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**FACTORS AFFECTING SUSTAINABILITY OF FINANCING TECHNICAL
AND VOCATIONAL EDUCATION AND TRAINING IN KENYA**

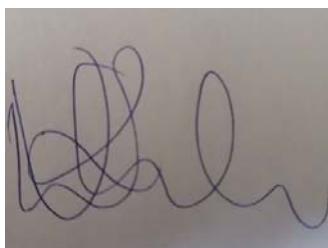
VIVIANNE MUTUA

**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF DEGREE OF MASTER OF PUBLIC
POLICY AND MANAGEMENT, STRATHMORE UNIVERSITY**

NOVEMBER 2021

DECLARATION

This dissertation is my original work and has not been submitted for the award of a degree in any other University.

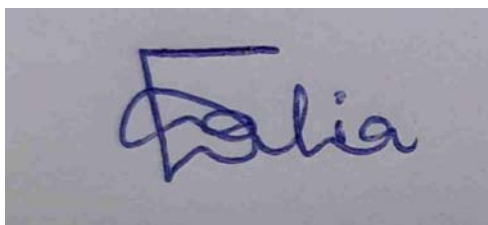


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This dissertation has been submitted for examination with my approval as university supervisor.



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ABSTRACT

Technical and Vocational Education and Training (TVET) is an essential element of Skill management and has a fundamental part to play in achieving sustainable development. The purpose of this study is to determine the factors affecting sustainability of financing of TVET in Kenya. The study was conducted in the Higher Education Loans Board since it is the body that grants loans to TVET institutions. The objectives of the study were to determine the effect of financing policy and regulations, financial diversity, employability of graduates and graduates' attitudes towards government loans on the sustainability of financing of TVET in Kenya. The study used a descriptive research design, and the population of interest was 113 employees. Stratified random sampling was used to come up with 88 respondents. The research predominantly utilized primary data in form of questionnaires. Secondary data in form of reports and publications was also utilized. The questionnaires comprised of both close and open-ended questions. Descriptive statistics was employed in the analysis of data while regression analysis was employed in establishing the relationship amongst the studied variables. The findings show that there existed a moderate positive relationship between financing policy and regulations on sustainability of financing and there was accountability of the funds allocated to TVET programmes, compliance with financial policy and regulations governing the award of TVET loans. There was a positive relationship between financial diversity on sustainability of financing of TVET and there was a higher dependence on government own funding to fund TVET programmes. There was a positive relationship between employability of graduates on sustainability of financing of TVET and the inability to pay due to unemployment is a major factor that affects TVET programmes sustainability. Graduates' attitudes towards government loans has a positive influence on sustainability of financing of TVET in Kenya and future earnings of graduate students influence TVET loans repayment. The study recommends that the government through HELB should review the policy on penalties levied on defaulters to control how and when penalties are charged to curb ever rising loan default. The policy should provide framework to protect unemployed undergraduate beneficiaries from being charged penalties until when they secure employment. The study also recommends that HELB should introduce a reward scheme for those who finish paying their loan on record time; this will instil motivation towards repayment of HELB loan in Kenya. The study recommends that HELB should escalate on their seminars and sensitization forums to sensitize graduates to repay their loans.

Key Words: *Sustainability of financing, financing policy, financial diversity, employability of graduates.*

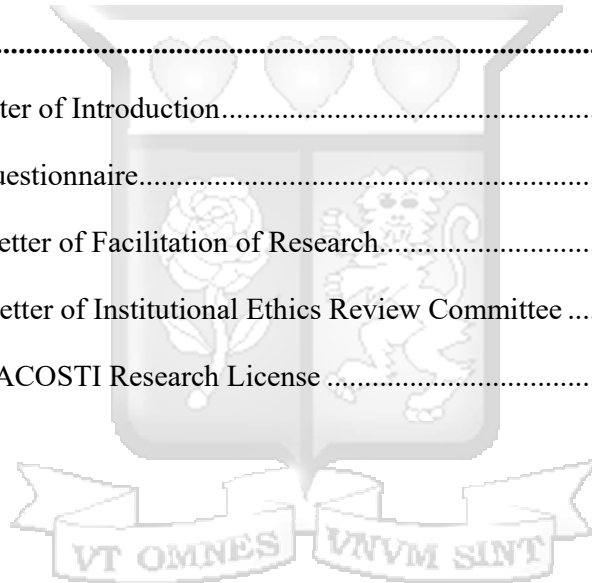
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LIST OF ABBREVIATIONS

CBT:	Competency Based Training
EU:	European Union
FBOs:	Faith Based Organizations
GOEs:	Government Owned Enterprises
HELB:	Higher Education Loans Board
ILO:	International Labour Organization
KAM:	Kenya Association of manufacturers
KES:	Kenyan Shilling
KIPPRA:	Kenya Institute for Public Policy Research & Analysis
KUCCPS:	Kenya Universities and Colleges Central Placement Service
MVRSI:	Motor Vehicle Service and Repair Industry
NACOSTI:	National Commission for Science, Technology, and Innovation
NGOs:	Non-Governmental Organizations
OECD:	Organization for Economic Co-operation and Development
STEM:	Science Technology Engineering and Maths
T&D:	Training and Development
TSC:	Teachers Service Commission
TTIs:	Technical Training Institutes
TVET:	Technical and Vocational Education and Training
TVETA:	Technical and Vocational Education and Training Authority
TVETI:	Technical and Vocational Education and Training Institute
UK:	United Kingdom
UNESCO:	United Nations Educational, Scientific and Cultural Organization
VTCs:	Vocational Training Centers

DEFINITION OF KEY WORDS

Employability of Graduates: This is the capability of graduates to move self-sufficiently within the labour market to realize potential through sustainable employment in regard to their knowledge and skills in different sectors (Dasmani, 2016). Employability of graduates is the varied skillsets, experience, and knowledge that individuals need to harness to thrive in the workplace or in any other economic enterprise.

Financial Diversity: This is a strategy in financing where financing is spread among different donors to enhance the sustainability of organizations in the near future (Kerine, 2015). Financial diversity are the strategies used by HELB to finance TVET institutions.

Financing Policy: This refers to the decisions, choices or regulations related to the financing system of the organization so as to enhance sustainability of financing in the near future (Shuqair & Abdel-Aziz, 2015). Financing policy are the decisions and regulations adopted by HELB to finance TVET institutions.

Graduates' Attitudes Towards Government Loans: This is the graduate approach, thinking and feeling towards government loans which could affect his or her tendency to default on loan repayment (Christie & Munro, 2015). Graduates' attitudes towards government loans are the attitudes of graduates from TVET institutions to repay HELB loans.

Sustainability of Financing: This is the ability of an organization to develop a range of resources so that it could continue with its activities after the withdrawal of donor funding (Renz & David, 2016). Sustainability of financing is the capability of HELB to continue financing TVET institutions in the near future.

CHAPTER ONE: INTRODUCTION TO THE STUDY

1.1 Background to the Study

The overriding theme of this study is to establish the factors affecting the sustainability of financing of technical and Vocational Education and Training (TVET) in Kenya. This chapter outlines the background of the study, problem definition, and research objectives, and research questions, scope of the study and significance of the study.

It is widely recognised that skills and knowledge are indispensable for employment, social inclusion and job creation, economic and national development, and international competitiveness (Akoojee, 2016). Education and skills training are crucial for improving workers' employability, productivity, and inclusiveness of economic growth (ILO, 2016). Consequently, there has been a strong drive in a number of countries for skills development policies and transformation through development of Technical and Vocational Education and Training (TVET) systems (Marope, Chakroun & Holmes, 2015). According to United Nations Educational, Scientific and Cultural Organization (UNESCO), TVET is middle level training and education that provides learners with skills and knowledge that are required in the world of work (UNESCO, 2017).

According to International Labour Organization (ILO), the overall objective of TVET is to provide the economy with a qualified and competitive workforce by training and enabling them to participate in sustainable growth and poverty reduction through provision of training opportunities to all social groups without discrimination (Paryono, 2017). Many governments, regional blocs and associations around the globe have enhanced their focus on TVET as a key enabler of economic development. TVET is highly featured in operational and strategic agendas of regional economic blocs, such as European Union (EU), which has been particularly remarkable in its continuous elaborate initiatives and work in TVET, inside and outside Europe (UNESCO, 2017), the same applies to the Caribbean Community and the African Union.

Key international clusters such as the Organization for Economic Co-operation and Development (OECD) and the G20 and multifaceted establishments such as the United Nations Educational, Scientific and Cultural Organization (UNESCO) and International Labour Organization (ILO) have advanced the debate of TVET as key in economic development.

According to a report by the United Nations Education Scientific and Cultural organization (UNESCO, 2017) countries such as Belgium, Poland, Mexico, Bulgaria, Portugal, Thailand, Mauritius, Canada, and Ukraine have special provisions for TVET with their societies having a positive attitude towards it. Canada has advanced rapidly in the TVET areas as faculties of education in the country offer advanced degree programmed in the study of the teaching of technical education (UNESCO, 2017). Some innovative methods of instruction have been devised at the Canadian Universities to promote TVET courses which , at one time, been taken almost exclusively by men but within the last 15 years an increasing number of women have enrolled in high school and post-secondary school TVET courses (Knipe, 2016). Australia has similarly made progress in TVET education with the overall enrolment clearly explained in the Australian constitution, a document developed in close consultation with training stakeholders throughout Australia (Hart & Rogojinaru, 2017).

Meanwhile, all the European nations have gone forward to unify the development of TVET by developing a common qualification framework that culminates into all the factors that would sustain the development of education. In order to promote TVET for its importance in the industrial development, the Japanese government gives out career development grants to employers to promote TVET in the country (UNESCO, 2017). The foregoing government policy has promoted both industrial development and TVET education system which in turn has catalysed the technological and economic development, positioning Japan as one of the most developed countries in the world today.

In Africa, the African Union's Second Decade of Education describes TVET as being an important subject for economic advancement and increased production in the continent. A robust economic justification therefore exists for financing TVET. This justification originates from the acknowledgement that TVET is a vital basis of the technology, knowledge and skills required to transition into to knowledge-based societies that can adopt to modern times and the future. Technology, knowledge, and higher-level skills are essential for attractiveness of a nation in the international economy. Improved international attractiveness can lead to a better political and economic stability of power that will sustain global stability and peace (Marope, Chakroun & Holmes, 2015).

Regionally, statistics from the Ugandan Ministry of labour and Social development show that 390,000 students who complete tertiary education each year have only 8000 jobs to fight for (Mochere & Aluko, 2018). Thus, the Uganda government needs to focus on

vocational training because it leads to job creation and self-employment. A stampede for university education which eventually leads to frustration is not necessarily the best way of addressing Uganda's unemployment problem (Mochere & Aluko, 2018).

In Kenya Technical and vocational Education and training (TVET) constitutes any form of education, training and learning activity leading to the acquisition of practical knowledge, understanding and skills relevant for gainful economic engagement, both formal and informal. A quality and relevant TVET system is, therefore, critical for national economic growth and global competitiveness as well as holding a strategic position in effective implementation of Vision 2030 and the Big Four Agenda (KIPPRA, 2018). The prioritization of TVET in both developed and developing economies is usually because of an abundance of human capital that lacks essential skills and technical knowledge. Technical and vocational education and training (TVET) is progressively evolving as main priority for many governments in driving national progress and education agendas (Marope, Chakroun & Holmes, 2015).

Ngure (2013) noted that TVET plays a vital role in furnishing its learners with skills that are required in the Motor Vehicle Service and Repair Industry (MVRSI) However, while Training and Development (TD) programs have very well-crafted training objectives, it is beset by numerous challenges. Skills development in Kenya is important for economic development, poverty mitigation, and social inclusion. Despite this important role that TVET plays in addressing labour challenges, in major policy documents there lacks an explicit approach by which this role can be achieved (Ngerechi, 2016). TVET needs to respond to numerous challenges, such as a rapidly increasing population, growing youth unemployment, the high cost of education against stagnating resources, rural urban migration, rising social and economic insecurity, reduction in jobs due to economic liberalisation and new technologies, as well as the people's clamour for accountability (Barasa & Kaabwe, 2015).

1.1.1 Sustainability of Financing

According to Johnson and Scholes (2007) sustainability refers to a measure of the ability of an organization to fulfil its objectives and meet its stakeholders' requirements. It entails the ability of firm to effectively grow, develop and function effectively for a long period of time. Bowman (2011) defines sustainability of financing as the ability of an organization to maintain financial capacity over a period of time. Renz and David (2016) define

sustainability of financing as the ability of an organization to develop a range of resources so that it could continue with its activities after the withdrawal of donor funding. For organizations to be financial sustainable, proper strategies which cover foundations, fundraising and advocacy are required. Sustainable financing is crucial for the long-term survival and effectiveness of organizations. The challenge is how to achieve such levels of sustainable financing (Dresner, 2015).

Leon (2016) looked at sustainability of financing of municipal council in South Africa and indicated that the financial stability of the key local municipalities in South Africa is weak, and likely to deteriorate over the short to medium term, which has a direct impact on the economic growth and development that is desperately needed to reduce the unemployment level in the country. Sustainable financing has been affected by lack of skill levels, inexperience in quality of management, financial indiscipline, and un-sound governance. In South Africa for example, weak financial stability of the municipal sector had been detrimental to their economy and placed additional financial pressure on the central government for financial support in order to keep the operations on going (Rozenda 2018).

Sustainability of financing is promoted through a broad-based, interdisciplinary approach. Lack of good management or technical capacity prevents an organization from generating revenue and adversely affecting sustainable financing (Njoroge, 2013). Learning from organizations that have managed to achieve sustainable financing to some extent, is important for Government Owned Enterprises (GOEs) as they chart their paths to success in sustainable financing. As a key policy instruments the GoEs should be transformed from being dependent to independent by adopting strategies that shove towards sustainable financing (Muriithi, 2014). Mutinda and Ngahu (2016) noted that key attributes to sustainable financing are sound financial practices, active fund management, planning, ability to innovate, and infrastructure development. A sustainable organization is able to survive in the long run by generating its own revenue without depending on contributions from donors, financiers, and well-wishers.

1.1.2 Sustainability of Financing of Technical Vocational Education and Training

Despite the progress made in enhancing access, retention, quality, completion rates and gender parity in technical education and training, the TVET sector continues to face many challenges that adversely affect its sustainability. These include an insufficient number of trainers with the required trainers' competency, limited industry participation and

inadequate research support services, limited financing, gap between skills acquired and skills demanded by employers and lack of acceptability by the public (Mupinga, Busby & Ngatiah, 2017).

Other challenges include poor geographical distribution and location of TVET institutions, negative perception of TVET, low enrolment for females in Science, Technology Engineering and Mathematics (STEM) related courses and unfriendly environment for people with special needs. Furthermore, there is uncoordinated admission of students to TVET institutions. There is also low enrolment in TVET institutions due to the high cost of technical training and lack of awareness. The result is that many trainees end up in cheap alternative programmes whose graduates do not acquire the requisite technical skills relevant to the labour market (Mureithi, 2017).

Ensuring that there is financial sustainability of TVET institutions is the main barrier facing the institutions since adequate funding has not been provided to this sector and thus mainstreaming TVET has been one of the problems. To address the financing challenge for TVET in Kenya, the Higher Education Loans Board (HELB) has been provided with the mandate to finance students pursuing TVET programmes through a loan and bursary scheme. In 2016, the Government through the Ministry of Education dedicated KES 800 million from the previous KES 300 million for TVETIs to be advanced as loans to students in order to further their technical education (HELB 2016). However, increasing demand for technical education, the funds available for HELB to provide financing to students pursuing TVET programs is limited. Moreover, HELB is also challenged with low recovery rates for the already advanced loans and hence presenting a sustainability crisis (Lubanga, 2017).

