FACTORS THAT PROMOTE SAVINGS IN TANZANIA: THE CASE OF BANKS AND GOVERNMENT EMPLOYEES IN ILALA DISTRICT

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A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION OF THE OPEN UNIVERSITY OF TANZANIA

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CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by the Open University of Tanzania a Dissertation entitled: **"Factors that Promote Savings in Tanzania; the Case of Banks & Government Employees in Ilala District."** in partial fulfillment of the requirements for the Degree of Master of Business Administration of the Open University of Tanzania.

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DECLARATION

I, **Lucas K. Mkonya**, do hereby declare that this dissertation is my own original work, which has never been presented and which will not be presented to any other University for similar or any other degree award.

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DEDICATION

This work is dedicated to my beloved wife Mrs. Dinna Mkonya and my lovely and very resourceful daughter – Ms. Victoria Sigalla for their consistent encouragement and moral support. Lavesta Holdings (T) Limited – a Business Consulting firm co-founded with my fellow Directors deserves inclusion in this dedication given its intervention in part sponsorship and prompt facilitation whenever need arose.

ACKNOWLEDGEMENT

ABSTRACT

Over years, a number of research studies were conducted by scholars in the country to depict either saving behaviors or determinants of saving behaviors in Tanzania. By this study, the researcher wished to investigate what factors to consider in-depth while promoting savings, particularly now that the country targets to register itself in the medium-income economy by 2025. Successful sustenance of this economic endeavor highly demands capital accumulation in terms of increased saving rates to sustain economic operations during the transit period. Savings being the dependable variable; the researcher identified six independent variables vide literature reviews that promote saving rates to ensure the required break through. Altogether a total of 132 employees of the Ilala Municipal Council were selected to represent the national population in this study. Employees were identified using simple random sampling, cluster and purposive sampling techniques situational requirements taken into account. Primary data forming part of the study were gathered through interviews, self administered questionnaire and documentary reviews; such data were then coded and analyzed using the Statistical Package for Social Sciences Version 21 which presents results by way of units of coefficient / frequency, tables and percentages. In view of a large number of independent variables to interpret, Multiple Regression Analysis was recommended as rightful approach to apply in deriving reliable results on these data findings. Findings established that Financial Developments, Demographic Effects and ICT had great significance in promoting savings; but Interest Rate Effects and Products Innovations were proved to be insignificant to savings; while on the other end Social Security and Unemployment benefits were confirmed to greatly promote dis-saving in the society.

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LIST OF ABBREVIATIONS

AIH	Absolute Income Hypothesis
APS	Average Propensity to Save
DI	Disposable Income
DOI	Diffusion of Innovations
ICT	Information Communication Technology
KMO	Keiser-Meyer-Olkin
LCM	Life-Cycle Model
MPS	Marginal Propensity to Save
NBS	National Bureau of Statistics
NFIF	National Financial Inclusion Framework
NMB	National Microfinance Bank
PIH	Permanent Income Hypothesis
SPSS	Statistical Package for the Social Sciences
SSA	Sub Sahara Africa
TAM	Technological Acceptance Model
USA	United States of America
WTO	World Trade Organization

CHAPTER ONE

INTRODUCTION

1.1   Background to Research Problem

The rate of economic growth across countries is measured by matching the rate of savings or capital accumulation against the rate of investment (Rossen & Rozenov, 1999). The higher the rate of savings the more capital accumulation is assured to promote growth in investments which in turn catalyze further economic growth initiatives. Thus key success factors lay in placing sound relationships between the rate of savings and that of investments; this is what is renowned by economists as the virtuous circle of savings and investments.

Notable economic success registered in the East Asia and Pacific Economic Blocks over the past three decades exemplify how the virtuous circle of savings/ investment did correlate to accelerate prosperity and poverty alleviations under the existing world social / economic order. World Bank database (2017). Tanzania, aspiring to reach a medium economy by 2025; had needed to perform an extra mile at least to step up its per capita income to reach a threshold of USD 2,700 by end of 2016 as declared by (WEO, 2017). Globally Tanzania is grouped within the Sub Sahara Africa (SSA) Economic Block as Emerging Markets and Developing Economies and further classified as a Low-Income Developing Country required to sustain a per capita income > USD 2,700 (World Bank Economic Outlook, 2017).

Tanzania had demonstrated positive saving rates during (2000-2015) period as compared to the trend that prevailed in the (1980s/90s) period; and more so the

country has had a relatively competitive edge over many other countries within its economic block particularly during the latter period. Nonetheless it should be noted that neither the Sub-Saharan Economic Block nor the Tanzanian economies are approaching the Global rate of saving as summarized in **Appendix: I** down below. Even so despite reflecting some positive signs of improvement, Tanzania is still trailing down the bottom level in promoting saving among its individuals and particularly at household level. But why is the situation as such; some inquisitive economists are seeking for some explanations. It's by this research study that factors to these effects are to be established.

To uphold the importance of promoting savings, each individual person, household and business organization as well as policy makers need to firmly inculcate the general community on the critical importance of promoting savings at all levels; since as cited by Harrod (1939) & Domar (1946) "the ability of its people to save determines the speed of country's economic growth and direction". Such that high saving rates will drive upwards rates of capital accumulations and promote investments, and consequently stimulating productivity and economic growth.

Higher saving rates would ensure a sustained economic base, reduce and/or avoid continued dependency on external financing vide soft loans, aids and grants while promoting income growth for self sustained economic growth; taking note of the quote from Norman Loayza, Klaus Sghmidt-Hebbel (2000) "anywhere in the world higher saving rates tend to go hand in hand with higher income growth".

On the other end, the fact that acceptability of Information Communication Technology (ICT) as an unavoidable working tool in the banking sector (operations)

no doubt has become globally recognized as an extra advantage to any developed economy; since ICT is pervasive in banking and gaining prevalence even in least developing countries in the remote Africa.

In situational areas where attitudes towards saving have been experiencing negative growth, the researcher is greatly concerned, since all over the world higher saving rates are noted to be going hand in hand with higher income growth and investments Tanzania being no exception -Norman Loayza, Klaus Sghmidt-Hebbel (2000). Whereas everybody under prevailing economic hardships should seriously become aware of the key role accumulated savings would play in stimulating economic growth and promoting the country's rate of investments; in dismay, most of the Tanzanian wage earners and household elites are showing least concern in promoting the attitude of savings. It's thus imperative to establish de facto action to be taken in light of this situational analyses once facts are established vide this research study.

