a lump sum of twelve instalments if he/she was a loans beneficiary.

2.18.7 Repayment for postgraduate loans shall start immediately upon completion of the first year of study by monthly instalments deducted by employers and remitted to the Board.

3.0 MEANS TESTING, LOAN ITEMS AND AMOUNT/RATE TO BE FINANCED

According to the Act, the Board may provide loans to cover either all items or any of the items stipulated under section 1.3 above.

3.1 Means Testing System

The Board has since 2011/2012 academic year reviewed the Means testing system to make it Simple, Transparent and Fair.

The Means Testing System considers School Fees paid in O – level and A – Level Secondary Schools or Ordinary Diploma as an indication of applicant’s ability to contribute to the costs of higher education.

Thus, Applicant’s neediness shall be measured as a difference between the higher education costs (Meals and Accommodation charges, Books and Stationery expenses, Special Faculty Requirement expenses, Field Practical expenses, Research expenses and Tuition Fees) of a particular institution of study and the applicant’s ability to pay for his/her own education; multiplied by a factor to acknowledge the high return of Higher Education to the applicant. The factor ranges from 1.1 to 1.5 depending on the magnitude of Tuition Fees paid at O-Level or A-Level Secondary/Ordinary diploma Education. The higher the magnitude, the higher the factor.

In addition, the system shall make adjustments to cover for Loan applicants with special socio-economic disadvantages such as Orphanage, Disability (of Parents/applicants) and Single parent.

Under the new Means Testing System, the whole loan shall be aggregated to one lump sum amount. Out of that, the Tuition Fee and Special Faculty Requirement components shall be paid directly to the Institution of study, whereas the remaining amount shall be paid to the student, quarterly.

The Means Test shall be applicable to first time applicants on Tuition fee and Special Faculty Requirements loan items only. The other four loan items (Meals and Accommodation, Books and Stationery, Field Practical Training and Research) may be allocated one hundred (100) per cent loans.

3.2 Number of Students to be given Loans

In view of the limited loanable funds budget, and pursuant to section 7, paragraph (1) of Act No 9 of 2004 (as amended), the Board in the 2015/2016 academic year shall issue loans to a limited number of applicants as per allocated budget.

In view of limited loanable funds budget, candidates who are able to meet costs for higher education are strongly advised not to apply for loans from the Board.

3.3 Applicable Tuition Fee Rates

Tuition Fee for **first time** applicants approved for loans in the 2015/2016 academic year as well as all continuing loan beneficiaries in Local HEIs shall be pegged to the equivalent tuition fees paid in Public Higher Education Institutions.

3.4 Continuing students who are loan beneficiaries

All other continuing students' loan beneficiaries shall continue to receive their loans as per their previous Means Test grades. However all continuing students who are loan beneficiaries need not to apply for loans except those who are no longer in need should notify the Board through the Online Loan Application System (OLAS).

3.5 Tuition Fee

The Board may provide tuition fee loans of **between 0% and 100%** based on the comparable rates charged by public institution and also depending on the types of the programme offered by the comparable Public institutions.

The ceiling of **Tzs 3.1 million** that was set on medical related programmes in the 2013/2014 academic year shall continue to be in force during the **2015/2016** academic year. **This ceiling will be applicable to first, second and third year students only while fourth and fifth year students will continue with the ceiling of Tzs 2.6 million.** Also, given increased demand for loans, and limited budget available, HESLB shall, unless directed otherwise by the Government, continue to issue Tuition Fees loans for Non-Medical related programmes based on the rates that prevailed in previous year (2014/2015), for both new and continuing students, for all programmes of study.

Tuition fee funds shall be paid directly to the higher learning institutions but the student borrower shall have to acknowledge receipt of the funds by signing on a copy of the payment list issued by the Board. It will be the responsibility of the Higher Education Institutions to obtain the signatures of the students on the Tuition Payment lists and submit the same to the Board within sixty (60) days after receipt of the funds.