TVET in Kenya dates back to 1967 with the registration of the Kenya Polytechnic as a post-secondary education institution (TVETA, 2018). Established by the Ministry of Education, its principal mandate was to offer training largely in the technical fields but later introduced social skills to complement technical knowledge with the practical society needs (Ministry of Education, 2018). With the increase in demand for technical skills, more technical colleges were established. They were run by the government, private sector, Non-Governmental Organizations (NGOs), Faith-Based Organizations (FBOs) and other stakeholders through formal and informal training models (TVETA, 2018). This further expanded opportunities for technical education and training in the country (Abagi and Ogachi, 2014).

In order to enhance TVET in Kenya, the Government through the Technical and Vocational Education and Training (TVET) Act No 29 of 2013 (Kenya Gazette Supplement No. 44) established the Technical and Vocational Education and Training Authority (TVETA) as a state corporation. TVETA is a regulatory body whose mandate is to regulate and coordinate the TVET sector through accreditation of institutions, programs and trainers as well as assure access, quality, equity and relevance in education and training (TVETA, 2018).

The Kenyan TVET sector comprises of National Polytechnics, Technical Training Institutes (TTIs), Vocational Training Centers (VTCs), Technical Trainer Colleges (TTCs) and any other category specified by the Cabinet Secretary, Ministry of Education Science and Technology (TVETA, 2018). The government contrived the TVET policy which is aimed at guiding the uplifting of the TVET segment and providing employable and skilled graduates required to progress the objectives of Vision 2030 (Republic of Kenya, 2012). The policy sought to enhance admission to TVET by aiming at an ambitious overall rate of enrollment of 30 percent by 2030 and guaranteeing importance of the training provided to students pursuing TVET courses. To attain that target, the government has committed to ensuring good governance, facilitating the expansion of human resource capacity and infrastructure, strengthening assurance and quality of training, and providing motivations for industry connection and involvement in TVET (Republic of Kenya, 2012).

1.1.3 Factors Affecting Sustainability of Financing

There are various factors that affect sustainability of financing. The financing policy in terms of how institutions are financed affect their sustainability of financing in the near future. TVET institutions all over the world have struggled to find the best way to allocate resources and to structure a budgetary system to finance them in future (Lauglo, 2017). Increasing enrolment and inadequate resources in the higher education sector are certainly of worldwide importance and gained central concern in both developed and developing countries. All activities involving funds must adhere to the financial policies and TVETs should incorporate prudent financial accounting in order to account for funds, prevent fraud and increase overall efficiency and sustainability of financing (Palmer, 2015).

Financial diversity affects sustainability of financing in terms of various avenues that TVET institutions use to finance their programmes. The increased demand for higher education has exerted pressure on the existing institutions financially. It is known that mainly public or private sector is used to finance higher education (Anudo & Orwa, 2020).

Kenya's education is financed from various sources, depending on the types of the educational institutions. As a consequence, the cost-sharing system in higher education financing has been accepted and as a result of this, four groups have started to participate in higher education financing (Kuria, 2015). The first group is governments and taxpayers, and governments use public revenues such as taxes to underpin higher education. The second group is parents who save or borrow money to finance their children's higher education. The third group is students, and they also save or borrow money as parents do. The last group is charity organizations who support students, parents, or higher education institutions (Goksu & Goksu, 2015).

Graduates' attitudes towards government loans has an impact on graduate loan default and in turn sustainability of financing (Bakar, Masud & Jusoh, 2006). It arises when the borrower does not honour the agreement to meet the loan repayment terms which details when money ought to be paid back to the lender. Default in loan repayment leads to lack of sufficient funds by institutions to offer to all the loan applicants hence some of the students ends up not being awarded the loans. Some students believe that the loan given is a form of grant which should not be repaid back. They believe that the government should support them freely without the condition of repaying back the loans (Kiguta, 2017). A failure in making of payments is contributed to by the failure of the lender (most often the government) to make clear that the obligation was indeed a loan and the failure to repay will lead to having potentially serious legal and other consequences, such as a loss of credit (Moenjak & Worswick, 2013).

Employability of graduates has an impact on sustainability of financing since inability to pay due to unemployment or other unanticipated financial strains is the major cause of default leading to lack of sustainability of financing. Education is perceived by many people as a pathway to enhance employability through the acquisition of the necessary skillsets, experience, and knowledge that individuals need to harness to thrive in the workplace or in any other economic enterprise. However, it is not a guarantee to secure employment but only enhances employment chances (Lourens, 2016). Education enhances someone's prospects of getting better jobs with high income, thus money spent on education now is a form of investment which leads to greater returns in the future. Student loans are built upon a model that relies on a person's borrowing to earn a degree which increases employment potential and subsequently the ability to pay off their loans (Paterson, 2017). Unemployment by many students who have completed their studies and

earned degree leads to increased likelihood of default in loan repayment. An understanding of employability issues provides individuals with an opportunity to be aware of their potential, skills, attitudes, and knowledge to become effective citizens and workers (Hooley, 2017)

1.2 Problem Statement

TVET is an integral component of lifelong learning and has a crucial role to play in this new era as an effective tool to realize the objectives of a culture of peace, environmentally sound sustainable development, social cohesion, and international citizenship. TVET can play an instrumental role in developing a new generation of individuals who will face the challenge of achieving sustainable socio-economic development (Kossey & Ishengoma, 2017). Technical and vocational education and training also plays an essential role in improving the wellbeing of youths and communities. It increases productivity, empowers individual to become self-reliant and stimulates entrepreneurship. The government of Kenya considers TVET as key in attaining its middle-income status by 2030 (Republic of Kenya, 2012). However, despite the above importance and the crucial role played by TVET, the sustainability of financing TVET has been an issue of concern in Kenya as the funds allocated to TVET and the repayment rate has been low.

The main barrier in the TVET is the funding aspect, adequate funding is not provided to this sector and so mainstreaming and ensuring sustainability TEVT has been one of the problems (Kuria, 2015). In order for the Higher Education Loans Board (HELB) to achieve its targets of 30% enrolment in TVETIs, the TVET programs need more funding. According to HELB (2018) in 2019 Government through Kenya Universities and Colleges Central Placement Service [KUCCPS] intended to place 150,000 new students in TVET institutions. However, there was inadequate funding to support the increasing enrolment rate of the students and also the sustainability of financing institutions was an issue of concern (HELB, 2018). An increase in the number of beneficiaries with no corresponding rise in the number of loanees repaying their loans leads to a decreased loan performance portfolio (HELB, 2018).

This indicates a financing gap which may hamper sustainability of TVET financing in Kenya in Kenya (HELB, 2018). Regarding loan recovery, the second quarter report by HELB (2018) indicate that 3,956 loan accounts valued at KES 104 million were mature for repayment. As at June 2018, 1,160 loanees were actively repaying KES 31 million

translating to a performance loan portfolio of 36%. The portfolio was at risk by June 2018 and stood at 2,057 loan accounts valued at KES 53.8 million. This implies that there are challenges in recovering the already advanced loans to students pursuing TVET programmes (HELB, 2018).

Studies have been carried regarding TVET; Shiba (2015) focused on TVET for sustainable development in Nepal and established TVET provided skills and jobs to many people and also enhanced national development. However, this was a global study and focused on the importance of TVET while the present study is focusing on sustainability of financing TVET.

Njenga (2014) focused on determinant of sustainability of students' loan schemes: case study of HELB and noted that the background of student loan financing, loan default, success and failure of student loans schemes affected student loan sustainability. However, the above study focused on HELB which provides loans to many students apart from those in TVET. Following the above findings that differ across the researchers in different contexts, this study is out to determine the factors affecting the sustainability of financing of TVET in Kenya.

1.3 Research objectives

1.3.1 General Objective

The general purpose of the study was to determine the factors affecting sustainability of financing TVET programs in Kenya.

1.3.2 Specific Objective

The study was guided by the following research objectives:

- i. To determine the effect of financing policy and regulations on the sustainability of financing of TVET in Kenya.
- ii. To establish the effect of financial diversity on the sustainability of financing of TVET in Kenya.
- iii. To determine the effect of employability of graduates on the sustainability of financing of TVET in Kenya.
- iv. To determine the effect of graduates' attitudes towards government loans on the sustainability of financing of TVET in Kenya.

1.4 Research Questions

- i. What is the effect of financing policy and regulations on the sustainability of financing of TVET in Kenya?
- ii. To what extent does financial diversity affect the sustainability of financing of TVET in Kenya?
- iii. What is the effect of employability of graduates on the sustainability of financing of TVET in Kenya?
- iv. To what extent do graduates' attitudes towards government loans affect the sustainability of financing of TVET in Kenya?

1.5 Scope of the study

This study focused on the factors affecting the sustainability of financing of TVET in Kenya. The population of this study comprised of staff at HELB in Nairobi County. The population of interest was 113 employees that consisted of the senior and middle management staff at the Lending Department, Debt Management department and External Resource Mobilization and Student Loan Self-Protection Scheme Department at HELB. The study relied primary data and the study and covered a period of two (2) years between 2018 and 2019.

1.6 Significance of the study

The findings of the study may help the stakeholders at HELB and TVET institutions have a better understanding on how to increase loan funding, recovery of loans from TVET beneficiaries and enhancing employability of TVET graduates. The findings may also be of value to the policy makers at HELB, TVETIs, employers, students, and the academic community. The findings from this study may help establish how the variables of the study influence the sustainability financing of TVET in Kenya. The policy makers can use the findings to understand the challenges facing TVET so that future policy regarding TVET can be drafted using insight from this study. Therefore, effective policy that is based on evidence is critical for effective development of TVET in Kenya. This study may provide such evidence which can be of great importance to these policy makers.

Other institutions that finance students may also benefit from the study as they may understand the factors that affect the sustainability financing of student' loan and also the challenges facing in financing and sustaining their operations. The study findings may also be of value to employers, and employer organizations such as Kenya Association of

manufacturers (KAM) and TVETIs. The findings may provide employability challenges that are faced by TVET graduates and hence form a base where TVETIs and employers can partner to ensure that what is taught in TVETIs is what is demanded by employers in the industry. This may bridge the gap between supply and demand of TVET graduates. Moreover, instilling employable skills into TVET students may ensure that the whole supply and funding chain may be sustainable.

Lastly, the results may be of value to academicians and researchers as it may be an addition to the empirical work on sustainability of financing TVET in Kenya. This may provide more information and insight into what challenges face TVET in Kenya and elicit discussion, improvements, and policy reforms. Moreover, the study may be of value to researchers as it may document limitations which would inform researchers in future studies. The study may also provide suggestions for further research which researchers can take advantage of in furthering researcher on challenges facing sustainability of financing TVET in Kenya.



CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The main aim of literature review is to study and acknowledge the input of other researchers and authors and their contributions to the body of knowledge in order to shed more light on the topic of discussion. This chapter deals with literature review in line with past studies and theoretical review on the factors affecting the sustainability of financing of technical vocational education and training in Kenya. This literature was guided by the objectives of the study and the research questions.

2.2 Theoretical Review

The section discusses and explains the factors affecting the sustainability of financing of technical vocational education and training in Kenya. The theories discussed are Resource-Dependency theory and the Resource Mobilization theory.

2.1.1 Resource-Dependency Theory

The resource dependency theory was advanced by Pfeffer and Salancik (2003). Resource dependence theory (RDT) maintains that organizations are resource-insufficient; they strive to acquire and sustain resources from their external environment. They argue that resources are controlled by external actors who exert demands on the organization. These actors perceive certain advantages in their relationship with the organization and exercise power through control over resources. The heavier the dependence on external resources, the more the demands of particular actors controlling these resources are influential. The challenge is for the organization to manage proactively and effectively incompatible and competing demands.

Luoma and Goodstein (2015) indicated that uncertainty on external resources control might reduce prudence from the management and therefore interfere with accomplishment of the goals of an organization and finally threatening the main organization's existence. Challenged with the expensive nature of the situation, the management aggressively directs a firm to make the external dependency manageable to its benefit. Sheppard (2017) discovered that RDT undertakes that organizations are supposed to be engaged in interactions with players from the external surrounding for purposes of obtaining the resources needed. Where there exists resource scarcity, inadequate information concerning

the resources required or unsteady supplies of the resources required, organizations are required to come up with ways of ensuring resources are optimally used (Boyd, 2014).

TVET institutions heavily rely on external funders and are thus faced with instability in the flow of funding taking into consideration that they have to deal with volatile demands (Moenjak & Worswick, 2013). Accordingly, organizational behaviour reflects the TVETIs dependence on an external resource and the ensuing demands of a donor controlling the resources. The magnitude of resource dependence often determines the financial behaviour of an TVET institutions which in turn affect the financial sustainability of the TVET programmes. If TVET institutions fail to meet the conditions set by the external funders, the donors may withdraw the funding making the TVET institutions face financial sustainability issues. TVET may not be able to fund their programmes due to instability of funding flows.

The theory was thus important in determining the factors affecting the sustainability of financing of Technical Vocational Education and Training in Kenya. The theory was relevant in the present study as it sought to highlight how TVET institutions can put in place strategies and policies to increase their resources and in turn ensure that they are resource independent. With enough resources TVETI in conjunction with other Government entities and Researchers can commission research to determine the viability of training programmes in TVET institutions, the competency of trainers, the quality of TVET graduates and whether the skills acquired fit in with the demands in the job market. It will thus come up with relevant course programmes that can enhance employability of graduates and thus increase their chances of loan repayment.

2.1.2 The Resource Mobilization Theory

The resource mobilization theory of social movements holds that a social movement arises from long-term changes in a group's organization, available resources, and opportunities for group action. Resource mobilization theory has five main principles (Jenkins, 2013). According to resource mobilization theory, participation in social movements is a rational behaviour, based on an individual's conclusions about the costs and benefits of participation, rather than one born of a psychological predisposition to marginality and discontent (Klandermans, 2014). Resource mobilization theory of social movements explains how social movements mobilize resources, from inside and outside their movement, to reach goals. Resource mobilization theory argues that social movements

succeed through the effective mobilization of resources and the development of political opportunities for members. Social movements can mobilize both material and non-material resources (Jenkins, 2013).

Resource mobilization theory holds that social movement organizations with powerless or resource-poor beneficiaries require outside support and funding. Social movements often seek out and receive resources from conscience constituents. Conscience constituents refer to individuals or groups outside of the social movement who have a moral alliance with the social movement 's cause, goal, or mission. Resource mobilization theorists have found that conscience constituents tend to contribute more when beneficiaries are framed, by the social movement itself or mass media, to emphasize commonalities with conscience constituents (Paulsen & Glumm, 2015).

Resource mobilization theorists believe that the outcomes of social movements are influenced by strategic choices, the positions and actions of elites, the support of influential organizations, and governing coalitions and regimes. There are four outcomes for social organization: full success, acceptance without benefits or gains, benefits and gains without acceptance, and failure. The mass media is an integral part of the political participation effort by social movements. It influences the politics of social movements by informing the elites and public about the actions of social movements as well as interpreting these actions (Jenkins, 2013).

The resource mobilization theory will help the study know how to mobilize resources, both physical and finance to ensure sustainability of financing TVET programmes. The theory will enable TVET institutions come up with relevant financing policies and enhance their financial diversity. With enough resources TVET will also come up with relevant course programmes that are competency based, driven by market research that provides data on skill that are on demand and that can enhance employability of graduates and thus increase their chances of loan repayment. This theory thus helps in explaining the factors affecting the sustainability of financing of TVET in Kenya.

2.3 Empirical Review

The section gives an insight on literature from previous studies concerning the factors affecting the sustainability of financing of technical vocational education and training in Kenya.