1.2   Statement of the Problem

A critical analysis of the National Microfinance Bank (NMB) customer service database on the trend of saving culture has revealed that despite being a market leader in financial inclusion and one of the biggest retail commercial bank in Tanzania, NMB trend of saving during the 2012–2015 period was registering downward results; Aneth and Anne (2016). The country is striving to register a medium-economy by Year 2025; this cannot be achieved and sustained without firm capital accumulation built up through internally generated sources of Funds. Otherwise a cross - country research done on the impact of aid on growth has yielded ambiguous results. While aid boosts investment, which should raise growth, it can also reduce incentives to raise

domestic resources. Aid inflows can also complicate monetary and exchange rate policy, potentially causing real exchange rate appreciation and reducing competitiveness; IMF Publication Services (1970-2008).

Waceke (2017) has these comments on saving culture: "there is never going to be enough money to save"; accept this if you wish to develop the habit of saving. An increase in salary or disposable income to most people may not necessarily attract them to save more as per Keynes - Absolute Income Hypothesis (AIH) on consumption and savings. People are relatively overlooking saving not because they have no money to save but rather for lack of culture of saving.

The culture of saving is an important element to both individuals and macroeconomic factors in development. Where individuals are availed access to formal saving mechanisms, they get the opportunity to use savings so accumulated as tools to guarantee acquisition of other forms of credit facilities or accumulate capital with which to start or expand existing businesses. The facilitation as such provides positive impact on financial inclusion to poverty reduction efforts Burges and Pande, (2005), Aneth & Anne Lopez, (2016). But are Tanzanians aware of this fact?

Then what factors should be applied to arouse understanding on the importance of savings and subsequently take action to promote it? This is a question preferably required to be replied by Banks seriously eager to stimulating savings. (Dayal-Ghulati & Thimann, 1997) analyzing determinants of private savings in South-East Asia and Latin America during (1975-1995) found out:- good fiscal policies as core instruments to promoting positive savings in some Asian Countries. What fiscal policies should

Tanzania apply in this respect? Or is forced saving a recommendable policy to apply in Tanzania?

Under prevailing economic environment the need to straighten the country's fiscal policies for the purpose of promoting improved savings should not be overemphasized, however it is a noble course of action if we are real interested to promote our economy to achieving the medium – economy by 2025. Consequently the Statement of the Problem seeks to establish the extent to which savings is being promoted in the country as the main means of capital accumulation for re-investment.

1.3   Research Objectives

1.3.1   General Objectives

The main objective of the study is to establish factors, which promote savings among Tanzanians.

1.3.2   Specific Objectives

The study is guided by the following specific objectives:

(i)   To assess factors promoting savings among Tanzanians and their impacts.

(ii) To assess the impact of ICT on savings among Tanzanians; and

(iii) To ascertain the specific role played by employment in promoting savings among Tanzanians.

1.4   Research Questions

To address the research problem, the study will respond to answering the following key questions:

(i)   What key factors do influence saving in Tanzania?

(ii)   Social Security and Unemployment Benefits are said to undermine saving in Tanzania, how far is this true?

(iii)   ICT is believed to have a great impact in promoting to what extent is this hypothetical statement true?

1.5   Development of Hypotheses

(i)   Hypothesis 1: Saving is positively influenced by interest rates effects.

(ii)   Hypothesis 2: Saving is positively influenced by financial development

(iii)   Hypothesis 3: Saving is negatively influenced by Effects of Social Security and Unemployment Benefits

(iv)   Hypothesis 4: Saving is positively influenced by technological advancements in Information Communication Technology (ICT).

(v)   Hypothesis 5:Saving is positively influenced by demographic effects

(vi)   Hypothesis 6:Saving is positively influenced by product portfolio and innovation

1.6   Significance of the Study

Significance of this study is based on economic realities governing the world economic order. The reality is based on the fact that conclude that *"Trade is War";* by Jean Ziegler UN Special Rapporteur Yash Tandon "*A necessary and timely contribution which goes to the roots of the deep crises facing humanity.*" Yash Tandon (2018).

Tanzania is living in a competitive business world in which global competition is institutionalized in the name of *free trade agreements* under guidance of the World Trade Organization (WTO) which is the main actor in inflaming business crisis that extends beyond the realms of free economy, and instead creating hot wars for markets and resources, fought between proxies in Africa, Asia, Latin America, the Middle East and now even in Europe.

As Tanzania was getting independence during the early 1960s/70s economic levels/stability of Tanzania and most of the Far East countries of e.g. Malaysia, Indonesia and even Vietnam were more or less at par; WB Database. To date, some 50 years after great dis-parities in economic performance between Tanzania or rather East African Economies with the Far East Economic block have occurred. Thus under this world economic order definitely people of East Africa, in particular Tanzania would wish to know what their counterparts in the Far East had done to achieve such high economic performance by far incomparable to theirs. *See Appendix 1* down below.

Significance of this study is thus to establish what other countries are doing or have been doing to achieve tangible economic success; taking into account the note that *Trade is War*. The essence is further to establish what should be done to dis-entangle the country from looming poverty targeting to registering a medium economy by 2025.

Should Tanzania follow suite of most developing countries in African South of Sahara that cherish and feel proud as they are gradually turned into major dependants or

rather major beneficiaries of donations in forms of foreign aids, grants and/or concessional loans. And who once they are assured of such support, end up becoming deeply helpless and in their mindset failing to search for own means of making any economic breakthrough to dis-entangle themselves from such donor support bondages. The Far East Countries are highly praised for achieving great economic success in view of their high saving rates substantially building up their capital base which was able to back-up and sustain growth in investments and re-investments.

What can Tanzania do to imitate such success? The aim of this research study is, among other things, to establish or access the extent to which Tanzania should be fairing in meeting its budgetary requirements with or without the donor support. Secondly the aim is to establish what efforts should be put in place to promote internally generated sources of funds particularly through savings / deposits to match /meet the country's capital development aspirations. Thus while Tanzania budgetary amounts are on the increase year after year, situational analysis on the same reflect a gradual shift from the highly donor supported system to a gradually growing internally generated fund capital to cover the country's budgetary aspirations; this is particularly so in meeting the capital and recurrent expenditure funding as reflected in Figure 1.1 for the periods between 2011-2017.