3.6 Field Practical/Teaching Practical Work expenses

The Board may provide Field Practical Training/Teaching Practical (FPT) loans at the rate of Tzs **10,000 per day** up to a maximum of **56 days** in a year. FPT loans shall not be subjected to Means Testing.

The Board may provide such loans for those **programmes that require Field Practical Training (FPT)** as recommended by the respective Higher Education Institutions and approved by the Tanzania Commission for Universities (TCU) and the National Council for Technical Education (NACTE).

3.7 Special Faculty Requirements

Subject to Means Testing results, the Board may provide Special Faculty Requirement (SFR) loans of **between 0% and 100%** but only **for study programmes that require special faculty requirement** items and only for specified items as approved by TCU/NACTE based on the rates comparable to public institutions.

Funds for special faculty requirements shall be paid directly to the Higher Learning Institutions but respective student borrowers shall have to acknowledge receipt of the funds by signing on a copy of the payment list issued by the Board.

Within the amount allocated for Special Faculty Requirements, eligible and needy students with disability may be provided with loans to cover special academic material requirements as may be determined by the Board.

3.8 Meals and Accommodation

The Board may provide loans for Meals and Accommodation at the rate of **Tzs 8,500** per day while on campus for theoretical instructions in the academic year.

3.9 Books and Stationary expenses

A maximum of **Tzs 200,000.00** per annum for Books and Stationery may be granted to eligible and needy students. However, loan beneficiaries from Open University of Tanzania (OUT) may be granted books and stationery loans **for 3 to 4 academic years only** (depending on the programme of study) and not every year.

3.10 Research expenses

The Board may provide loans of 100% for Research expenses in selected fields only, based on the rates applicable at public institutions and as may be endorsed by either TCU or NACTE. These fields include:

- Health Sciences as defined in section 2.7.2 above
- Engineering
- Agriculture
- Land Sciences
- Other eligible undergraduate programmes may be given Research loans to a tune of **Tzs 100, 000.00** in their final year of study

4.0 OTHER CONDITIONS ON ISSUANCE OF LOANS

4.1 Loans Value Retention fee

For the purpose of retaining the value of loans issued as well as making the loan scheme sustainable, all loans issued bear **Loan Value retention fee equal to 6% (six) percent, per annum.**

4.2 Students with multiple admissions

The Board shall not disburse loan to any eligible candidate admitted into more than one Higher Education Institution. Loan applicants and Higher Education Institutions are hereby advised to ensure that a candidate is admitted into only one Institution. The Board shall not be responsible for delayed or non- disbursement of a loan arising from a problem of multiple admissions.

4.3 Students shifting from one Institution to another Institution

To avoid misdirection of loan funds for students admitted at one HEI who later choose to shift to another HEI, the Board shall not raise a duplicate loan payment to such students. Instead, loan applicants who shifted to other HEI will have to wait until the Board receives back the funds from HEI where it was initially paid.

The Board may re-direct the loan funds to the Institution where the student has shifted to subject to obtaining written confirmation from TCU/NACTE that, the transfer of institution has been approved as well as written report that the candidate has actually reported and registered at the new HEI.

The Board will honour and process only transfers which have been received within ninety (90) days from the date of admission for first year students. Only transfers which do not attract additional loans amount will be considered, otherwise, transfers will be done based on the previous amounts allocated.

4.4 List of Candidates admitted into Higher Education Institutions

To ensure compliance and enforcement of quality issues in higher education, only candidates in the official admission lists approved by the TCU or NACTE for respective institutions shall be considered for loans. Higher Education Institutions are advised to strictly submit lists of admitted students through either TCU or NACTE. Admission lists submitted directly to the Board by Higher Education Institutions shall not be considered.

4.5 Mode of Application

The Board has since 2011/2012 academic year introduced an Online Loan Application System (OLAS) with the aim of simplifying and increasing efficiency of the loan issuance process.