2.3.1 Financing Policy and Regulations and Sustainability of Financing

A study on efficient and strategic resource allocation for sustainable development in Jordan was conducted by Shuqair and Abdel-Aziz (2015) and the study purposed to address sustainability in development activities in the country. The study noted that one of the challenges of resource allocation is skewed focus from the main project or activities. Therefore, resources would be channelled to instant issues that pop up which poses a challenge to sustainable resource allocation. The results of the study indicated that in resource allocation, the public or stakeholders should be involved in order to achieve equitable resource allocation. In addition, the author underscored the essence of prioritizing rather than hierarchy in resource allocation. However, a gap exists as the above study was in the global context and focused on efficient and strategic resource allocation for sustainable development while the current study focuses on the factors affecting sustainability of financing TVET programs.

A study on resource allocation in higher education was conducted by Mah'd (2014). In focus were Jordanian private universities. The study aimed to explore the methods used to allocate resources. It was established that planning and resource allocation was incremental rather than dynamic. The information sharing and department participation in respect to the institution's budget was limited and led to inefficiency. More so, the study noted that it is imperative for academic departments to enhance accountability. In addition, it was ascertained that accountability needed to be formalized by monitoring financial performance against the budget allocated. One of the recommendations of the study was that university departments ought to embrace a structured approach to the institution's budget based on responsibility and accountability for use of resources allocated. Nevertheless, a gap exists as the above study was in the global context and focused on resource allocation in higher education while the current study focuses on the factors affecting sustainability of financing TVET programs.

Wango and Gatere (2016) looked into integrity and financial accountability in schools in Kenya. The aim of the study was to provide intervention strategies for enhancing financial accountability. The school principals, officers in the ministry of education and in teachers' service commission participated in the study. The findings indicated that schools were losing large chunks of money through fraud and other financial malpractices as a result lack of accountability. As such it was noted that financial accountability ought to be

incorporated in the leadership and management of schools in order to curb financial malpractices. It was suggested that all activities involving funds must adhere to the financial policies and the school heads and board of management should incorporate prudent financial accounting in order to account for funds, prevent fraud and increase overall efficiency and financial accountability. Nevertheless, a gap exists as the above study focused on integrity and financial accountability while the present study focuses on the factors affecting sustainability of financing TVET programs.

In another study, Gakuru and Mungania (2016) examined budgetary allocation and success of public sector management in Kenya. The study aimed at determining the effects of budgetary allocation on the success of public sector management in government departments. Managerial and supervisory staff participated in the study. The findings revealed that budgetary allocations were not adequate for the government departments to dispense the implementation of new public management strategies. The study emphasized on accountability in the usage of public funds and decentralization of the department activities in order to enhance effective allocation of resources. It was generally noted that budgetary allocation positively influenced public sector management. Nonetheless, a gap exists as the above study focused on budgetary allocation and success of public sector management while the present study focuses on the factors affecting sustainability of financing TVET programs.

2.3.2 Financial Diversity and Sustainability of Financing

Kerine (2015) while determining the factors influencing financial sustainability of non-governmental organizations, a survey of NGOs in Nakuru County, Kenya adopted a descriptive survey research design where both descriptive and inferential statistics were used. It was noted that the high dependence on donor funding was inclining interventions to match donor priorities, meaning that if NGOs have to be 'independent' and achieve their specific objective and not that of their donor they have to develop a diverse resource base. Based on the results of the study, it was observed that dwindling foreign donor funding was having a significant effect on the financial position of the NGOs. As a result, the NGOs in the area were taking initiative to explore non-traditional sources of funding for their projects. This included appealing to the locals to support their projects and also engaging in income generating projects. However, a gap exists as the above study focused on the

factors influencing financial sustainability of NGOs while the present study focuses on the factors affecting sustainability of financing TVET programs.

While evaluating the factors influencing sustainability of donor funded projects: a case of Wenje water projects in Tana River County, Kenya Nthenge (2014) applied a quantitative research design. Purposive sampling method which relies on the researcher's judgment in selecting respondents regarding those special participants who had specific information of interest to the study was applied. It was noted that the income generated from the donor funded water projects was not enough to finance the repair and maintenance of the water pumps. The researcher concluded that inadequate projects' income management undermines sustainability of water supplies. Proper financial records, pricing flexibility, revenue collection and its incentives as well as cost recovery skills ensures improvement in generation and use of project's income. Nevertheless, a gap exists as the above study focused on the factors influencing sustainability of donor funded projects while the present study focuses on the factors affecting sustainability of financing TVET programs.

Kiguta (2017) evaluated the factors influencing implementation of Youth Vocational Training Centers projects by county governments in Kenya, a case of Isiolo County Government. The study adopted a descriptive research design where a census sample design was used. Data was collected through questionnaire and was analysed using descriptive statistic which includes frequencies and percentages. The researcher concluded that funds allocated for implementation of vocational training centres projects were not reliable and were not sufficient. It is also concluded that that there was delay in financing implementation of vocational training centres projects in county governments. The study also noted that respondents were dissatisfied with resources allocation on the implementation of vocational training centres projects. However, a gap exists as the above study focused on the factors influencing implementation of youth vocational training centres projects while the present study focuses on the factors affecting sustainability of financing TVET programs.

2.3.3 Employability of Graduates and Sustainability of Financing

In Ghana, Dasmani (2016) adopted a descriptive research design where a census sample design was used so as to determine the factors affecting employability of TVET graduates. It was revealed that most TVET graduates attributed their unemployment to a number of

factors including outdated and irrelevance in some parts of the curriculum, non-exposure to entrepreneurship education, practical subjects not well taught due to the absence of laboratory and inadequate practical demonstrations, obsolete equipment, and materials in short supply. The results of this study triggered more research in Ghana on the best way to carry out training in TVET. Therefore, Competency Based Training (CBT) which is an industry and demand driven education and training program, its products have a high demand on the job market have been adopted in order to produce employable graduates from TVET. However, a gap exists as the above study was in the regional context and focused on the factors affecting employability of TVET graduates while the present study focuses on the factors affecting sustainability of financing TVET programs.

According to Mbugua, Muthaa and Sang (2016) study on the factors that affect employability of graduates' students in Kenya where a descriptive research design was used it was noted that most TVETs operate with inadequate teaching staff which compromises the quality of teaching and learning since the short fall in the number of teachers is addressed through hiring part-time teachers multi-grade teaching, and the students individualized learning engagements. Multi-grade teaching refers to a situation where students at different levels of learning are taught in the same workshops, laboratories, or classrooms. This affects the interactive capacity between the students and the teachers' hence poor quality of training and acquisition of skills. Nevertheless, a gap exists as the above study focused on the factors that affect employability of graduates' students while the present study focuses on the factors affecting sustainability of financing TVET programs.

Mwaura and Mwangi (2015) study on the factors that affect employability of graduates' students in Kenya used a descriptive research design. It was revealed that the teachers teaching automotive diploma course mostly used demonstration, project work and phase testing as the least used method. However, in most cases the teachers combined all the above methods, and the trainers varied the use of these methods which is a good practice of quality training delivery. Despite the teachers using these methods in enhancing skill acquisition, the teachers are sometimes incapacitated since the institutions did not have well balanced adequate training facilities to implement the curriculum effectively. Teaching aids such automotive training models are very critical in the provision of quality skills training of which were not available which limit their employability. However, a gap exists as the above study focused on the factors that affect employability of graduates' students while

the present study focuses on the factors affecting sustainability of financing TVET programs.

2.3.4 Graduates' Attitudes Towards Government Loans and Sustainability of Financing

Booij, Leuven and Oosterbeek (2016) looked at the role of information in influencing student perception towards the cost of education in the Netherlands. They used a representative sample of students in higher education. Half of these students were given information about loan conditions (including interest rates, the maximum loan amount, the grace period, and the repayment period). Results indicate that Dutch students were relatively poorly informed about loan conditions and that availability of that information significantly improved financial literacy. This suggests that information campaigns are successful in improving student knowledge and thus influenced their perception towards loan repayment. Nevertheless, a gap exists as the above study was in the global context and focused on the role of information in influencing student perception towards the cost of education while the existing study focuses on the factors affecting sustainability of financing TVET programs.

Christie and Munro (2015) did a study about students' perception of the costs and benefits of student loans. Interviews were conducted with students enrolled at two universities in the United Kingdom. It was found that students from lower-class backgrounds were typically uninformed about the economic benefits of higher education and thus the default on loan repayment. In contrast, students from upper-class backgrounds are certain of the economic benefits of higher education, but, because of their parents' resources, often they do not need to use loans to pay college expenses. However, a gap exists as the above study was in the global context and focused on students' perception of the costs and benefits of student loans while the existing study focuses on the factors affecting sustainability of financing TVET programs.

Kapsalis (2016) examined the factors affecting the repayment of student loans in Canada. The study used data from the Canada Student Loans Program database and administrative records with the Statistics from Canada Longitudinal Administrative Database. The key variables in the analysis were the current status of the loan, the annual income of the borrowers, and the total amount of the loan (indebtedness) at consolidation. The study findings established that the ability of students to repay their loans depended primarily on

their future earnings rather than on the size of debt incurred. The amount of debt did not appear to have much of an effect, except when high loan amounts are combined with low incomes. The relationship between income and default was found to emerge soon after graduation and is a strong predictor of the final repayment outcome. Future earnings, as well as the probability of loan repayment, were found to be strongly correlated with the type of education (type of degree, field of study, and type of institution. Nevertheless, a gap exists as the above study was in the global context and focused on the factors affecting the repayment of student loans while the present study focuses on the factors affecting sustainability of financing TVET programs.

Mungai (2015) studied the loan repayment and sustainability of government revolving funds in Murang'a County, Kenya. The study adopted a positivism philosophy of research, where the researcher was independent on what was being observed and studied. Descriptive survey design was used to determine the level of government revolving fund repayment and its effect on sustainability for other borrowers. The results indicated that government revolving funds operational procedure, socio-micro group functions and borrowers' characteristics were statistically significant to loan repayment and sustainability. Nevertheless, a gap exists as the above study focused on loan repayment and sustainability of government revolving funds while the present study focuses on the factors affecting sustainability of financing TVET programs.

2.4 Summary of Knowledge Gaps

Table 2.1: Summary of Knowledge Gaps

Author	Focus on Previous Research	Research Gaps
Shuqair and Abdel-Aziz (2015)	Efficient and strategic resource allocation for sustainable development in Jordan	This study was in global context and focused on efficient and strategic resource allocation for sustainable development while the current study focuses on the factors affecting sustainability of financing TVET programs
Mah'd (2014)	The resource allocation in higher education in Jordanian private universities	The study was in the global context and focused on resource allocation in higher education while the current study focuses on the factors affecting sustainability of financing TVET programs
Wango and Gatere (2016)	Integrity and financial accountability in schools in Kenya	A gap exists as the above study focused on integrity and financial accountability while the present study focuses on the factors

		affecting sustainability of financing TVET programs
Gakuru and Mungania (2016)	Budgetary allocation and success of public sector management in Kenya	The study focused on budgetary allocation and success of public sector management while the present study focuses on the factors affecting sustainability of financing TVET programs
Kerine (2015)	The factors influencing financial sustainability of non-governmental organizations: a survey of NGOs in Nakuru County, Kenya	The study focused on the factors influencing financial sustainability of NGOs while the present study focuses on the factors affecting sustainability of financing TVET programs
Nthenge (2014)	The factors influencing sustainability of donor funded projects: a case of Wenje water projects in Tana River County, Kenya	The study focused on the factors influencing sustainability of donor funded projects while the present study focuses on the factors affecting sustainability of financing TVET programs
Kiguta (2017)	The factors influencing implementation of Youth Vocational Training Centers projects by county governments in Kenya, a case of Isiolo County Government	The above study focused on the factors influencing implementation of youth vocational training centers projects while the present study focuses on the factors affecting sustainability of financing TVET programs
Dasmani (2016)	The factors affecting employability of TVET graduates	The study was in the regional context and focused on the factors affecting employability of TVET graduates while the present study focuses on the factors affecting sustainability of financing TVET programs
Mbugua, Muthaa and Sang (2016)	The factors that affect employability of graduates' students in Kenya	A gap exists as the study focused on the factors that affect employability of graduates' students while the present study focuses on the factors affecting sustainability of financing TVET programs
Mwaura and Mwangi (2015)	The factors that affect employability of graduates' students in Kenya	A gap exists as the study focused on the factors that affect employability of graduates' students while the present study focuses on the factors affecting sustainability of financing TVET programs
Booij, Leuven and Oosterbeek (2016)	The role of information in influencing student perception towards the cost of education in the Netherlands	A gap exists as the study was in the global context and focused on the role of information in influencing student perception towards the cost of education while the existing study focuses on the

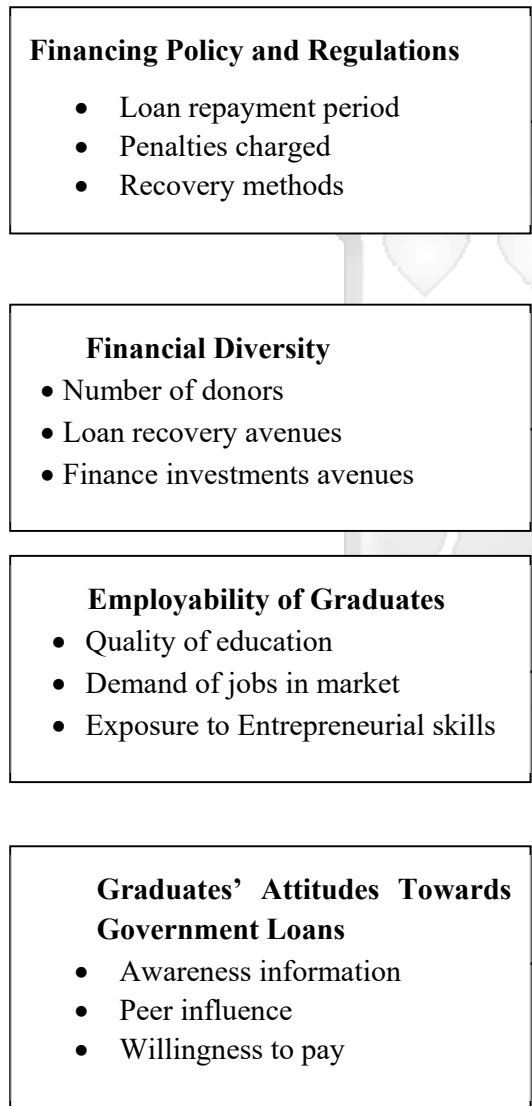
		factors affecting sustainability of financing TVET programs
Christie and Munro (2015)	Students' perception of the costs and benefits of student loans	A gap exists as the study was in the global context and focused on students' perception of the costs and benefits of student loans while the existing study focuses on the factors affecting sustainability of financing TVET programs
Kapsalis (2016)	The factors affecting the repayment of student loans in Canada	A gap exists as the study was in the global context and focused on the factors affecting the repayment of student loans while the present study focuses on the factors affecting sustainability of financing TVET programs
Mungai (2015)	The loan repayment and sustainability of government revolving funds in Murang'a County, Kenya	The study focused on loan repayment and sustainability of government revolving funds while the present study focuses on the factors affecting sustainability of financing TVET programs



2.5 Conceptual Framework

The conceptual framework provides the relationship that the researcher feels is present between the research variables so as to establish the factors affecting the sustainability of financing of TVET in Kenya. The independent variables are financing policy and regulations, financial diversity, employability of graduates and graduates' attitudes towards government loans while the dependent variable is sustainability of financing

Independent Variables



Dependent Variables

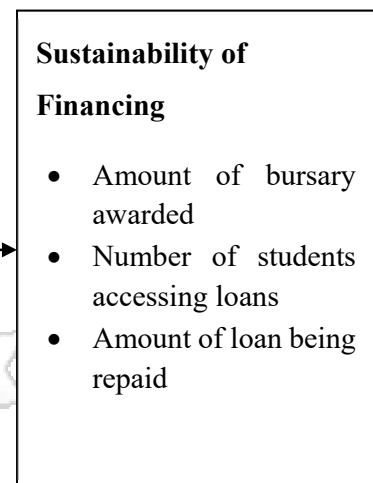


Figure 2.1: Conceptual Framework

Source: Author (2020)

2.6 Conceptualization

Financing policy and regulations plays a role in sustainability of financing TVET institutions. TVET institutions must come up with financing policy and regulations that seek to enhance the sustainability of financing TVET programmes. There should be policies in place to increase TVET funding through collaboration with multilateral and bilateral donor institutions to provide funding. However, donor aid should be seen as additional to rather than replacing the public funding of training institutions (Oviawe, 2020). TVETs should also develop financing policies that involve cost sharing between the government, students and the income generating activities of the institutions in a bid to enhance sustainability of financing. TVET should provide income generation programmes from the sale of services, including the renting out of underused facilities and providing consulting services to local enterprises (Mah'd, 2014).