Nonetheless, to ensure growth of a sustainable internal source of funding, the trend of savings and cash deposits in the country need to be promoted streamlined and directed towards formal financial institutions. However going through audited financial statements of distinguished financial institutions, it is revealed that the trend of savings /cash deposits is on a gradual decrease year after year as portrayed in Figure

1.2 (respective institution financial statements). It is in view of this down-ward trend that the researcher seeks to establish the potential cause of this discouraging trend and work for corrective measures well in advance. The importance of observing cash deposit trends should not be under-rated since capital accumulation is the key element in growth of income and capital investment required to meet the national aspirations of reaching a medium economy by 2025.
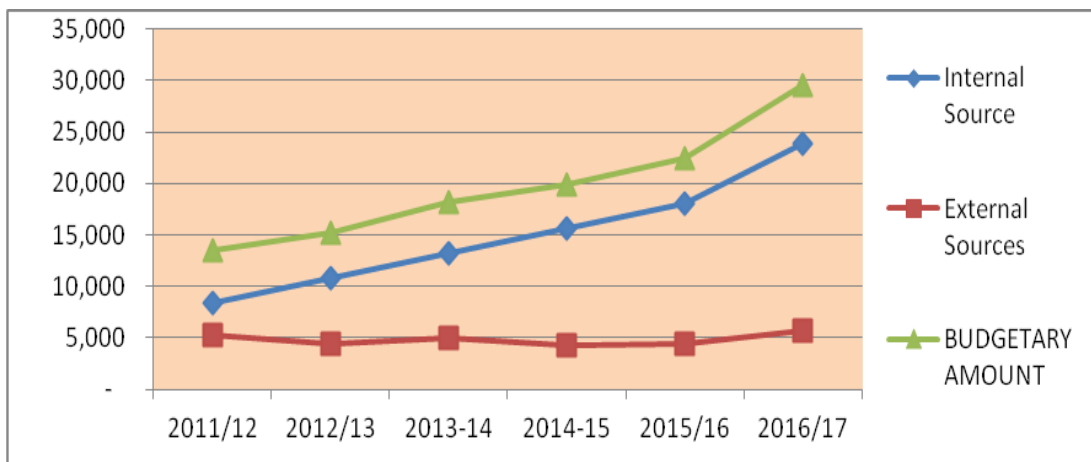
Figure 1.1: Trend of Budgetary Support Funds; Tanzania Position, (2011- 2017)
Source: Budgetary Speeches as Summarized by Citizen Budget and Family Forum for

periods, (2011-2017)
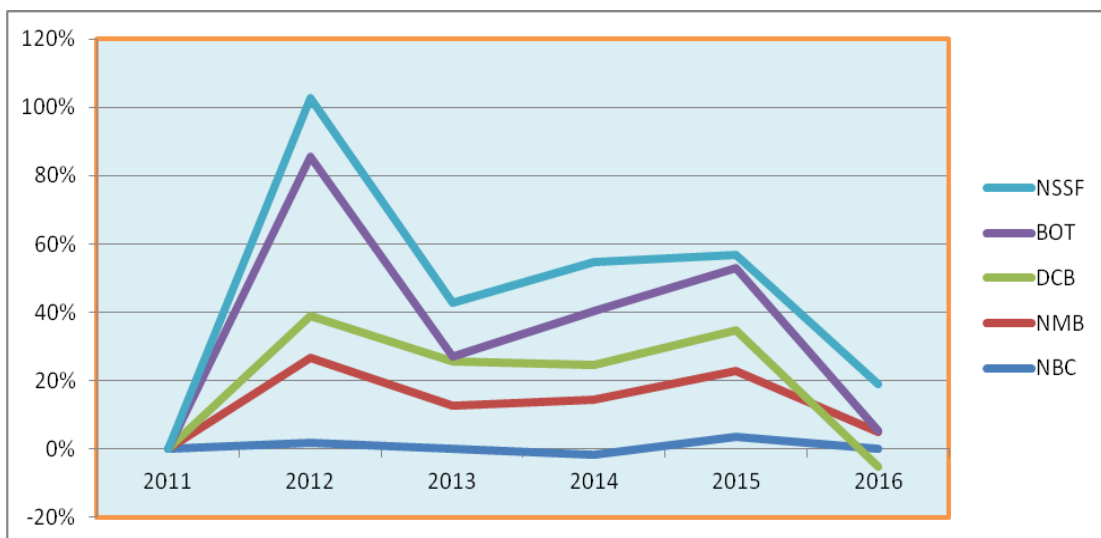
Figure 1.2: Trend of Deposit Growth by % Over One's Previous Year
Source: Financial Statements (Records) of each respective Institution

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter outlines what is involved in the theoretical literature review; the empirical review and empirical evidence. The theoretical section has identified a number of savings, consumption and risk perception theories. Empirical review has traced where and how various theories have been put on test while the empirical evidence has portrayed findings to correlate their applicability relative to each respective theory. The chapter has further introduced what would be involved in savings, the conceptual framework purportedly based on the Friedman's Life-Cycle Model of the Permanent Income Hypothesis (PIH).

2.2 Theoretical Literature Review

This section presents theories some of which are used in this research study.

2.2.1 Theories of Saving, Consumption and Risk Perceptions

Quite a number of economists' over-time had developed major theories on human kind patterns of consumptions and savings. Sociologists on the other hand, tended to associate societal harms-from sickness, famine to natural catastrophes-with conducts that transgress societal norms Douglas, (1997).

2.2.1.1 The Life-Cycle Model (LCM)

Modigliani, Brumberg & Ando's life-cycle model (1950s) did define individuals' consumption pattern in specific periods of time under which an individual worked to maintain his/her consumption level throughout his/her life-time period. Instilled in the

life-cycle model was the lifetime budget constraint, that linked consumption at one'
lifetime period. The very young have little wealth, middle aged people have more, and
peak wealth is reached just before one's retirement. As they live through their golden
years, retirees sell off their assets to provide for food, housing, and recreation in
retirement.

The most fundamental challenge to the life-cycle model is in its basic underlying
assumption, that people make rational, consistent, inter-temporal plans; that they act
as if they are maximizing a utility function defined over their periods of life, based on
"the perceived theory of consumer choice over time *à la* Fisher." However
economists' behavioural assumptions about consumer choice have long been
challenged by psychologists and others thinkers but, until recently, these critiques
have not had much effect on mainstream economic analysis. Many anomalies and
paradoxes have been identified over the years, often associated with the way people
deal with the uncertainties that are inevitable when making choices that involve
comparisons of whether to consume today or defer consumption of today for future
use (saving).

Even commercial financial planners do advise their clients about retirement planning
according to set rules and recommendations, such as target wealth to income ratios
although; such circumstances are quite inconsistent with the life-cycle theory.
However such commercial plans are not *better* than life-cycle plans, and can lead to
disaster under certain circumstances, but they attest to the self-desire of respective
individuals, who lack the resources and facilities of financial planners, to do better in
following the life-cycle rules.