Candidates wishing to apply for loans for the **2015/2016** application cycle are advised to apply through OLAS; print out the application form and Loan Agreement, appropriately sign the same, attach the necessary documentations and submit to the Board through a EMS or registered mail to:

**Executive Director,
Higher Education Students' Loans Board,
PLOT No.8 BLOCK NO 46, Service Trade Kijitonyama Area,
Sam Nujoma Road, Mwenge,
P.O. Box 76068,
DAR ES SALAAM.**

Applicants are advised to maintain a copy of the application form and the receipt used for mailing the application for subsequent purposes of tracking the application form.

Eligible needy candidates are advised to visit HESLB website www.heslb.go.tz to familiarize themselves with OLAS before attempting to apply.

4.6 Loan Application Fees

First time applicants must pay non-refundable one-off application fee of **Tzs 30,000.00** through M-Pesa, Tigo- Pesa **or** Airtel money.

4.7 Application Deadline

Loan Application cycle for **2015/2016** academic year will start on **4th May, 2015 and come to an end on 30th June 2015**. Application lodged beyond this date shall not be honoured.

4.8 Mode of Disbursement of Approved Loans

In order to expedite disbursement of approved loans and minimize the possibility of wastage arising from disbursing loans from the Board directly to the students' bank accounts, all loans shall continue to be paid through Higher Education Institutions. The Higher Education Institutions upon being satisfied that the student loan beneficiary has reported and been registered or has passed all the necessary examinations allowing him/her to advance to the next level of study shall remit to the student bank account the amount of loan so far received from the Board.

5.0 PUBLICATION OF SUCCESSFUL CANDIDATES

A list of Candidates and awarded loans shall be posted on the Board's website www.heslb.go.tz as and when the process of means testing is completed.

6.0 APPEALS AGAINST AWARDED LOAN AMOUNTS

Applicants who are not satisfied with the Awarded Loan Amounts may appeal to the Board as stipulated in the HESLB Regulations of 2008 and as clarified below:

6.1 All appellants must complete the relevant Online Appeal Forms, make a printout of the same and attach thereto the necessary supporting documents. The Online Loan Application System is accessible at <http://olas.heslb.go.tz>.

6.2 Appeal Fee (Tzs. 10,000.00 per appeal)

All appeals will attract a non-refundable fee of Tzs, 10,000 per appeal which, should be paid by using Tigo Pesa, M-Pesa or Airtel Money and the Transaction ID generated should be input into the Online System prior to printing the completed appeal form, otherwise the appeal will not be considered.

7.3 Routing of Appeals through Loan Officers at the institutions of study

Appeals must be routed through the Loan Officers at the respective Higher Education Institution who will collect all appeals from his/her respective institution and submit them under a covering letter to the Board. The Board will not accept any appeal that will be submitted directly by students to the Board.

6.4 Appeals must be submitted to the Board within 90 days, counting from the date of opening of the respective Higher Education Institution.

PART B: ISSUANCE OF GRANTS

7.0 GRANTS

7.1 Grants Items

Grants may be issued to cover either partially or fully the following items;

- Tuition Fees
- Books and Stationery expenses
- Special Faculty Requirement expenses
- Field Practical Training expenses
- Research expenses

7.2 Eligibility Criteria

Issuance of grants to Higher Education Students shall be governed by the following conditions and procedures:

7.2.1 A limited number of grants shall be issued to direct students admitted into fully accredited HEIs in Tanzania to pursue MD, DDS or BVM.

7.2.2 Must have obtained outstanding academic performance of Division I or II at Advanced Level Secondary Education or a first class for Assistant Medical Officers.

7.2.3 Must have registered for studies with the HEIs.

7.3 Signing of Bond

Students awarded Grants must sign a bond with the Board, where the grant beneficiary shall be required to work as a medical practitioner within the United Republic of Tanzania for a period of not less than five (5) years.

7.4 A separate advertisement calling for applications for grants shall be floated **to HEIs in October 2015.**

Issued by:

**EXECUTIVE DIRECTOR
HIGHER EDUCATION STUDENTS' LOANS BOARD**

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REFERENCE LIST

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