Financial diversity plays a role in sustainability of financing TVET institutions. Increasing funding of TVET is an obvious way to increase access and affordability and sustainability of financing TVET institutions. This is through stimulating private investment in TVET and through incentivizing private enterprises to train their own workers and contribute to overall reform efforts (Hondonga & Ramaligela, 2020). TVET funding typically comes from three main sources: government budgets, student fees and the private sector. In addition, other sources might include employee contributions, private donations, income generating activities and external assistance (Lukman, Adam, Jibrin & Umar, 2017). There should be incentivizing of private enterprises to contribute to overall TVET financing that involves stimulating in kind private sector resources, tapping into private sector corporate social responsibility towards TVET and creating private investment in TVET capital projects. TVET must continue to develop innovative financing methods to sustain affordability and access to student education (Palmer, 2017).

Employability plays a role in sustainability of financing TVET institutions. Employability is about the capability to move self-sufficiently within the labour market to realise potential through sustainable employment (Rothwell & Rothwell, 2017). For the individual, employability depends on the knowledge, skills, and attitudes they possess, the way they use those assets and present them to employers and the context (e.g., personal circumstances and labour market environment) within which they seek work. Employability of graduates has an effect on sustainability of financing TVET programmes. Most employers are looking for graduates who are proactive and can use higher level skills

including, analysis, critique, synthesis and multi layered communication to facilitate innovative teamwork in catalysing the transformation of their organisation. Although many students invest in university education in order to achieve good academic qualifications, this valued investment is no longer sufficient to secure employment (Tran, 2019).

Graduates' attitudes towards government loans has an impact on graduate loan default and in turn sustainability of financing. This occurs when the graduates do not make the required payments or in some way the borrower does not comply with the terms of a loan (Bakar, Masud & Jusoh, 2006). Despite the fact that the loan provides financial support to students, the students tend to take the loan agreement for granted. Some believe that it is fully subsidized by the government and needs not be repaid. The consequences are the students may not be prepared for repayment and do not manage their finances well. As a result, the educational loans may affect their life after graduation and constrain their options when they graduate (De Gayardon, Callender & Green, 2019).

2.7 Operationalization and Measurement of Variables

This sub-section will identify and operationalize the key variables independent and dependent variables of the study. The operationalized is based on how the variable has been used in the current study.

Table 2.2: Operationalization and Measurement of Variables

Variable	Indicators	Data Collection tool	Data Analysis
Sustainable Financing	<ul style="list-style-type: none"> • Amount of bursary awarded • Number of students accessing loans • Amount of loan being repaid 	Questionnaire in form 5-likert scale questions	Descriptive and inferential analysis
Financing Policy and Regulations	<ul style="list-style-type: none"> • Loan repayment period • Penalties charged • Recovery methods 	Questionnaire in form of open ended and 5-likert scale questions	Descriptive and inferential analysis
Financial Diversity	<ul style="list-style-type: none"> • Number of donors • Loan recovery avenues • Finance investments avenues 	Questionnaire in form of open ended and 5-likert scale questions	Descriptive and inferential analysis

Employability of Graduates	<ul style="list-style-type: none"> • Quality of education • Demand of jobs in market • Exposure to Entrepreneurial skills 	Questionnaire in form of open ended and 5-likert scale questions	Descriptive and inferential analysis
Graduates' Attitudes Towards Government Loans	<ul style="list-style-type: none"> • Awareness information • Peer influence • Willingness to pay 	Questionnaire in form of open ended and 5-likert scale questions	Descriptive and inferential analysis

Source: Researcher (2020)

2.8 Chapter Summary

The literature review began by looking at the theories that guided the study that included Resource Dependence and Resource Mobilization Theory. In summary, theory (RDT) maintains that organizations are resource-insufficient and need resources from external actors who exert demands on the organization. Resource mobilization theory holds that social movement organizations with powerless or resource-poor beneficiaries require outside support and funding. Social movements often seek out and receive resources from conscience constituents. The literature review has established that having sound financing policies and regulations relating to TVET programmes will increase student enrolment in TVETIs which then have a significant impact on the resolvability of TVET loans. Through financial diversity there has been an increase in the number of donors, loan recovery avenue and finance investment avenues which has increased the student's enrolment rate in TVET institutions. Inability to pay due to unemployment or other unanticipated financial by many students who have completed their studies leads to increased likelihood of default in loan repayment. Finally, graduates' attitudes towards government loans also affect sustainability of TVET programmes since some students believe that the loan given by TVET loans are a form of grants which should not be repaid.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The research methodology topic gives an outline of different methodologies used in data collection, procedures incorporated in carrying out this study, the methods applied in analyzing and interpreting the collected data. Particularly, it identifies the design used in research, population, sampling, method of collecting data, pilot test, analysis of data and its presentation and ethics to be put into considerations and dissemination of study results.

3.2 Research Design

A descriptive research design was adopted that aim at determining the factors affecting the sustainability of financing of technical vocational education and training in Kenya. It was preferred for this research because it allow the analysis of various variables at a go and allow the researcher to give a description of conditions, variables, and situations (Erik & Marko, 2011). The descriptive design was also applied because it gives the researcher a room for obtaining large data volume from a substantial population in an economical, very effective and efficient way by use of questionnaires (Saunders, Lewis & Thornhill, 2012).

3.3 Research Philosophy

Research philosophy relates to the development of knowledge and the nature of that knowledge (Saunders, Lewis & Thornhill 2012). There are two research paradigms that may underpin research, that is, positivism and social constructivism. Positivism assumes in its understanding of the world that the environment and the events of interest are objective, external, and independent of the researcher (Bryman & Bell, 2015). Social constructivism, however, assumes that the understanding of the environment and events in it are socially constructed and subjective from the researcher's point of view. Positivism relies on quantitative data that positivists believe is more reliable than qualitative research. Positivism believe quantitative research is more scientific in its methods than qualitative research and thus more trustworthy (Saunders, Lewis & Thornhill 2012). The positivism research philosophy was thus appropriate for this study since the study is quantitative in nature. This was appropriate philosophy in determining the factors affecting sustainability of financing TVET programs in Kenya.

3.3 Population

Population refers to a full set of objects, cases or individuals that have some similar observable features, (Mugenda & Mugenda, 2012). As well, Kombo and Tromp (2006) states, a population is a group of items, events, households, people, elements, and services under investigation for generalizing outcomes. The target Population is the specific population under research (Kothari, 2014). Kothari (2014) notes that the target population should be characterized by traits that can be observed and which helped the researcher make generalizations on the whole population. The population of interest was 113 employees that consisted of the management staff at the finance department; Debt Management department, Lending department and External funds a Self-protection Scheme department at HELB. The staffs were chosen since they are aware of the factors affecting sustainability of financing TVET programs in Kenya.

Table 3.3: Target Population

Population Category	Population Frequency	Percentage (%)
Members of Finance Department	14	12
Members of Debt Management Department	60	53
Members of Lending Department	34	30
Members of External Mobilization and Self-Protection Scheme Department	5	4
Total	113	100.0

Source: HELB Human Resource Department (2020)

3.4 Sampling Procedure

According to Erik and Marko (2011) sampling is the process of selecting a number of individuals for a study in such a way that the individual represents a true representation of the group from which they are selected. A sample is a small group obtained from accessible population (Mugenda & Mugenda, 2012). Sampling method is the procedure a researcher uses to gather people, places, or things to study (Kombo & Tromp, 2014). Stratified random sampling technique was used since the population of interest is not homogeneous and could be subdivided into groups or strata to obtain a representative sample The population included the Chief Operations Officer (Debt Management, Lending and Documentation), the Finance Manager, Lending Manager, the Manager External Mobilization and Self-

Protection Scheme, the Assistant Manager Research and Strategy, Assistant manager External Mobilization and Self-Protection Scheme, Assistant Manager – Audit and Risk Management, Senior Credit Officers- Lending, Loan Recovery Officers – Debt Management, Assistant Manager – Audit and Risk Management, Senior Officers- External Mobilization and Self-Protection Scheme, and Accounting officers.

According to Erik and Marko (2011) stratified random sampling produces estimates the overall population parameters with greater precision and ensures a more representative sample is derived from a relatively homogeneous population. This method was used since it reduces chances of bias, and all items have an equal chance of being selected.

The study used the Yamane (1967) formula to arrive at the sample size. The selection formula is as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where n= the required sample size

N = is the Target Population (113 employees)

e = accuracy level required. Standard error = 5%

$$n = 113 / (1 + 113(0.05)^2)$$

$$n = 113 / 1.2825$$

$$n = 88$$

A sample of 88 respondents was used.

Table 3.4: Sampling frame

Population Category	Sample Size	Percentage (%)
Finance department	11	12
Debt Management department	47	53
Lending Department	26	30
External Mobilization and Self Protection Scheme Department	4	4
Total	88	100.0

3.5 Data Collection Methods

Data collection enable the researcher to accumulate information about people, objects, or a phenomenon and about the setting in which they occur. (Cooper & Schindler, 2011). The

researcher intends to employ primary data collection methods. The Primary data was collected through questionnaires which comprised of both close and open-ended questions. The questionnaire was adopted by the researcher where the questions were drafted based on each objective from the literature review. Open-ended questions (refer to appendix II) were employed in this research for purposes of enabling respondents respond to questions in their own terms. This also gave the researcher room to explore ideas that may not have been discussed yet are important. The questions need to be well thought- out as well as contemplated from the respondent's side and may consume more time to provide answers Questions that were close-ended entailed mainly the Likert scales (refer to appendix II) because they are reliable and give increased data volumes as compared to the rest of the scales.

3.6 Data Collection Procedures

Primarily, researchers deal with generating, collecting, collating, analysing data and drawing inferences from them. This study used primary data, where the former refers to information obtained from key informants. Protocol for data collection was followed attentively. The researcher first sought an approval from the University Ethics Board before research study begins. Thereafter, an approval was sought for collection of data from the National Commission for Science, Technology, and Innovation (NACOSTI) in Kenya, an agent of the Ministry of Education. Upon receiving the approvals, the researcher visited key officers within specific departments in HELB selected to participate in the study. Upon visiting the officers, the researcher explained in detail the purpose of the visit to the administration and created a rapport with the officials as well the respondents. The research adopted a drop and pick technique in the data collection process. The researcher collected responses as agreed with the respondents.

3.7 Research Quality

The researcher observed research quality by ensuring that the techniques and reports used are reliable to produce consistent reports when used by other researchers. Completeness and accuracy of the filled questionnaires was checked to ensure reliability of the data. The researcher conducted a pilot study in the three departments that were not involved in the actual study to test the survey instrument. It helped to validate the questions, remove errors of omission and commission, rectify mistakes, and check the general structure of the questionnaire. The study employed a small sample of randomly selected county staff that

did form part of the population under study to measure the reliability of the questionnaire. This was done before proceeding to collect the actual data for analysis as earlier indicated.

3.7.1 Reliability of Instruments

Reliability is the measure of whether one gets a similar result through the use of an instrument for measuring an item more than one time. Simply, reliability in research is the level by which a method used in research gives consistent and constant outcomes. A specific measure is considered to be reliable if its application on the same object of measurement number of times produces the same results (Bryman & Bell, 2015). Reliability is evaluated repeatedly through using a test–retest reliability approach of the Cronbach Alpha measure of internal consistency (Cooper & Schindler, 2011). For this study reliability was measured using Cronbach alpha. It tests internal consistency used to calculate correlation values among responses on an assessment tool. Cronbach’s Alpha (α) points out the degree to by which the instruments of measurement would be considered as measuring one variable. The 0.70 is the level acceptable that is the desirable reliability (Bell & Bryman, 2015).

Table 3.5: Reliability Analysis Results

Factor	Cronbach's Alpha	Comments
Financing Policy	0.823	Accepted
Financial Diversity	0.772	Accepted
Employability of Graduates	0.728	Accepted
Graduates’ Attitudes Towards Government Loans	0.818	Accepted
Sustainability of Financing	0.734	Accepted

After the test, all the alpha characteristics were more than 0.7 as shown in Table 3.5. financing policy had an alpha estimation of 0.823, financial diversity had Cronbach's alpha estimation of 0.772 while employability of graduates had a Cronbach's alpha estimation of 0.728. Graduates’ attitudes towards government loans had Cronbach's alpha estimation of 0.818 while sustainability of financing had Cronbach's alpha estimation of 0.734. This was an indication that there was consistency in responses in the questionnaire and thus the questionnaire was deemed to be reliable.

3.7.2 Validity of Instruments

The researcher in this case sought to establish in the first instance whether the set of questions asked adequately address the study objectives. This should comprise of whether or not the manner in which answers are recorded is appropriate. Content validity was further established through consultation with the researcher's supervisor. Content validity was applied in this research which measures the level by which collected data by use of particular instruments mirrors a particular content or domain of specific concept. To achieve this, the researcher proofread the questionnaire to ensure that there were no errors both typographical and in form and where they occurred the questions were edited. The feedback from the pre-test formed the basis for reviewing the questionnaire before final administration.

3.7.3 Pilot Test

The questionnaires were subjected to pre-testing since it allows for clarity of the instrument to the respondents. Pre-testing enables the researcher to get familiar to the area of study and the procedure of administration and also recognizing items which need modification (Cooper & Schindler, 2011). The outcomes from the pre-test assisted in correction of the mistakes from the instruments for purposes of capturing the desired outcome. Pretesting made sure that there are clear statement of every item and that there was similar interpretation to every respondent (Kothari, 2014). A pretest of 7 respondents from HELB who did not form part of the study were selected for purposes of forming the pretest study. Mugenda and Mugenda (2012) stated that 10% of a size of a sample is sufficient to form the pre-test group. A pretest study should be done before the main research in order to cater for any sensitive, confusing, or biased items that may be omitted (Kothari, 2014). The pilot study established that the research instruments were reliable, and they were also valid hence the data did not suffer from any inconsistencies.

3.8 Data Analysis and Presentation

The collected data was both qualitative and quantitative. Descriptive statistics was used in analyzing the data both qualitatively and quantitatively. The quantitative data in descriptive form was in form of mean, standard deviation, frequency, and percentages. Additionally, advance statistical approaches were taken into consideration in the form of inferential statistics. Analysis of data was carried out by employing SPSS version 23 and the results

were presented in form of tables. For qualitative analysis of data, it was carried out by the application of content analysis and presentation of outcomes was in pros form.

A multivariate regression model was used in establishing the relationship amongst the studied factors. The study terms the method of regression as being important as a result of its potential in testing the kind of influence generated by the independent variables on dependent ones. Regression as well is capable of estimating the linear equation's coefficients, comprising one or many independent variables, that best estimates the dependent variable's value (Cooper & Schindler, 2011). The linear regression model was applied in assessment of the combined impact of the independent variables and dependent variable.