Over time, observations on how to place the life-cycle theory within the new behavioural economics of savings and consumption have faced some obvious challenges; with population growth, there are more young people than old, more people are saving than are dis-saving, so that the total dis-saving of the old will be less than the total saving of the young, and there will therefore be net positive saving. Unfortunately the above view has remained unchallenged; to enforce the fact that, if people have been capable of saving, they ought to plan their consumption, saving, and retirement according to the principles enunciated by Modigliani and Brumberg in the 1950s. Under the prevailing circumstances therefore, the choice to plan between saving today for future consumption in the manner of the Life Cycle Theory or Model is facing this great challenge. Nonetheless the life-cycle model will still remain the baseline model to which people aspire; whether it will be shifting from a positive to a normative theory, or posted far away from the current description towards a different prescription.

2.2.1.2 The Permanent Income Hypothesis (PIH)

The Friedman's Permanent Income Model (2000) was based on the understanding that individuals have a rational choice on how to spend their incomes; income as defined by Hick's book – Value and Capital (1939; 1946 2nd edition.) was identified as the budget constraint of consumption behavior. Individuals were free to maximize their lifetime utility out of their life time earned resources; which however would fluctuate over time due to life cycle effects, business cycles and related adversary's and other adverse factors in life. Thus Friedman in this model considered household life as infinite but acknowledged existence of a normal/standard level of income adequacy to

household members as a survival baseline level for their lifeline. This baseline income was said to compose of permanent, quasi-permanent and transitory income; the latter being any other (positive or negative) accrued income. According to Friedman's Permanent Income Model, the saving function at time t in its simplest form given the transitory and permanent income could be expressed as:

$$S_t = \mathrm{C} + \text{\O}Y^P + \text{\O}Y^T$$

Where, Y= Y^P + Y^T, Ø is the marginal propensity to save (MPS) given the permanent income (Y^P), Ø is (MPS) given transitory income (Y^T)

The model therefore concluded that personal savings depended on the permanent and transitory incomes.

2.2.1.3 The Relative Income Hypothesis (RIH)

The Instigator of the Relative Income Hypothesis, James Duesenberry, (1949) had the two versions on the relative income hypothesis philosophy: i) the cross section version and ii) the time series version. Under cross section version the proportion of income an individual was expected to consume under normal circumstances would relatively be equal or similar to what was consumed by one's household neighbors. Under the time series option, similarity prevailed with the cross section version but under the option consumption comparison would be between the current consumption levels against the past or historical household consumption levels.

2.2.1.4 Absolute Income Hypothesis (AIH)

The Keynesian Theory of Absolute Income Hypothesis is based on the argument that consumption and savings are functions of absolute disposable income. Keynes

postulate that consumption would increase at a decreasing rate as income increased other things being constant, Keynesian Theory & Tesha, (2013). This implies that part of the income would be saved at an increasing rate as absolute income increased.

Generally the Keynesian saving function would take a form of linear function with a constant marginal propensity to save (MPS)

$$S = Ç + \beta Yt \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\text{Equation 1}$$

Where *S and Y,* would represent real value of saving and total disposable income respectively at time t. $\beta = \frac{\Delta S}{\Delta Y}$ the *MPS*, marginal propensity to save is expected to be constant and positive but less than a unity so that higher income leads to higher savings. The autonomous component of saving = Ç is assumed to be small but positive. Assumptions of the fundamental law, the absolute income hypothesis has these important features: (1) that saving increases or decreases with increase or decrease in income but non-proportionally.

This non-proportional saving function implies that in the short run average propensity to save (APS) is greater than the MPS: APS > MPS, where APS $= \frac{S}{Y}$ and MPS $= \frac{\Delta S}{\Delta Y}$; this is because in the short run autonomous saving do not change with income but over the long period horizon, as wealth and income increase saving also rises; the marginal propensity to save out of the long run income is closer to the average propensity to save. (2) As income rises, the proportion of saving falls: $\frac{\Delta APS}{\Delta Y} < 0$, so the income elasticity of saving defined as $\frac{MPS}{APS}$ would be less than unity. (3) That saving function is stable both in the short run and long run: R.Santos Alimi (2013).

2.3   Theories of Information Communication Technology

With electronics embedded into devices that encompassed the day-to-day life and business dealings, ICT in the life system has by virtue of Diffusion of Innovation theory (DOI). Eija Korpelainen, (2011) become a non-avoidable instrument of work both in business and non-business undertakings. Theories underpinning ICT intervention include: The Technological Acceptance Model (TAM) by Davis (1989), the theory of Diffusion of Innovations (DOI) and Information Systems Success Model (De Lone and McLean 1992).

2.3.1   Technological Acceptance Model

TAM is based on perceived usefulness, secure and ease in application both with the two factors being fundamental determinants of the system use. The users being willingly free to use the system to the extent of any one's full satisfaction and believing that using a particular system would enhance his or her job performance. This then resemble the free acceptance of ICT intervention into banking operations taking advantage of the electronic access technology through which the culture of saving can be enhanced.

2.3.2   Diffusion of Innovations

DOI as perceived by Rogers' (1983); Diffusion of Innovations is based on the general theory of how why, and at what rate new ideas, technology, and process innovation spread through an organization, a society, or a country, Rogers, (1962) & (2003) and finally adopted in a community, thus explaining how communication channels and opinion leaders shape adoption. The "how" concerns the innovation process while the "why" is a justification for adopting or rejecting the innovation, referring specifically

to the perceived attributes of the innovation and the need to apply innovations to promote saving.

2.3.3 De Lone and McLean Model of Information System, 1992

The Information Systems Success Model originated by DeLone and McLean (1992) who reviewed prior research and introduced comprehensive taxonomy /classification of factors contributing to the success of information systems. The theory's success measures are categorized into six major categories: system quality, information quality, use, user satisfaction, individual impact, and organizational impact. The updated DeLone and McLean's model (2003) add service quality to the system quality and information quality.

The update has furthermore combined individual impact and organizational impact into one variable called net benefit. These variables are noted to interrelate to each other to produce successful system implementation DeLone and McLean, (2003). Thus implementation of these successful systems should catalyze our banks to work on continuous improvements of banking services and attract more clients towards promoting the culture of saving as we continue to embrace this robust technological advancement which have made banks to be once again friendly to all its clients.

2.4 Empirical Literature Review

2.4.1 Saving in Tanzania

The focus of this study is on savings. The motives of saving under this study are specifically two: first is the precautionary motive while the second is pinned much more on the Life – Cycle Motive. The precautionary motive is based on the

assumption that future income is uncertain and since people seek to be risk averse, then it makes sense that one should abstain from consuming earnings completely as received to keep a reserve for future use in case of need should income be lower than expected; Martin Weale (2009).

However, the motive to save or consume depends on the culture cycle of behavior which evolves based on facts that "something done consistently becomes a habit; a habit done consistently becomes a way of life, and a way of life culminates into some sort of culture" Waceke (2017). Thus saving is a culture cultivated through a habit of savings done over and over in one's life cycle. One can therefore cross-check in ones own society if society members do have either a spending culture or a saving inclined culture. Where society members have had negative attitudes towards saving then no matter what increase in income one would receive, nothing much will be inclined to increase one's rate of saving.

In a progressive economy positive saving would normally be expected. The youth who aspire to see their living standards in retirement growing higher than those enjoyed by current old people, would work to ensure their savings exceed wealth accumulated by old people in their retirement process on the bases of the faster the rate of growth, the higher the required rate of saving. Similarly it is quite likely that, as people's incomes increase their desire to be protected from potential larger income shocks in the future would also increase. Thus, under the self imposed competitive desire, balance of wealth held for precautionary reasons would tend to increase over time registering positive savings required to deliver current youth income expectations. Martin Weale (2009).

Douglas B. Bernheim (1993) identified four central findings when analyzing private savings.

(i)   Many families do not save enough to provide themselves with adequate financial security;

(ii) No matter the extent of knowledge on importance of savings for any reasons, those with knowledge do not only save more adequately for retirement/ precautionary purposes, but also generally behave in a way that shows non seriousness in the life cycle planning;

(iii) Employer-provided pensions do not appear to displace other personal savings in cases where the head of the family lacks formal knowledge on savings;

(iv) High-income families respond more vigorously to tax incentives for saving than do moderate-and low-income families.

These findings have important implications for public policy makers. Depicted from the above findings is the view that many Americans, particularly those unknowledgeable save too little. The findings also indicate that it is possible to increase total personal saving among lower income families but through formation of private pension plans.

However in Tanzania policy makers have in place three types of savings plans that are outlined as follows: (1) Voluntary saving relates to an individual / company willingly abstaining from consumption of disposable income or generated profits for precautionary motives or for a specified reason e.g. retirement preparations, wedding preparations etc. Savings can be in the form of cash deposits or other tangible assets

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such as livestock, housing estates, and motor vehicles and so on. (2) Involuntary saving includes all forms of deductions from ones gross income in form of various statutory payments such as social security contributions, educational loan deductions and pay as you earn and so on. (3) Forced saving on the other hand is the saving that is beyond one's control; it is a form of taxation administered by the government which in effect may cause re-distribution of income to those with higher propensity to save, such as profiteers. Inflationary trends engineered by the government's monitory policy, in principal, functions as another way of taxing the general community to beef up government coffers. But to community members who wished to remain thrifty, forced saving would make them realize the real value of money in form of stocks; however inflation would influence them to save more and spend less as prices rise, thus exercising the real balance effect; Republic of Rwanda, (2013).

2.4.2 Determinants of Saving in Tanzania

2.4.2.1 Demographic Effects

Based on 2012 census report, Tanzania has a population structure which has a 100% dependent group of young aged between (0-14 years) standing at the ratio of 43.9%; and another group of real income earners aged between (15-64 years) ratio-wise accounting at 52.20% of total population. The country has still a burden of supporting at 100% a dependant group of the aged (65years ++) who add up to 3.9% of the country's total population. Hence a clear 47.8% of the total population which needs 100% support from the remaining 52.20% of income earners' group.

The situation portrays a too high dependence ratio for the income earner group to manage; hence the main reason for a continued deterioration in saving rate trends

being experienced in our economies as reflected in the World Bank database 2017. The resulting effect is a high dependency ratio that greatly affects the actual saving rates (Tesha 2013); this situation demands an immediate redress if the country aspires to meet its 2025 development ambitions. Globally the youth of the age lower than 25 years are accounting at approximately 33% of the world population (Lissa, YungSoo, N. Chowa 2015); but the same in Tanzania stands at 63% Statistical Bureau of Tanzania (2012) census data.

Thus, youth in Tanzania should be accorded and encouraged to practice banking at their early stage in life; since that is the best way to promote the culture of saving in their youthful stage of growth, the common barriers to this effect which had included among others: restrictions on bank account operation and ownership; denial of financial education on the importance of saving; lack of innovative and access to safe and affordable bank products and services should be introduced forthwith. Demirguc-Kunt& Klapper (2012); see also Porter, Blaufuss & Owusu Achaampong (2007); and United Nations Development Fund, (2011).

2.4.2.2 Financial Development

Governments' monetary policies are important tools in managing the country's financial development. Per capital income growth is an important determinant of private and public saving. Higher government saving crowds out private saving, and higher foreign saving is associated with lower domestic saving Republic of Rwanda, (2013).

The relationship between foreign aid and domestic savings has been examined vide

several studies (Griffin 1970). It has been concluded that foreign aid crowds out domestic saving. These findings have recently been confirmed by Elbadawi & Mwega (2000), for Sub-Sahara Africa, but should be taken with caution as the same may have been caused by economic distress affecting the poorest countries in the sub-continent.

However explaining the difference in saving performance between sub-Sahara Africa and the performing Asian economies, research studies have established that growth precedes savings, and that low per capita income & high young-age dependency ratio coupled with large amounts of foreign aid are the main causal factors; Loazya and Schmidt-Hebbel, (2000).

The motive for improved domestic saving rates may relatively be targeting smooth consumption and / or precautionary motives but the same may end up beefing capital accumulation. This trend is in line with Keynesian theory which purports that higher economic growth leads to higher saving, (economic growth was the main engine towards increased savings-case of Pakistan) Tesha, (2013). This further enhances investment and economic growth thus accelerating the savings/investment vicious circle hypothesis that increase in economic growth causes increase in privates savings / and increase investments which in turn stimulates growth and backup savings once again.

According to Ibrahim Elbadawi & F. Mwega (2000), "growth precedes savings not the reverse." Hence governments should come up with tactical policy designs that trigger domestic saving efforts while at same time discouraging the foreign aids dependency syndrome. Prudent public management of non-renewable resources (gold,

diamonds, and Tanzanite) should be used to boost up public savings and thus stimulate investments and subsequently economic growth, promoting savings and re-investments; Loayza, Schmidt-Hebbel, & Serven (2000).