The regression model was as follows:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Where:

Y = Sustainability of Financing

X₁= Financing Policy and Regulations

X₂= Financial Diversity

X₃= Employability of Graduates

X₄= Graduates' Attitudes Towards Government Loans

β_0 = Constant Term; β_1 , β_2 , β_3 and β_4 = Beta coefficients which was employed for measuring dependent variable's sensitivity (Y) to a change in a unit of predictor variables.

ε = Error term

Regression analysis was important in this study as it showed the strength and the direction of the relationship that is whether each of the independent variable has a positive or negative relationship with the dependent variable.

3.9 Ethical Considerations

The researcher sought necessary approvals before the research study began. The researcher wrote an introductory letter to respondents to assure them that the research was purely for academic purposes. The researcher then introduced herself to the target respondents to explain what the study entails, the purpose of the study and the benefits of the study to the

respondents. It was necessary to make clear that the purpose of the study is purely academic in order to enhance knowledge and purpose to share the final research document with HELB. The research upheld the ethical rights of the respondents when administering the questionnaire. The researcher emphasized that responding to the questionnaire is voluntary. The respondents maintained the right to withdraw from the study at any point in the study. The respondents were also assured that their identity and information provided remain confidential and would not be used against them.



CHAPTER FOUR: PRESENTATION OF RESEARCH FINDINGS

4.1 Introduction

The chapter presents the research findings, the analysis and interpretation of the findings. The chapter presents the response rate, the background information and analysis of the findings on specific objectives. Descriptive and inferential statistics have been used in the study.

4.2 Response Rate

The study sampled 88 respondents out of which 73 were able to complete the questionnaires. This forms a response rate of 83%. This response rate was satisfactory to make conclusions for the study. The response rate was representative.

4.3 Demographic Characteristics

The study sought to find out the respondents' gender. From the findings, majority of the respondents were male and 44% were female. The findings show that there was a fair representation of both genders.

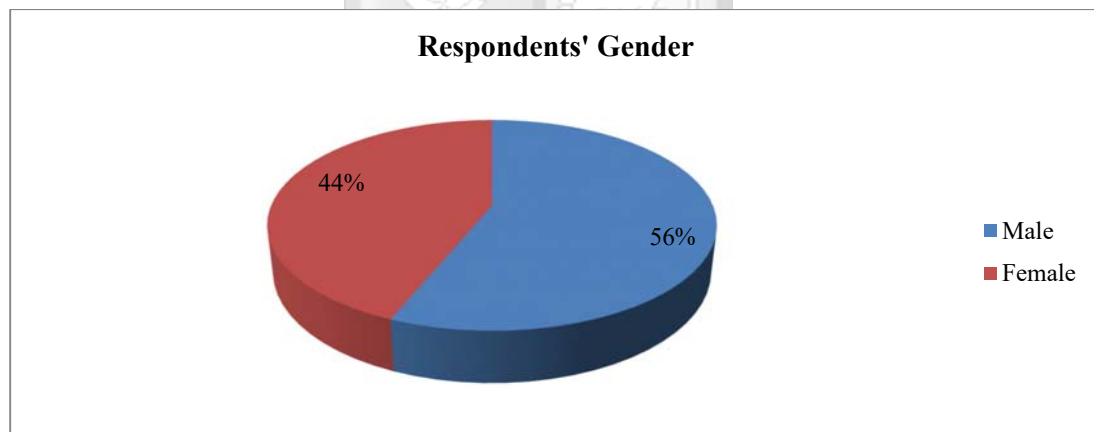


Figure 4.2: Gender

The respondents were requested to indicate their age brackets. The findings show that 50.7% of the participants were 31-40 years, 21.9% were 41-50 years, 15.1% were 20-30 years while 12.3% were above 52 years.

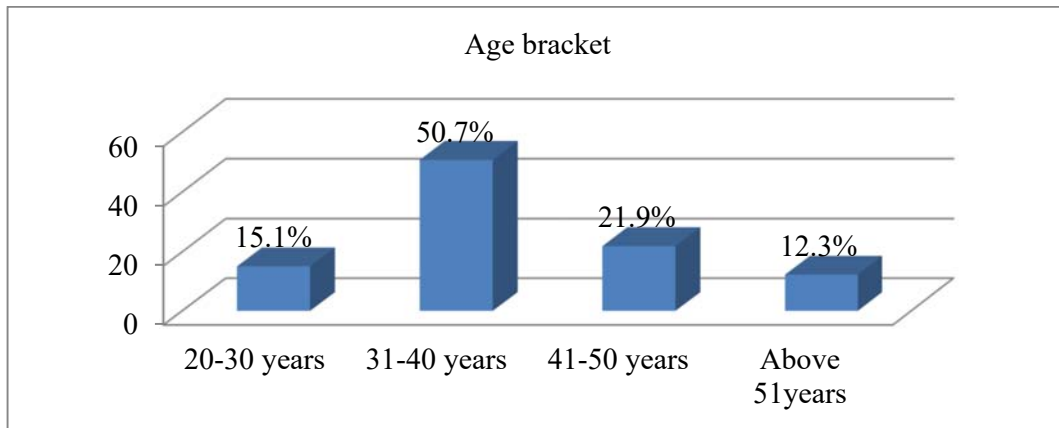


Figure 4.3: Age bracket

The study sought to establish the respondents' education level. The findings were as in Figure 4.4. From the findings, 75% of the respondents were attained the level of Bachelor's degree and 25% were at the postgraduate level of education. The findings imply that the respondents were literate and understood the concepts and questions of the study.

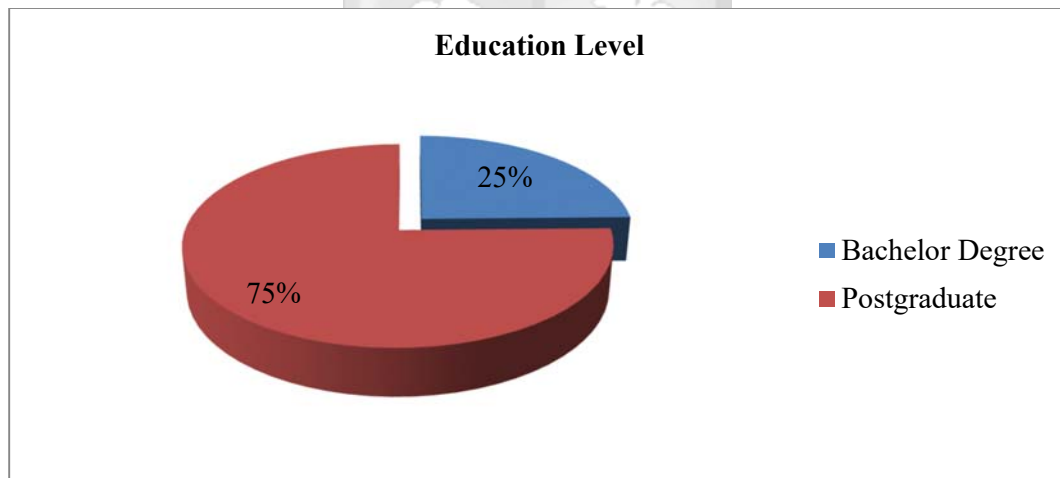


Figure 4.4: Highest level of Education

The study sought to establish the period of service of the respondents at HELB. The findings were as presented in Figure 4.4. The findings show that 46.6% of the respondents had worked at HELB for a period of above 22 years, 31.5% for a period of 0-5 years and 21.9% for a period of 6-10 years.

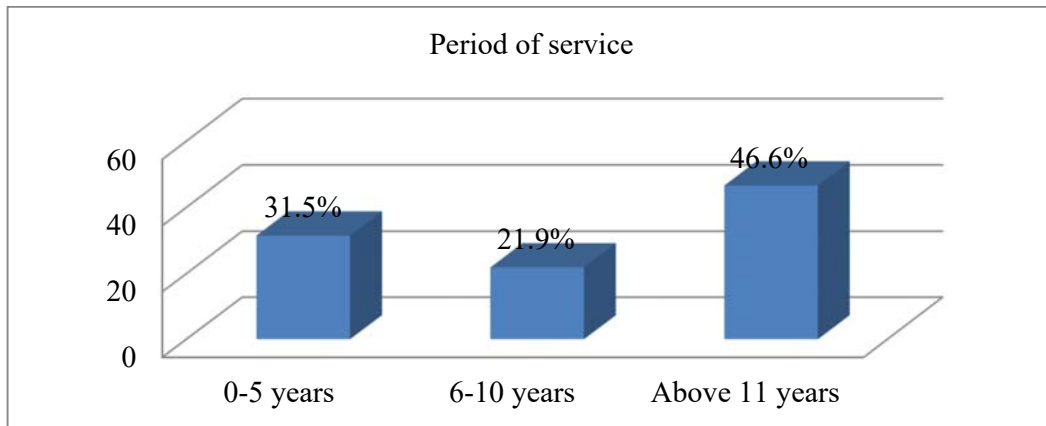


Figure 4.5: Period worked at HELB

4.4 Financing Policy and Regulations and Sustainability of Financing

4.4.1 Descriptive Analysis

On the financial policies and regulations that HELB has put in place to ensure that the loan from TVET is sustainable, HELB has directed TVET management to put in place sound and effective financing policy and regulations. This will in turn ensure accountability and proper management of funds allocated. HELB has directed that TVET institutions have an effective and independent internal audit department to ensure that the finances are prudently utilised. HELB has also directed TVET institutions to have a proper criterion for granting loans as well as effective and efficient recovery of the existing loans so as to ensure sustainability of financing in the near future. Punitive measures should be taken by HELB on loan defaulters so as to ensure that they repay back the loan on time to ensure that TVET institutions financing is sustainable.

The respondents were further requested to indicate their level of agreement with the following statements that relate to the financing policy and regulations of TVET in Kenya. The findings were as presented in Table 4.7.

Table 4.6: Statements on Financing Policy and Regulations

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Std. Dev
There is compliance with financial policy and regulations governing the award of TVET loans	37	31	3	2	0	1.60	0.49
There is accountability of the funds allocated to TVET programmes	48	15	7	3	0	1.52	0.56
There is involvement of all stakeholders in TVET loans award and recovery decision making	36	16	14	7	0	1.89	0.68
There are proper system and procedures for recovering loans from TVET students	11	36	7	11	8	2.58	0.78
There is sufficient loan repayment period to enable TVET students' beneficiaries repay their loans	12	37	13	7	4	2.38	0.62
There is proper link of financing policy and regulations strategies on TVET programmes sustainability	17	37	11	6	2	2.16	0.73

From the closed ended questions, majority of the respondents strongly agreed that there is accountability of the funds allocated to TVET programmes as shown by a mean of 1.52 which is in the strongly agree range of 1 to 1.8. The response variation was low as shown by a standard deviation of 0.56 which is below 1. Moreover, the respondents also strongly agreed that there is compliance with financial policy and regulations governing the award of TVET loans as demonstrated by a mean of 1.60 which ranges at the strongly agree scale range of 1 to 1.8. The responses had a low variation as shown by a standard deviation of 0.49.

The respondents agreed that there is involvement of all stakeholders in TVET loans award and recovery decision making as illustrated by a mean of 1.89. The response variation was low as shown by a standard deviation of 0.68. The respondents agreed that there is proper link of financing policy and regulations strategies on TVET programmes sustainability as

shown by a mean of 2.16 which ranges at the agree range of 1.8 to 2.6. The variation in the responses was low at a standard deviation of 0.73.

The respondents further agreed that there is sufficient loan repayment period to enable TVET students' beneficiaries repay their loans as demonstrated by a mean of 2.38 which was in the range of agree which ranges between 1.8 to 2.6. The standard deviation was less than 1 (0.62) and indication that the responses had a low variation. The respondents also agreed that there are proper system and procedures for recovering loans from TVET students as shown by a mean of 2.58 which at the range of agree at between the mean of 1.8 to 2.6. The standard deviation was 0.78 and indication that the responses had minimal variation as it is below 1. Consistently, Wango and Gatere (2016) found that financial accountability ought to be incorporated in the leadership and management of schools in order to curb financial malpractices.

4.4.2 Inferential Statistics

This section presents regression analysis on influence of financing policy and regulations on sustainability of financing. A linear regression analysis was conducted to test the influence of financing policy and regulations on sustainability of financing. The model summary is presented in the Table 4.7.

Table 4.7: Regression Test of Financing Policy and Regulations and Sustainability of Financing

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.498	.248	.246	.44216		
Model	Sum of Squares		df	Mean Square	F	Sig.
	Regression	5.565	1	5.565	28.393	.000
1	Residual	13.916	71	0.196		
	Total	19.481	72			
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
	(Constant)	1.888	.274		6.882	.000
1	Financing policy and regulations	0.526	0.133	0.198	3.955	.000

R which is the correlation coefficient showed that there existed a moderate positive relationship between financing policy and regulations on sustainability of financing as

indicated by the correlation coefficient of 0.498. The R-squared, also called the coefficient of determination is the percent of the variance in the dependent variable explained uniquely or jointly by the independent variables. The model had a coefficient of determination (R^2) of 0.248 and which implied that 24.8% of the variations on sustainability of financing were explained by financing policy and regulations.

From the ANOVA, the study established that the regression model had a significance level of 0.000% which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5%. The calculated value was greater than the critical value ($28.393 > 3.976$) an indication that financing policy and regulations had a significant effect on sustainability of financing. The significance value was less than 0.05 indicating that the model was significant.

From the regression model obtained above, a unit change in financing policy and regulations while holding other factors constant would positively change sustainability of financing by a factor of 0.526. The p-value was 0.000, an indication that financing policy and regulations had a significant influence on sustainability of financing at 5% significance level.

4.5 Financial Diversity and Sustainability of Financing

4.5.1 Descriptive Analysis

From the open-ended questions, the respondents were requested to indicate how HELB can enhance its financial diversity so as to increase the sustainability of TVET programmes. The respondents indicated that HELB should increase the avenues through which TVET institutions are financed through collaboration with the private sector and other donors. HELB should promote the cost-sharing system of financing where the parents should be encouraged to save or borrow money to finance their children's higher education. HELB should also work closely with the government so as to ensure that there is increase in the funds allocated to TVET institutions in the budget making process as there is increasing demand for TVET education.

The study further requested the respondents to indicate their level of agreement with the following statements that relate to the employability of graduates emerging from TVET programmes in Kenya.

Table 4.8: Statements on Financial Diversity

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Std. Dev
There is higher dependence on donor funding to fund TVET programmes	6	10	15	34	8	3.38	0.95
There is higher dependence on government own funding to fund TVET programmes	43	24	4	2	0	1.52	0.58
There is higher dependence on past student's loan recoveries to fund TVET programmes	9	28	19	13	4	2.66	1.10
HELB generates its own fund through internal investments to fund TVET programmes	8	30	13	14	8	2.78	1.07
The funds allocated for implementation of TVET programmes are sufficient	8	14	14	24	13	3.27	0.99
The HELB revolving fund is sufficient to ensure sustainability of TVET programmes	3	10	15	29	16	3.62	0.98

From the open-ended questions, the findings reveal that majority of the respondents strongly agreed that there is higher dependence on government own funding to fund TVET programmes as illustrated by a mean of 1.52 which is in the range of strongly agree between the mean of 1 to 1.8. The responses had a low variation as since the standard deviation (0.58) was less than 1. The respondents were neutral on the statement that there is higher dependence on past student's loan recoveries to fund TVET programmes as shown by a mean of 2.66 which is the neutral range of between the mean of 2.6 to 3.4. The responses had a greater variation as shown by a standard deviation of 1.10 which is more than the threshold of 1.

The respondents were also neutral on the aspect that HELB generates its own fund through internal investments to fund TVET programmes as demonstrated by a mean of 2.78 which is in the neutral range of between 2.6 to 3.4. There was a high variation in the responses as shown by a standard deviation of 1.07 as it was more than 1. The respondents were also undecided on whether the funds allocated for implementation of TVET programmes are sufficient as depicted by the mean of 3.27 which is at the range of 2.6 to 3.4. The

respondents' responses had low variation as supported by the standard deviation of 0.99 since it is below the threshold 1.

The study found that the respondents were undecided that there is higher dependence on donor funding to fund TVET programmes as demonstrated by the mean of 3.38. The mean was in the range of disagree between 2.6 to 3.4. The variation of the responses was low since the standard deviation value (0.95) was below the threshold of 1. The respondents disagreed that the HELB revolving fund is sufficient to ensure sustainability of TVET programmes as illustrated by a mean of 3.62. This mean lies in the range of disagree which is 3.4 to 4.2. The responses had a low variation as shown by a mean of 0.98. Consistent to the findings, Ngerechi (2016) found that increased student enrolment in higher education in Africa has not been awarded equivalent public funding.

4.5.2 Inferential Statistics

This section presents regression analysis on influence of financial diversity on sustainability financing.

Table 4.9: Regression Test of Financial Diversity on Sustainability Financing

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.544	.296	.286	.37847	

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.276	1	4.276	29.849	.000 ^b
	Residual	10.170	71	.143		
	Total	14.446	72			

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	1.002	.250		4.011	.000
	Financial diversity	.468	.086	.544	5.463	.000

From model summary table, R which is the correlation coefficient showed that there existed a moderate positive relationship between financial diversity on sustainability of financing as indicated by the correlation coefficient of 0.544. The R-squared, also called the coefficient of determination is the percent of the variance in the dependent variable explained by the independent variables. The model had a coefficient of determination (R^2)

of 0.296 and which implied that 29.6% of the variations on sustainability of financing were explained by financial diversity.

From the ANOVA results the study established that the regression model had a significance level of 0.000% which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5%. The calculated value was greater than the critical value ($29.849 > 3.976$) an indication that financial diversity had a significant effect on sustainability of financing. The significance value was less than 0.05 indicating that the model was significant.

From the regression model obtained above, a unit change in financial diversity while holding other factors constant would positively change sustainability of financing by a factor of 0.468. The p-value was 0.000, an indication that financial diversity had a significant influence on sustainability of financing at 5% significance level.

4.6 Employability of Graduates

4.6.1 Descriptive Analysis

The respondents were asked to indicate their level of agreement with the following statements that relate to the employability of emerging from TVET programme in Kenya.

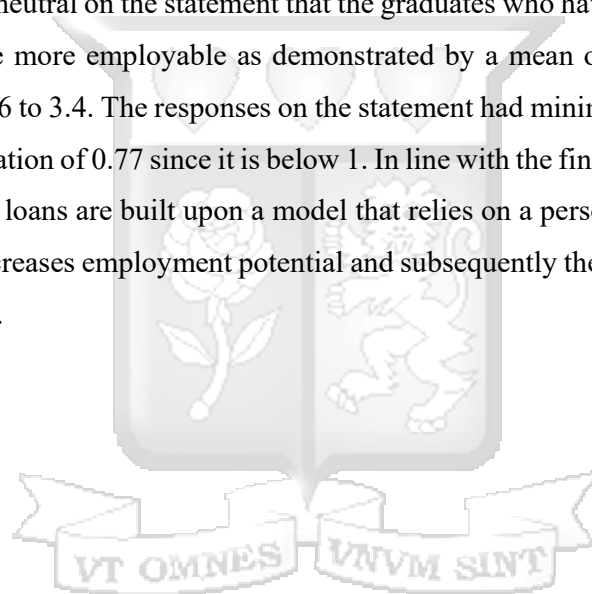
Table 4.10: Statements on Employability of Graduates

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Std. Dev
Inability to pay due to unemployment is a major factor that affect TVET programmes sustainability	34	28	7	4	0	1.74	0.78
The graduates who are self-employed tend to repay their loans faster	6	15	25	20	7	3.10	0.96
The graduates who have undertaken technical courses tend to be more employable	19	31	10	9	4	2.29	0.79
The graduates who have undertaken business courses tend to be more employable	4	11	18	29	10	3.37	0.77
The university and the college of learning attended affect employability of graduates	8	28	17	12	8	2.78	0.82

As presented in Table 4.10 majority of the respondents strongly agreed that inability to pay due to unemployment is a major factor that affects TVET programmes sustainability as shown by a mean of 1.74 which is in the strongly agreed category of between 1 to 1.8. The responses were less diverse as the standard deviation was 0.78 which is less than the

recommended threshold of 1. The respondents agreed that the graduates who have undertaken technical courses tend to be more employable as depicted by a mean of 2.29 which lies at the agree category of between 1.8 to 2.6. The responses were less diverse as shown by a standard deviation of 0.79.

The respondents were however neutral on the statement that the university and the college of learning attended affect employability of graduates as depicted by a mean of 2.78 which lies at the neutral category of a range of 2.6 to 3.4. The standard deviation was 0.82 which is below 1 meaning that the responses were less diverse. The respondents were also neutral on the statement that the graduates who are self-employed tend to repay their loans faster as illustrated by a mean of 3.10 and a standard deviation of 0.96. Additionally, the respondents were neutral on the statement that the graduates who have undertaken business courses tend to be more employable as demonstrated by a mean of 3.37 which is in the neutral range of 2.6 to 3.4. The responses on the statement had minimal deviation as shown by a standard deviation of 0.77 since it is below 1. In line with the findings, Akoojee, (2016) found that student loans are built upon a model that relies on a person's borrowing to earn a degree which increases employment potential and subsequently the ability to pay off their student loan debts.



4.6.2 Influence of the Employability of Graduates on Sustainability Financing

This section presents regression analysis on influence of the employability of graduates and sustainability financing.

Table 4.11: Regression of Employability of Graduates and Sustainability Financing

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.417	.174	.162	.40999		
Model	Sum of Squares		df	Mean Square	F	Sig.
1	Regression	2.511	1	2.511	14.937	.000 ^b
	Residual	11.935	71	.168		
	Total	14.446	72			
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
	(Constant)	1.274	.282		4.522	.000
1	Employability of graduates	.081	.021	.417	3.865	.000

From the above table, R which is the correlation coefficient showed that there existed a moderate positive relationship between employability of graduates on sustainability of financing as indicated by the correlation coefficient of 0.417. The R-squared, also called the coefficient of determination is the percent of the variance in the dependent variable explained by the independent variables. The model had a coefficient of determination (R^2) of 0.174 and which implied that 17.4% of the variations on sustainability of financing were explained by employability of graduates.

From the ANOVA, the study established that the regression model had a significance level of 0.000% which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5%. The calculated value was greater than the critical value ($14.937 > 3.976$) an indication that employability of graduates had a significant effect on sustainability of financing. The significance value was less than 0.05 indicating that the model was significant.

From the regression model, a unit change in employability of graduates while holding other factors constant would positively change sustainability of financing by a factor of 0.081.

The p-value was 0.000, an indication that employability of graduates had a significant influence on sustainability of financing at 5% significance level.

4.7 Graduates' Attitudes towards Government Loans

4.7.1 Descriptive Analysis

The study sought to determine the effect of graduates' attitudes towards government loans on the sustainability of financing of TVET in Kenya. The findings were as in Table 4.12.

Table 4.12: Effect of Graduates' Attitudes Towards Government Loans

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Std. Dev
The seminars and sensitization forums in place to sensitize graduates to repay their loans are effective	15	26	16	12	4	2.51	0.96
Graduates believe that the loan given by TVET loans are a form of grants which should not be repaid back	5	9	18	30	11	3.45	1.01
Most of the graduates are not motivated to repay the TVET loans	13	20	13	18	9	2.86	0.98
Lack of strict measures on recovery of TVET loans contribute to low repayment	8	16	21	17	11	3.10	1.06
The penalties charged on TVET loans contribute to low repayment	3	11	19	23	17	3.55	0.94
The future earnings of graduate students influence TVET loans repayment	21	32	12	6	2	2.12	0.85

The open-ended questions reveal that the respondents agreed that the future earnings of graduate students influence TVET loans repayment as demonstrated by a mean of 2.12 which lies in the agree range of 1.8 to 2.6. The standard deviation was 0.85 depicting that the responses were less diverse since it was less than the threshold of 1. The respondents also agreed that the seminars and sensitization forums in place to sensitize graduates to repay their loans are effective as shown by a mean of 2.51 and a standard deviation of 0.96. However, the respondents were neutral on the statements that most of the graduates are not motivated to repay the TVET loans as illustrated by a mean of 2.86 which lies at the range of neutral of 2.6 to 3.4. The responses had less deviation as shown by a mean of 0.98 which is less than the threshold of 1.

The respondents were neutral on the statement that lack of strict measures on recovery of TVET loans contribute to low repayment as shown by a mean of 3.10 which lies at the range of 2.6 to 3.4. The respondents' opinions were diverse as shown by the standard deviation of 1.06 which is more than 1.

The respondents disagreed on the statement that graduates believe that the loan given by TVET loans are a form of grants which should not be repaid back as demonstrated by a mean of 3.45 which is at the disagree range of 3.4 to 4.2. The responses were diverse as shown by a standard deviation of 1.01. The respondents finally disagreed that the penalties charged on TVET loans contribute to low repayment as shown by a mean of 3.55 which is at the disagree range of 3.4 to 4.2. The responses were less diverse as shown by a standard deviation of 0.94 which is below 1. Kapsalis (2016) established that the ability of students to repay their loans depended primarily on their future earnings rather than on the size of debt incurred.

4.7.2 Influence of the Graduates' Attitudes towards Government Loans on Sustainability of Financing

This section presents regression analysis on influence of the graduates' attitudes towards government loans on sustainability of financing.

Table 4.13: Influence of the Graduates' Attitudes towards Government Loans on Sustainability of Financing

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.386	.149	.137	.41602		
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	2.158	1	2.158	12.466	.001 ^b
1	Residual	12.288	71	.173		
	Total	14.446	72			
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	1.390	.275		5.050	.000
1	Graduates' attitudes towards government loans	.326	.092	.386	3.531	.001

R which is the correlation coefficient showed that there existed a weak positive relationship between graduates' attitudes towards government loans on sustainability of financing as indicated by the correlation coefficient of 0.386. The R-squared, also called the coefficient of determination is the percent of the variance in the dependent variable explained by the independent variables. The model had a coefficient of determination (R^2) of 0.149 and which implied that 14.9% of the variations on sustainability of financing were explained by graduates' attitudes towards government loans.

From the ANOVA Table 4.25, the study established that the regression model had a significance level of 0.001% which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5%. The calculated value was greater than the critical value ($12.466 > 3.976$) an indication that graduates' attitudes towards government loans had a significant effect on sustainability of financing. The significance value was less than 0.05 indicating that the model was significant.

From the regression model, a unit change in graduates' attitudes towards government loans while holding other factors constant would positively change sustainability of financing by a factor of 0.326. The p-value was 0.001, an indication that graduates' attitudes towards government loans had a significant influence on sustainability of financing at 5% significance level.



4.8 Sustainability of Financing

The respondents were required to indicate their level of agreement with the following statements that relate to the sustainability of financing of TVET in Kenya.

Table 4.14: Statements on Sustainable Financing

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Disagree	Mean	Std. Dev
There has been an increase in the amount of bursary awarded in the last 5 years	7	24	27	11	4	2.74	1.20
There has been an increase in the number of students accessing loans in the last 5 years	47	23	3	0	0	1.40	0.55
There has been an increase in amount of loan being repaid in the last 5 years	38	20	10	5	0	1.75	0.62
HELB manages debt from TVET loans and ensures the debts accrued are less than the previous year	7	14	31	16	5	2.97	0.91
There are proper financial policies and regulations in place to ensure TVET programmes sustainability	14	24	27	6	2	2.42	0.78
HELB has diversified its revenue sources to ensure TVET programmes sustainability	13	30	10	16	4	2.56	0.91
The employment rate of TVET graduates has increased in the last 5 years which has enhanced their loans repayment	17	23	13	14	6	2.58	0.72

The open-ended questions show that majority of the respondents strongly agreed that there has been an increase in the number of students accessing loans in the last 5 years. This is as demonstrated by a mean of 1.40 which lies at the strongly agree range of 1 to 1.8. The standard deviation was 0.55 implying the responses were less diverse since it was below 1. The respondents also strongly agreed that there has been an increase in amount of loan being repaid in the last 5 years as depicted by the mean of 1.75 with a low response deviation as shown by a standard deviation of 0.62.

The findings agreed that there are proper financial policies and regulations in place to ensure TVET programmes sustainability as shown by a mean of 2.42 which lies at the agree range of 1.8 to 2.6. The standard deviation as 0.78 implying that the responses were not diverse since it was below 1. The respondents further agreed that HELB has diversified its revenue sources to ensure TVET programmes sustainability as demonstrated by a mean of

2.56 which lies at the range of agree of 1.8 to 2.6 and a standard deviation of 0.91 showing that the responses were not so diverse.

The findings also show that the respondents agreed that the employment rate of TVET graduates has increased in the last 5 years which has enhanced their loans repayment as illustrated by a mean of 2.58 and a standard deviation of 0.72. However, the respondents were neutral on the statements that there has been an increase in the amount of bursary awarded in the last 5 years as shown by a mean of 2.74 which lie at the neutral range of 2.6 to 3.4. The responses were diverse as shown by a standard deviation of 1.20 since it's above the recommended threshold of 1. The respondents were also neutral on the statement that HELB manages debt from TVET loans and ensures the debts accrued are less than the previous year as shown by a mean of 2.97 and a standard deviation of 0.91 showing that the responses were less diverse.

4.9 Overall Relationship

A multiple regression analysis was conducted to test the influence of factors affecting sustainability of financing and sustainability of financing. The model summary is presented in the Table 4.15.

Table 4.15: Overall Relationship

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.708	.501	.472	.20207		
Model	Sum of Squares		df	Mean Square	F	Sig.
1	Regression	2.79	4	0.697	17.08	.000 ^b
	Residual	2.777	68	0.041		
	Total	5.566	72			
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1	(Constant)	0.231	0.466		0.496	0.002
	Financing Policy	0.046	0.074	0.065	0.627	0.003
	Financial Diversity	0.380	0.073	0.445	5.169	0
	Employability of Graduates	0.338	0.074	0.461	4.539	0
	Graduates' Attitudes towards Government Loans	0.115	0.079	0.134	1.465	0.001

R which is the correlation coefficient showed that there existed a strong positive relationship between factors affecting sustainability of financing on sustainability of financing as indicated by the correlation coefficient of 0.708. The R-squared, also called the coefficient of determination is the percent of the variance in the dependent variable explained uniquely or jointly by the independent variables. The model had a coefficient of determination (R^2) of 0.472 and which implied that 47.2% of the variations on sustainability of financing were explained by factors affecting sustainability of financing.

From the ANOVA, the study established that the regression model had a significance level of 0.000% which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5%. The calculated value was greater than the critical value ($17.08 > 2.507$) an indication that factors affecting sustainability of financing had a significant effect on sustainability of financing. The significance value was less than 0.05 indicating that the model was significant.

From the regression model obtained above, a unit change in financing policy and regulations while holding other factors constant would positively change sustainability of financing by a factor of 0.046. A unit change in financial diversity while holding other factors constant would positively change sustainability of financing by a factor of 0.38. A unit change in employability of graduates while holding other factors constant would positively change sustainability of financing by a factor of 0.338. A unit change in graduates' attitudes towards government loans while holding other factors constant would positively change sustainability of financing by a factor of 0.115. The p-value was 0.000, an indication that financing policy and regulations had a significant influence on sustainability of financing at 5% significance level.