A high rate of investments accelerates income growth which is calculated in terms of per capita income. Per capita, income growth in ceteris paribus are important determinants and indicators of potential raise in saving rates as increase in per capita income gets reflected as part of one's disposable income (DI) as per G. Gale (2000). And since consumption and savings are both functions of disposable income, this implies that part of the income will be saved in an increasing rate as disposable income increases; R. Santos Alimi (2013) or as per increase in income growth; (reflecting the life-cycle hypothesis on saving).

2.4.2.3 Interest rate Effects

In discussing interest rate effects, the theory of substitution effect should come into grim light: since rising interest rates may favor the income side and therefore increase cash saving. However on the other hand a fall in interest rate may cause a fall in prices of assets, thus encouraging individuals to purchase the assets. Utility of the purchased asset in this case is as well equal to that of saving; hence closing the deal squarely.

It is thus in line of this income and substitution effect theory that individuals become willing to save part of their incomes irrespective of whether interest rates in existence are increasing or falling low; the Republic of Rwanda (2013). Logically the policy of negative / low interest rates on deposits discourages people from saving and rather triggers consumption.

2.4.2.4 Products Portfolio/ Product Innovations

NMB Bank in its latest move has set aside 1% of its profit after tax towards promoting educational, health and financial capability projects. It has further made the " willingness to save" to match well with wide choice of products on offer, in the case of cash savings, what types of product facilities/preferences do banks offer for customers to choose; Yes there is the current account; the savings account and investment account or fixed deposit account. All these are product innovations, which create varieties of choice conducive to positive savings, Aneth Kasebele and Anne Ong Lopez (2016). Again respective banks should be innovative to ensure they provide a variety of bank products reflecting market demand e.g. providing car loans to new employees who have in deposit account an amount equal to 25% of the car market price.

The same can cover other areas including estate mortgage guarantees; services improvements to make banking much easier e.g. by introducing the NMB Mobile platform that allows money transfers to other banks up to the amount of Tsh. 3,000,000. The bank has further installed over 3500 NMB bank agencies, improved its ICT networking to over 210 branches and over 700 ATMs (40% of all operating ATMs in Dar es Salaam) data source: The Citizen newspaper (20th October 2017). This is as well an important area for research to mitigate what products to offer to the unbanked Tanzanian and the youth on the YouthSave concept to the unbanked groups under school age; Lissa Johnson, YungSoo Lee (2015). Such moves may turn out to be very inviting and cultivate instantly the culture of saving in anticipation of credit facilitation benefits.

2.4.2.5 Information Communication Technology

The impact of ICT adoption in banks has come as an avoidable tool in this advanced era of technology. In this study the researcher has basically concentrated on three ICT renowned groups in the identities of Technological Acceptance Model (TAM); Diffusion of Innovations Theory (DOI) and DeLeone and McLean Model of Information System Success.

The choice to this effect has taken into account each one's individual acceptance in the market, their ease in application, adaptability and future expandability to including subjective norms, user attitudes and other innovations. A study review conducted by Eija Korpelainen (2001) did identify TAM to be the most cited thematic group with 737citations along with 21 articles covering 51.6% of most cited articles. Other factors in consideration included, impact of ICT on successful redesigning of business process reengineering, Broadbent et al.(1999) and consideration of the future role of ICT systems Orlikowski and Iacono (2001).

2.4.2.6 Social Security and Unemployment Benefits

Practically all governments in advanced economies do provide social security, health care and unemployment benefits to their citizenry; the same are generally covered and included in their government budgets. Under such circumstances private savings for either precautionary motives or preparation for future life upon retirement tend to lose grip or importance, Loayza, Schmidt-Hebbel, & Serven (2000). Such provision have had discouraging effects on individuals and/or households as existence of this provision reduces the practical importance of managing another voluntary savings scheme running concurrently; Gale (1999).

No wonder in advanced economies like that of UK where social security and unemployment benefits are strong and accompanied by easy financial lending services, the household saving turn out rate is relatively low- G. Gale (1999). In this case it's apparent the government which is increasingly savings to offset declines in personal saving (G. Gale 1999) will have a plan to upkeep of retirees and the unemployed within its circles. In the Tanzanian case, is the Government having in its budget coffers something to support provident funds to care for its retirees and the aged group? The government has indirectly put in place social security funds to attend retirees but not the unemployed.

2.5 Empirical Evidence

Having gone through a number of empirical literatures on saving and the culture of saving; it's important that we now relate the findings to where such variables have worked relative to realities in life. In the empirical literature review covering topics on savings in both developed and developing countries, the researcher was able to analyze applicability of various theories and determinants of saving behaviors with a view of providing the basis for applying the said theories in Tanzania.

2.5.1 Culture of Saving as Defined by other Researchers

Waceke (2017) has some comments on culture of saving, particularly on the phrase that *"there is never going to be enough money to save"*. Accept this if you wish to develop the habit of saving. An increase in salary income/disposable income to most people may not necessarily encourage them to save more as per Keynesian AIH on consumption and savings. People are relatively not saving simply because they have no HABIT of saving.

Waceke (2017) describes culture as a way of thinking, behaving and working within a society or organization. That something done consistently becomes a habit; and a habit done consistently becomes a way of life i.e. a culture. Thus culture of saving is cultivated vide a habit of saving done over and over in one's life. You can thus cross-check with your society members if they have a spending or a saving culture. If your society members are negative on saving culture, no matter what increase in income they would received, not much will increase their rate of savings. Their minds will consistently think that there is not enough to save.

If the thought of "lack" has become part of ones' mind, one will experience "lack" and all he/she will be seeing is "lack"and "lack" only (Eckhart Tolle, 2017). Culture is therefore a term that refers to a large and diverse set of mostly intangible aspects of social life. It is primarily composed of the values, beliefs, systems of language and communication, and practices that people share in common and that can be used to define them collectively with material objects that are common to them as a group or society (Nick Lisa Cole, 2017).

Thus acknowledging culture and its effects on social behavior; the researcher in this study believes that if individuals are thoroughly inculcated into the importance of savings; then the general community through the psychometric theory or the risk perception theory should be subjective to changes and accept saving practices in the either forms of: (i) Voluntary saving (ii) Involuntary saving (iii) Forced saving

2.5.2   Interest Rates, Inflation Rate and Product Innovations

Indeed the issue of interest rates and their application has remained ambiguous to many as determinants to promoting the culture of saving. The need to distinguish and

differentiate between nominal interest rates and real interest rates should become an issue of paramount importance. Nominal interest rates are rates not adjusted against inflation rates, while Real Interest rates are those rates already adjusted against inflation rates (Jordan & Ross 5th Edition).