4.10 Chapter Summary

The study found a positive relationship between financing policy and regulations on sustainability of financing of TVET. There existed a moderate positive relationship between financing policy and regulations on sustainability of financing. The study found that there is accountability of the funds allocated to TVET programmes. There existed a moderate positive relationship between financial diversity on sustainability of financing. A unit change in financial diversity while holding other factors constant would positively change sustainability of financing. The study further revealed that inability to pay due to unemployment is a major factor that affects TVET programmes sustainability. The

graduates who have undertaken technical courses tend to be more employable. There exists positive relationship between graduates' attitudes towards government loans on sustainability of financing of TVET.



CHAPTER FIVE: DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter presents the discussion of the findings, the conclusion, and recommendations of the study. The general objective of the study was to determine the factors affecting sustainability of financing TVET programs in Kenya. The specific objectives were to determine the effect of financing policy and regulations on the sustainability of financing of TVET in Kenya, to establish the effect of financial diversity on the sustainability of financing of TVET in Kenya, to determine the effect of employability of graduates on the sustainability of financing of TVET in Kenya and to determine the effect of graduates' attitudes towards government loans on the sustainability of financing of TVET in Kenya.

5.2 Discussions

5.2.1 Financing Policy and Regulations and Sustainability of Financing

The study sought to determine the effect of financing policy and regulations on the sustainability of financing of TVET in Kenya. The study found a positive relationship between financing policy and regulations on sustainability of financing of TVET. There existed a moderate positive relationship between financing policy and regulations on sustainability of financing. A unit change in financing policy and regulations while other factors are held constant would positively change sustainability of financing. Consistently Shuqair and Abdel-Aziz (2015) found that financing policy and regulations has an association with sustainability of financing.

The study found that there is accountability of the funds allocated to TVET programmes. The findings were consistent to Wango and Gatere (2016) findings that financial accountability ought to be incorporated in the leadership and management of schools in order to curb financial malpractices. The study revealed that there is compliance with financial policy and regulations governing the award of TVET loans. The involvement of all stakeholders in TVET loans award and recovery decision making. The study established that there is proper link of financing policy and regulations strategies on TVET programmes sustainability. There is sufficient loan repayment period to enable TVET students' beneficiaries repay their loans. The findings are consistent with Resource Dependency theory which indicates that organizations are resource-insufficient and thus they should put in place proper financing policy and regulations to adequately manage the scarce resources.

5.2.2 Financial Diversity and Sustainability Financing

The study sought to evaluate the effect of financial diversity on the sustainability of financing of TVET in Kenya. The study found a positive relationship between financial diversity on sustainability of financing of TVET. There existed a moderate positive relationship between financial diversity on sustainability of financing. A unit change in financial diversity while holding other factors constant would positively change sustainability of financing. The findings concur with Kerine (2015) who established that financial diversity is highly correlated with sustainability of financing.

The findings reveal that is higher dependence on government own funding to fund TVET programmes. There is moderate dependence on past student's loan recoveries to fund TVET programmes. The study revealed that HELB does not generate its own funds through internal investments. More so the funds allocated for implementation of TVET programmes are not sufficient. These findings concur with Kiguta (2017) who found that there was delay in financing implementation of vocational training centers projects in sue to limited resources. Furthermore, the study revealed that HELB revolving fund is not sufficient to ensure sustainability of TVET programmes. The findings are in line with Resource Mobilization theory which indicates that institutions can mobilize both material and non-material resources through diversifying of their resource to enhance their TVET programmes.

5.2.3 Employability of Graduates and Sustainability Financing

The third objective of the study was to assess the effect of employability of graduates on the sustainability of financing of TVET in Kenya. There was a positive relationship between employability of graduates on sustainability of financing of TVET. The regression analysis coefficient showed that there existed a moderate positive relationship between employability of graduates on sustainability of financing. A unit change in employability of graduates while holding other factors constant would positively change sustainability of financing. In line with the study findings, Mwaura and Mwangi (2015) found a string relationship between employability and loan repayment.

The study further revealed that inability to pay due to unemployment is a major factor that affects TVET programmes sustainability. The graduates who have undertaken technical courses tend to be more employable. To some extent university and the college of learning attended affect employability of graduates. To some extent, the graduates who are self-

employed tend to repay their loans faster. Similar research observations were made by Mbugua, Muthaa and Sang (2016) who found that employment increases the likely hood of loan repayment. The findings are in line with Resource-Dependency theory and Resource Mobilization theory that indicates that ensuring that institutions are resource dependent and are able to mobilize resources will ensure employability of graduates and sustainability financing.

5.2.4 Graduates' Attitudes Towards Government Loans and Sustainability of Financing

The study sought to the effect of graduates' attitudes towards government loans on the sustainability of financing of TVET in Kenya. The study found a positive relationship between graduates' attitudes towards government loans on sustainability of financing of TVET. The regression coefficient showed that there existed a weak positive relationship between graduates' attitudes towards government loans on sustainability of financing. A unit change in graduates' attitudes towards government loans while holding other factors constant would positively change sustainability of financing. The findings concur with Christie and Munro (2015) findings, that students' perception of the costs and benefits of student loans affects the repayment of the loans.

The study found that the future earnings of graduate students influence TVET loans repayment. Similar to the findings, Kapsalis (2016) established that the ability of students to repay their loans depended primarily on their future earnings rather than on the size of debt incurred. The findings revealed that seminars and sensitization forums in place to sensitize graduates to repay their loans are effective. The findings further revealed that most of the graduates are not motivated to repay the TVET loans. Graduates do not believe that the loans given by TVET loans are a form of grants which should not be repaid back. The penalties charged on TVET loans do contribute to low repayment. In line with the study findings, Mungai (2015) found that the penalties charged on HELB loans encourage borrowers to repay. The findings are in line with Resource-Dependency theory and Resource Mobilization theory that indicates that ensuring that institutions are resource dependent and are able to mobilize resources will ensure employability of graduates and in turn enhance their graduates' chances of loan repayment.

5.3 Conclusions

The study sought to determine the effect of financing policy and regulations on the sustainability of financing of TVET in Kenya. It was found from the regression model that a change in financing policy and regulations affected sustainability of financing. The study thus concludes that the financing policies and regulations employed by the TVET institutions have an impact on sustainability of financing of TVET in Kenya. Thus, there should be accountability of the funds allocated to TVET programmes and compliance with financial policy and regulations governing the award of TVET loans.

The study sought to establish the effect of financial diversity on the sustainability of financing of TVET in Kenya. It was found from the regression model that a change in financial diversity affected the sustainability of financing of TVET. It was thus concluded that financial diversity plays a role in enhancing the sustainability of financing of TVET in Kenya. TVET institutions should thus diversify their funding and reduce the high dependence on government funding to fund TVET programmes through generation of its own fund through internal investments.

The study sought to determine the effect of employability of graduates on the sustainability of financing of TVET in Kenya. It was noted from the regression model that a change in employability of graduates affected the sustainability of financing of TVET. It was thus concluded that employability of graduates plays a role on the sustainability of financing of TVET in Kenya since inability to pay due to unemployment is a major factor that affects TVET programmes sustainability. Further, the graduates who have undertaken technical courses tend to be more employable.

The study sought to determine the effect of graduates' attitudes towards government loans on the sustainability of financing of TVET in Kenya. It was noted from the regression model that a change in graduates' attitudes towards government loans affected sustainability of financing of TVET in Kenya. The study thus concludes that the graduates' attitudes towards government loans play a role in enhancing sustainability of financing of TVET in Kenya. This is because future earnings of graduate students influence TVET loans repayment. In addition, the seminars and sensitization forums in place to sensitize graduates to repay their loans are effective.

Based on the regression model it was concluded that financial diversity had the highest effect on sustainability of financing followed by financing policy, employability of graduates and finally graduates' attitudes towards government loans.

5.4 Recommendations

5.4.1 Policy and Regulatory Recommendations

The study findings revealed a positive and significant relationship between financing policy and regulations on sustainability of financing of TVET in Kenya. The study therefore recommends that the government through HELB should review the policy on penalties levied on defaulters to control how and when penalties are charged to curb ever rising loan default. The policy should provide framework to protect unemployed undergraduate beneficiaries from being charged penalties until when they secure employment.

The study findings revealed a positive and significant relationship between financial diversity and sustainability of financing of TVET in Kenya. The study thus recommends that the TVET institutions should thus diversify their financing avenues and not to depend only on the money advanced to them through HELB. They should come up with financial streams through would sustain their education financing in the near future.

The study findings revealed a positive and significant relationship between employability of graduates and sustainability of financing of TVET in Kenya. They study thus recommends that TVET institutions should review their courses and offer the courses that are in line with the current job market demand. This will enhance the employability of the graduates, and this will enhance sustainability of financing TVET institutions.

The study found that graduate' attitudes towards government loans have a positive influence on sustainability of financing of TVET in Kenya. The study therefore recommends that HELB should increase the number of seminars and sensitization forums so as to encourage graduates to repay their loans. This should more so be focused on the self-employed graduates who tend to default loans advanced to them because they are employed or engaged in the informal sector and difficult to trace.

5.4.2 Managerial Recommendations

The study recommends that the management of TVET institutions in Kenya should put in place programmes that promote the sustainability of financing their TVET programs. This will go a long way in ensuring that their programmes are sustainable in the long run. The

management should come up with sound financing policies to enhance accountability of finance in their institutions. HELB should also diversify the sources of financing TVET programmes and align financing to courses that are in demand in the labour market to enhance employability of graduates and also ensure that the money advanced to the students is repaid on time.

5.4.3 Research and Academia Recommendations

The general objective of the study was to determine the factors affecting sustainability of financing TVET programs in Kenya. The study focused particularly the effect of on financing policy and regulations, financial diversity on the sustainability, employability of graduates and of graduates' attitudes towards government loans on the sustainability of financing of TVET in Kenya. However, there are other factors that influence the sustainability of financing of TVET thus the study recommends that future studies should focus on these other factors affecting the sustainability of financing of TVET in programs Kenya.

5.5 Limitations of the Study

Several limitations were experienced during process of conducting this study. First, data was collected from respondents who were reluctant to participate in the study. However, researcher gave respondents assurance of the confidentiality on given information. Furthermore, to ensure anonymity participants were not needed to indicate their personal information in questionnaires and hence no information provided was accredited to particular individuals. Further, researcher presented an introductory letter obtained from the University and research permit from NACOSTI to indicate that this study was deployed for learning purposes only.

Primary data was adopted in this research and was gathered using questionnaires. Nevertheless, questionnaires depend on ability of respondents to remember. Moreover, the gathered information by use of questionnaires cannot be regarded to be so much valid or reliable. The reason being they are subject to misinterpretation, misunderstanding and ambiguity of questions. Nonetheless to assess and increase validity and reliability of research tools, pilot test was carried out.



REFERENCES

- Abagi, O., & Ogachi, O. I. (2014). *Fifty Years of Education Development in Kenya: Challenges Prospectus for the Future*. Nairobi; Jomo Kenyatta Foundation.
- Akoojee, S. (2016). Skills for inclusive growth in South Africa: Promising tides amidst perilous waters. *International Journal of Educational Development*, 32(5), 674-685.
- Anudo, N., & Orwa, Q. (2020). Improving Technical and Vocational Education and Training in Kenya for Sustainable Development. *Journal of Language, Technology & Entrepreneurship in Africa*, 11(1), 122-137.
- Bakar, E. A., Masud, J., & Jusoh, Z. M. (2006). Knowledge, attitude, and perceptions of university students towards educational loans in Malaysia. *Journal of family and economic issues*, 27(4), 692-701.
- Barasa, F. S., & Kaabwe, E. S. (2015). Fallacies in policy and strategies of skills training for the informal sector: evidence of the Jua Kali sector in Kenya. *Journal of Education and Work*, 14(3), 329-353.
- Booij, A., Leuven, E., & Oosterbeek, H. (2016). The role of information in the take-up of student loans. *Economics of Education Review*, 3(1), 33-44.
- Bowman, W. (2011). Financial capacity and sustainability of ordinary non-profits. *Non-profit Management and Leadership Journal*, 22(1), 37-51.
- Boyd, B. (2014). Corporate Linkages and Organizational Environment: A Test of the Resource Dependence Model. *Strategic Management Journal*, 11(6), 419-430.
- Bryman, A., & Bell, E. (2015). *Business research method*. (2nd ed.) Oxford: Oxford University Press.
- Christie, R., & Munro, E. (2015). A comparison of the influence of debt load on the persistence of students at public and private colleges. *Journal of Student Financial Aid*, 30(2), 39-58.
- Cooper, R. D., & Shindler, S. P. (2011). *Business research methods*, (9th ed.). New York: McGraw-Hill.
- Dasmani, A. (2016). Challenges facing Technical Institute graduates in practical skill acquisition in the Upper East Region of Ghana. *Asia-Pacific Journal*, 12(2), 67-77.
- De Gayardon, A., Callender, C., & Green, F. (2019). The determinants of student loan take-up in England. *Higher Education*, 78(6), 965-983.
- Dresner, T. (2015). *Financial sustainability essentials: Course handbook*. Oxford: Management Accounting for Non-Governmental Organisations (MANGO).

- Erik, M. & Marko, S. (2011). *A Concise Guide to Market Research: The Process, Data, and Methods Using IBM SPSS statistics*, New York: Springer Heidelberg Dordrecht.
- Foley, P. (2017). *The socio-economic status of vocational education and training students in Australia*. Adelaide, SA: National Center for Vocational Education Research.
- Gakuru, M., & Mungania, A. (2016). Budgetary allocation and the success of public sector management in central province, Kenya. *European Journal of Business and social sciences*, 4(10), 151-158.
- Goksu, A., & Goksu, G. G. (2015). A comparative analysis of higher education financing in different countries. *Procedia Economics and Finance*, 26, 1152-1158.
- Hart, J., & Rogojinaru, A. (2017). The Development of National Qualifications and Quality Assurance Frameworks in the Context of the TVET Reform in Romania. *European Journal of Education* 2(5), 24-67.
- HELB (2016). Association of African Higher Education Financing Agencies. Retrieved from <https://www.aahefa.org/helb-faces-a-ksh9-5-billion-deficit-due-to-unpaid-loans/>
- HELB (2018). Second quarter report 2018. Nairobi: HELB.
- Hondonga, J., & Ramaligela, S. M. (2020). *Comparing Financing Models for Vocational Education and Training in Botswana, South Africa, and Zimbabwe*. In *Socio-Economic Perspectives on Vocational Skill Development: Emerging Research and Opportunities* (pp. 56-79). IGI Global
- Hondonga, J., & Ramaligela, S. M. (2020). Comparing Financing Models for Vocational Education and Training in Botswana, South Africa, and Zimbabwe. In *Socio-Economic Perspectives on Vocational Skill Development: Emerging Research and Opportunities* (pp. 56-79). IGI Global.
- Hooley, T. (2017). Climbing the employability mountain. *Graduate Market Trends*, Spring, 10–11
- ILO. (2016). Skills for employment policy brief: Formulating a national policy on skills development. Geneva: International Labour Office.
- Jenkins, C. (2013). Resource mobilization theory and the study of social movements. *Annual Review of Sociology*, 9(1), 527-554.
- Johnson, G., & Scholes K., (2007). *Exploring corporate strategy*. Dorling Kindersley (India) P Source: PVt ltd, New Dehli.