According to Tesha (October 2013) research study on determinants of private savings in Tanzania, real deposit rates (real interest rates) were non-responsive to mobilization of private savings in the Tanzanian economy. On the contrary, Mohd Yaziz, Fauzi & Dasmin (March 2017) in their study on Factors Influencing saving rates in Malaysia, all conclusively reiterated the importance of reasonable interest rates in attracting savings, economic growth, as well in improving the level of per capita income. But based on findings revealed by Aneth & Anne (2016), the culprit of low proportion of formal saving in Tanzania was attributed to inflation rate, which definitely would discourage cash savings should inflation rate be higher than the actual deposit interest rate; this in real terms would be effects of negative real interest rate and vice versa. Based on NMB study on saving culture as reported in Aneth & Anne (2016)., this being a market leader in financial inclusion and one of the biggest retail commercial bank in Tanzania; on analyzing its customer database, one observed a negative formal saving trend for the period between 2012 and 2015.

However applying competitive nature in retail banking practices product innovations would have encouraged customer savings. NMB developed three saving products each designed to chart one's future outlook. For example NMB Bonus Account; for adults with a bonus offer at end of period; NMB Junior Account – for the youth with offer rewards; NMB staff Account- encouraging staff savings- Aneth & Anne (2016). And

the National Financial Inclusion Framework (NFIF) (2013) had set the national target of achieving 50% of adult population having access to formal financial services by end 2016. Finding from Global Findex revealed that the target was achieved but with low performance level due to non-responsive quality products and services rendered albeit – interest rates.

2.5.3   Financial Development

Elbadawi and Mwega (2000) in their study on Sub - Sahara Africa, Latin America, East Asia and the Caribbean's revealed growth of private domestic income, per capita income and growth in trade as having great positive impact on savings; and that "growth precedes savings not the reverse". Like-wise, Ozcan, et al., (2003) in his study on Private savings in Turkey (1968-1994) revealed that the magnitude of income levels and income growth have had significant positive impact on saving.

However, Aizenman, Cheug and Hiro Ito, (2017) said in contrast that more developed financial markets lessen the need for precautionary saving and thereby negatively influencing the rate of saving. However Collins (1991), Loayza, Schmidt-Hebbel and Serven (2000), in their cross-country studies under World Bank Studies; supported the hypothetical idea that the level of real per capita income positively affects the rates of saving. Six out of seven studies undertaken proved that effect in private saving.

2.5.4   Demographic Effects

In Elbadawi and Mwega (2000) in their study on Sub- Sahara Africa, Latin America East Asia and the Caribbean's, further revealed that the rate of life expectancy tended to have a negative impact on private savings. Another study on Youth Savings

Patterns conducted by Lissa Johnson, YungSoo Lee and others(September 2015) on behalf of the Center for Social Development (USA) covering Colombia, Ghana, Kenya and Nepal revealed much positive results on youth saving habits. Two key factors were associated with such account uptake: (i) the direct marketing outreach strategy by Financial Institutions; and (ii) stiff regulations on account ownership.

In all the four countries marketing outreach to schools and youth clubs had lagged behind; the practice of "taking the bank to the youth" was non-existent. The regulatory policy on account ownership in each country had as well affected savings. Nonetheless findings established as positive in all four countries showing average net savings as follows: Colombia-COP 28,305($ 22.89), Nepal –NPR 423.56 ($ 12.54), Ghana –GHs 3.61 ($ 4.51) and Kenya – KES 41.23 ($ 1.04) (Lissa Johnson, YungSoo Lee & N.Chowa 2015).

Observations noted by Loazya, Schmidt–Hebbel, and Serven (2000) evidence microeconomic and macroeconomic factors to greatly affect private savings; factors such as rise in young-age and old-age dependency ratio necessitates decrease in private saving rates; this being in line with the Friedman's Life-Cycle Theory. Dosh (1994) using cross-country data to analyze determinants of saving in internationally established that there was a positive and statistically significant relationship between life expectancy and savings; the same was confirmed by Bloom et al. (2001) who affirmed that higher life expectancy in the Far East caused the high increase in saving rates while low life expectancy in Africa South of Sahara played a bigger part in dis-saving rates.

2.5.5 ICT Adoption

ICT application has been viewed as the perfect and reliable solution to enhancing positive changes towards activating the culture of savings among Tanzanians. ICT inclusion in the banking sector had topped among principal factors that were automatically seen as promoting the culture of saving in Tanzania and the world over.

The impact of ICT towards change in saving attitudes is vivid and measurable: almost all commercial banks have turned digital and employers/employees are embracing the use of ICT in banking systems such as channeling salary remittances and other financial settlements. Thus banks are in outright acceptance of ICT utility value, and have generally embraced this robust technological advancement which obviously enhances savings as shall be established by this research study.

2.5.6 Social Security & Unemployment Benefits

As mentioned above 2.4.2.6 the government which attends its retirees through Social Security Funding Schemes and where such schemes operate with dependable efficiency to warrant adequate social protectionism to its members, then workers and/or expected retirees would have no pressing reasons to increase their rates of savings, since their old-age livelihood would be taken care of by the schemes; Joshua Aizenman, Yin-Wong Cheung, Hiro Ito (2016).

Hence such schemes tend to negatively influence the rate of savings particularly in highly developed economies currently living on accumulated capital accrued on past years deposit when they were high-growth economies; Joshua Aizenman, Yin-Wong Cheung, Hiro Ito (2016).

2.6 Conceptual Framework

The conceptual framework in this study was based on the Friedman's Life-Cycle Model rooted in the life-cycle/permanent income hypothesis as organized by Hall (1978); the basic phenomena of this hypothesis was in the understanding that "saving is a future consumption and therefore anything disturbing the present consumption pattern also does affect savings of the future pattern". Thus, in view of this situation the researcher sought to expound and analyze the impact of ICT on Saving Culture in Tanzania by way of accommodating the random-walk hypothesis with the Permanent Income Hypothesis (PIH). These two theories do consider each individual rational seeking to maximize the present value of the lifetime utility given the existing budget constraints. The budget constraint was also based on the level of consumption path, but which further depended on the present value of the lifetime income. Manamba Epaphra (2014).