- Kapsalis, C. (2006). Factors Affecting the Repayment of Student Loans. *Research Paper Catalogue no. 81-595-MIE2006039*. Culture, Tourism, and the Centre for Education Statistics Division. Ottawa, Canada.
- Kerine, L. (2015). Factors influencing financial sustainability of Non-governmental organizations: a survey of NGOs in Nakuru county, Kenya, *International Journal of Economics, Commerce and Management*, 3(9), 704-756.
- Kiguta, W. (2017). The factors influencing implementation of youth vocational training centers projects by county governments in Kenya, a case of Isiolo County Government. Master of Arts in Project Planning and Management of the University of Nairobi.
- KIPPRA (2018). Revitalizing Technical and Vocational Training in Kenya. Nairobi: KIPPRA. Retrieved from <https://kippra.or.ke/revitalizing-technical-and-vocational-training-in-kenya/>.
- Klandermans, B. (2014). Mobilization and participation: Social-psychological expansions of resource mobilization theory. *American Sociological Review*, 49(5), 583-600.
- Knipe, E. (2016). Study on the implementation and development of an ECVET system for initial vocational education and training. Germany: European Commission.
- Kombo D. K., & Tromp, D. L. (2014). *Proposal and thesis writing, an introduction*. Paulines publication. Nairobi, Kenya.
- Kossey, M. M. & Ishengoma, J. M. (2017). Issues and Challenges of Student Financing Systems in Africa: The Case of Tanzania. *International Journal of African Higher Education*, 3(5), 01 – 25.
- Kothari, C. R. (2014). *Business research methods*. 6th ed. Boston: Irwin/McGraw Hill.
- Kuria, K. V. (2015). *Determinants of Loan Recovery in a Student Financing Organization: Case of Higher Education Loans Board*. An MBA Research Project, University of Nairobi.
- Lauglo, J. (2017). Research for TVET policy development. In *International Handbook of Education for the Changing World of Work* (pp. 891-904). Springer, Dordrecht.
- Leon, P. (2016). *Four pillars of financial sustainability*. Arlington: The Nature Conservancy.
- Lourens, E. (2016). *From graduate to employee: Exploring the journeys of first-time entrants into the labour market* (Doctoral dissertation, Stellenbosch: Stellenbosch University).
- Lubanga, D. (2017). HELB to finance students in technical colleges. Daily Nation, March 15.

- Lukman, S., Adam, S. M., Jibrin, D. U., & Umar, B. (2017). The role of Business Education in restructuring the funding of TVET for sustainable economic recovery in Nigeria. *American International Journal of Social Science Research*, 1(1), 52-58.
- Luoma, P., & Goodstein, J. (2015). Stakeholders and corporate boards: Institutional influences on board composition and structure. *Academy of Management Journal*, 4(2), 553-563.
- Mah'd, O.A. (2014). Allocating resources in higher education: Evidence from Private Jordanian Universities. *International Journal of Business and Management*, 9(5), 169-183.
- Marope, P. T. M., Chakroun, B., & Holmes, K. P. (2015). *Unleashing the Potential: Transforming Technical and Vocational Education and Training*. UNESCO Publishing.
- Mbugua, K. Z., Muthaa, M. G., & Sang, K.A. (2016). Challenges facing Technical Training in Kenya. *Scientific Research Journal*, 1(3), 109-113.
- Ministry of Education. (2018). *Enhancing enrolment in Vocational & Technical Training*. Nairobi: Government Printers.
- Mochere, G., & Aluko, O. (2018). Technical and vocational education and training: why attainment of Kenya's Vision 2030 is an Elusive Goal for TVET Graduates, *Greener Journal of Educational Research*, 8(2), 07-16.
- Moenjak, T., & Worswick, C. (2013). Vocational education in Thailand: A study of choice and returns. *Economics of Education Review*, 2(2), 99-107.
- Mugenda, O. & Mugenda, B. (2012). *Research Methods. Quantitative and Qualitative*. Nairobi: Acts Press Publishers.
- Mungai (2015). *Loan repayment and sustainability of government revolving funds in Murang'a County, Kenya*. Doctor of Philosophy in Finance of Kenyatta University
- Mupinga, D. M., Busby, J. R., & Ngatia, J. W. (2017). Post-secondary technical and vocational education institutions in Kenya: Needs and challenges, *International Journal of Vocational Education and Training*, 25(1), 21-35.
- Mureithi, G. W. (2017). *Technical, vocational education and training in Africa: Has it lost its significance*. Eldoret: Moi University.
- Muriithi, C.W. (2014). *Factors that Determine Sustainability of Non-Profit Organizations in Kenya*. Unpublished Dissertation, United States International University.
- Mutinda, S.M. & Ngahu, S. (2016). Determinants of Financial Sustainability for Nongovernmental Organisations in Nakuru County, Kenya. *IOSR Journal of Business and Management*, 18(9), 81-88.

- Mwaura, A. N., & Mwangi, S. W. (2015). Perception on Implementation of Automotive National Diploma Curriculum on Its Trainees Preparation for job Performance of Technical Vocational Education Training (TVET) in Nairobi Region. *Advances in Social Sciences Research Journal*, 2(3), 85-106.
- Ngerechi, J. B. (2016). *Technical and vocational education in Kenya*. Paper presented at the Conference on the Reform of Technical and Vocational Education and Training (TVET) Gaborone, Botswana.
- Ngure, S. (2013). *Stakeholders' perceptions of technical, vocational education and training: the case of Kenyan micro and small enterprises in the motor vehicle service and repair industry*. Retrieved from <https://ro.ecu.edu.au/theses/597>.
- Njenga, M. (2014). *The determinant of sustainability of students' loan schemes: case study of Higher Education Loans Board*, Unpublished Project University of Nairobi.
- Njoroge, G.B. (2013). *An investigation on the factors influencing sustainability of NGOs in Kenya* (Masters of Science thesis). University of Nairobi, Nairobi.
- Nthenge, M. (2014). Factors influencing sustainability of donor funded projects: a case of Wenje Water projects in Tana River County, Kenya. Master of Arts in Project Planning and Management of the University of Nairobi.
- Oviawe, J. I. (2020). Strategies for funding technical vocational education and training for achieving sustainable national development in Nigeria in a post-oil boom economy. *Vietnam Journal of Education*, 4(2), 1-10.
- Palmer, R. (2015). Research into the financing of technical and vocational education and training (TVET) in the Pacific. *Melbourne: ACER*.
- Palmer, R. (2017). *Current Status, Challenges and Opportunities Financing TVET in the East Asia and Pacific Region*. World Bank.
- Paryono, I. (2017). *The Importance of TVET and Its Contribution to Sustainable Development*. AIP Conference proceedings, SEAMEO VOCTECH Regional Centre, Bandar Seri Begawan: Brunei.
- Paterson, R. (2017). Lecturer and student perceptions of employability skills at a transnational university. *Qualitative research in education*, 6(3), 241–275.
- Paulsen, R., & Glumm, K. (2015). *Resource mobilization and the importance of bridging beneficiary and conscience constituencies*. *National Journal of Sociology*, 9(2), 37-62.
- Pfeffer, J., & Salancik, G. R. (2003). *The External Control of Organizations: A Resource Dependence Perspective*. California: Stanford University Press.
- Renz, D.O. & David, E. (2016). *Non-profit Leadership & Management*, 4th Edition. NJ:

John Wiley & Sons Inc.

- Republic of Kenya. (2012). Technical and vocational education and training (TVET) policy. Nairobi: Ministry of Education.
- Rothwell, A., & Rothwell, F. (2017). Graduate employability: A critical oversight. In *Graduate employability in context* (pp. 41-63). Palgrave Macmillan, London.
- Rozenda, F. H. (2018). *Governance and Financial Sustainability of NGOs in South Africa*. University of the Western Cape, South Africa.
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research Methods for Business Students* (4th edn). Harlow: FT Prentice Hall.
- Sheppard, J. P. (2017). A Resource Dependence Approach to Organizational Failure. *Social Science Research*, 24(1), 28-62.
- Shiba, B. (2015) Technical education and vocational training for sustainable development, *Journal of Training and Development*, 1(1), 16-32.
- Shuqair, H.I., & Abdel-Aziz, D.M. (2015). Efficient and strategic resource allocation for sustainable development in Jordan. *Journal of Architecture & Engineering Technology*, 4(1), 1-7.
- Tran, T. T. (2019). Graduate employability: Beyond the skills agenda. In *Innovate Higher Education to Enhance Graduate Employability* (pp. 158-168). Routledge.
- TVETA. (2018). Strategic plan 2018-2022. Nairobi: TVETA.
- UNESCO. (2017). Skills for work and life. Paris: UNESCO.
- Wango, G., & Gatere, A. (2016). Integrity and Financial Accountability in Schools: Role of Principals of Schools in Kenya. *International journal of Education and Research*, 4(4), 1-14.
- Yamane, T. (1967). *Statistics, An Introductory Analysis*, (2nd ed.). New York, NY: Harper and Row.

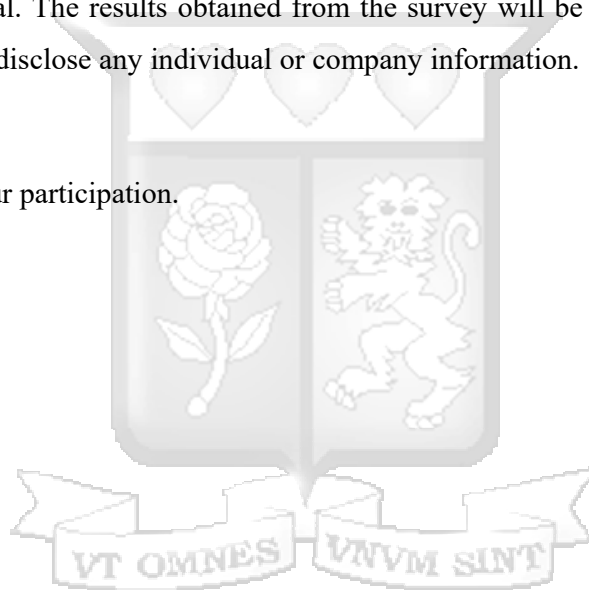
APPENDICES

Appendix I: Letter of Introduction

Dear Respondent:

I am a Strathmore University student undertaking a Master's Degree in Business Administration. As part of the requirement of my program, I am carrying out a study on THE FACTORS AFFECTING THE SUSTAINABILITY OF FINANCING OF TECHNICAL VOCATIONAL EDUCATION AND TRAINING IN KENYA. To achieve this, you have been invited to participate in this academic research by filling out the questionnaire. The information obtained will be used for academic purposes only and will remain confidential. The results obtained from the survey will be presented in summary form and will not disclose any individual or company information.

Thank you for your participation.



There are proper system and procedures for recovering loans from TVET students					
There is sufficient loan repayment period to enable TVET students' beneficiaries repay their loans					
There is proper link of financing policy and regulations strategies on TVET programmes sustainability					

Section C: Financial Diversity

7. How can HELB enhance its financial diversity so as to increase the sustainability of TVET programmes?

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8. Indicate your level of agreement with the following statements that relate to the employability of graduates emerging from TVET programmes in Kenya. Where: 1= Strongly agree; 2= Agree; 3= Neutral; 4= Disagree; 5= Strongly disagree

Statement	Strongly agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly disagree (5)
There is higher dependence on donor funding to fund TVET programmes					
There is higher dependence on government own funding to fund TVET programmes					
There is higher dependence on past student's loan recoveries to fund TVET programmes					
HELB generates its own fund through internal investments to fund TVET programmes					
There is collaboration with private financial institutions to fund TVET programmes					

The funds allocated for implementation of TVET programmes are sufficient					
The HELB revolving fund is sufficient to ensure sustainability of TVET programmes					

Section D: Employability of Graduates

9. Indicate your level of agreement with the following statements that relate to the employability of emerging from TVET programme in Kenya. Where: 1= Strongly agree; 2= Agree; 3= Neutral; 4= Disagree; 5= Strongly disagree

Statement	Strongly agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly disagree (5)
Inability to pay due to unemployment is a major factor that affect TVET programmes sustainability					
The graduates who are self-employed tend to repay their loans faster					
The graduates who have undertaken technical courses tend to be more employable					
The graduates who have undertaken business courses tend to be more employable					
The university and the college of learning attended affect employability of graduates					

Section E: Graduates' Attitudes Towards Government Loans

10. Indicate your level of agreement with the following statements that relate to the effect of graduates' attitudes towards government loans on the sustainability of financing of TVET in Kenya. Where: 1= Strongly agree; 2= Agree; 3= Neutral; 4= Disagree; 5= Strongly disagree

Statement	Strongly agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly disagree (5)
The seminars and sensitization forums in place to sensitize graduates to repay their loans are effective					
Graduates believe that the loan given by TVET loans are a form of grants which should not be repaid back					
Most of the graduates are not motivated to repay the TVET loans					
Lack of strict measures on recovery of TVET loans contribute to low repayment					
The penalties charged on TVET loans contribute to low repayment					
The future earnings of graduate students influence TVET loans repayment					

Section F: Sustainable Financing

11. Indicate your level of agreement with the following statements that relate to the sustainable financing of TVET in Kenya. Where: 1= Strongly agree; 2= Agree; 3= Neutral; 4= Disagree; 5= Strongly disagree

Statement	Strongly agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly disagree (5)
There has been an increase in the amount of bursary awarded in the last 5 years					
There has been an increase in the number of students accessing loans in the last 5 years					
There has been an increase in amount of loan being repaid in the last 5 years					
HELB manages debt from TVET loans and ensures the debts accrued are less than the previous year					
There are proper financial policies and regulations in place to ensure TVET programmes sustainability					
HELB has diversified its revenue sources to ensure TVET programmes sustainability					
The employment rate of TVET graduates has increased in the last 5 years which has enhanced their loans repayment					

Appendix III: Letter of Facilitation of Research

C/O Sangole Rd, Madaraka Estate,
P.O. Box 59857 00200, Nairobi, Kenya.
Cell: +254 703 414/6/7, Twitter: @SBSKenya
Email: info@sbs.ac.ke or visit www.sbs.strathmore.edu



11th March 2020

Director General,
National Commission for Science Technology and Innovation,
P. O. Box 30623, 00100
Nairobi.

Dear Sir,

RE: FACILITATION OF RESEARCH – MUTUA, VIVIANNE

This is to introduce Mutua, Vivianne who is a Master of Public Policy Management (MPPM) Student at Strathmore University Business School, admission number MPPM 102800/18. As part of our MPPM Program, Vivian is expected to do applied research and undertake a project. This is in partial fulfilment of the requirements of the MPPM course.

Vivian is undertaking a research paper on “Factors Affecting the Sustainability of Financing Technical Vocational Education and Training in Kenya.” The information obtained shall be treated confidentially and shall be used for academic purposes only.

Our MPPM seeks to establish links with industry, and one of these ways is by directing our research to areas that would be of direct use to industry. We would be glad to share our findings with you after the research.

We appreciate your support and shall be willing to provide any further information if required.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Caroline Tiara".

Caroline Tiara.
Manager – Graduate Programs

Association of African
Business Schools



Strathmore Business School is a Proud member of



Appendix IV: Letter of Institutional Ethics Review Committee



7th April 2020

Ms Mutua, Vivianne
vivianne.mutua@strathmore.edu

Dear Ms Mutua,

RE: Factors affecting the sustainability of Financing Technical Vocational Education Training


This is to inform you that SU-IERC has reviewed and **approved** your above research proposal. Your application approval number is **SU-IERC0730/20**. The approval period is **7th April 2020 to 6th April 2021**.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-IERC.
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-IERC within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-IERC within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to SU-IERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,







for: Dr Virginia Gichuru,
Secretary; SU-IERC

Cc: Prof Fred Were,
Chairperson; SU-IERC



Ole Sangale Rd, Madaraka Estate. PO Box 59857-00200, Nairobi, Kenya. Tel +254 (0)703 034000
Email info@strathmore.edu www.strathmore.edu

Appendix V: NACOSTI Research License

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 977603	Date of Issue: 28/March/2020
RESEARCH LICENSE	
	
This is to Certify that Ms. Vivianne Wavinya Wanjala Mutua of Strathmore University, has been licensed to conduct research in Nairobi on the topic: FACTORS AFFECTING THE SUSTAINABILITY OF FINANCING TECHNICAL VOCATIONAL EDUCATION AND TRAINING IN KENYA for the period ending : 28/March/2021.	
License No: NACOSTI/P/20/4466	
977603 Applicant Identification Number	 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR Code 
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