The sense in Manamba Epaphra above is - since income fluctuations over individual's lifetime are un-avoidable, it is important to consider individual determinants of saving behaviors at each stage (Kudaisi 2013). The model is quite flexible and very compatible in accommodating distinctive saving behaviors in developing countries like Tanzania. Such a model had been put in use by quite a number of researchers in Africa and other developing countries and in particular the one of Norman Loayza: Saving in Developing Countries- East Asia (2000). Other research studies applying the model within the African Continent included those done by: David Tesha-Determinant of Private Savings in Tanzania 2013; Nwanchuku and Odigie (2011) – Examining Private Savings in Nigeria; Manamba Epaphra (2014) – Investigation of the Determinants of Tanzania's National savings.

2.6 1   Analytical Framework on Saving in Tanzania

Adapting a resemblance of Aneth Kasebele & Anne Ong Lopez (2016)'s analytical framework in promoting the culture of savings in Tanzania, which offers lucid information to underpin the importance of determining factors that promote instilling the culture of savings into the general population has been adopted by this Researcher.

Independent Variables   **Dependent Variable**
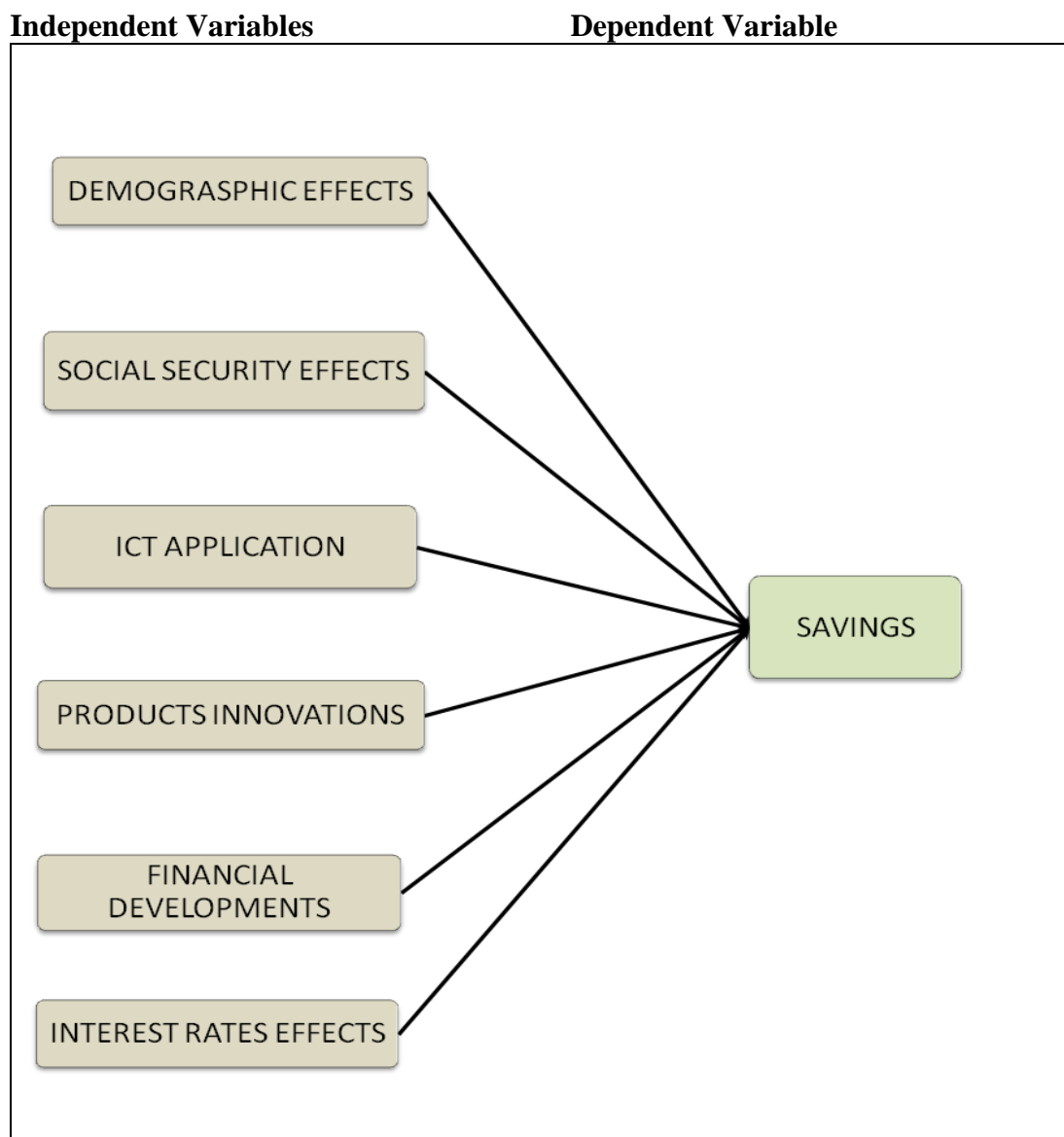
Figure 2.1: The Analytical Framework Model on Factors Promoting the Savings in Tanzania

2.6.2 Model Specifications

Independent variables identified in the life-cycle/permanent income hypothesis are put on test to establish their applicability in the Tanzanian economic conditions as against a single dependent variable saving. In this study the researcher identified six independent variables as determinants of savings in Tanzania. The variables are highlighted as reflected in the model presented above in the form of natural logarithm.

2.7 Chapter Summary

Chapter Two brought into consideration theories of savings, consumption and risk perceptions; the chapter outlined how each theory would function to facilitate success of this research study. Under consideration are hypothetical views on: The Life-Cycle Model as expounded by Modiglian, Brumberg & Ando in 1950s. Thereafter various researchers come up with assorted hypothetical views on saving / consumption patterns: Friedman came up with the Permanent Income Hypothesis – basing his arguments on individual rational choice of either spending or saving one's earned income; James Duesenberry introduced the Relative Income Hypothesis with the cross section version, against a time series version; while Keynes propounded the Absolute Income Hypothesis in which he viewed Consumption/Saving as functions of absolute disposable incomes.

The Chapter went further giving/highlighting empirical outlook on savings in Tanzania relative to the theoretical literature review. It was on the basis of the theoretical and empirical reviews that the Chapter identified key determinants of savings in Tanzania; and finally come up with a recommendable analytical framework model for adoption in carrying up the Research Study.

CHAPTER THREE

THE RESEARCH METHODOLOGY

3.1 Introduction

There have been quite a good number of research studies conducted by scholars on determinants of savings. While the theme of this study is again on determinants of savings, it is however putting particular attention to the culture of saving among Tanzanians, and how the recent technological advancements have made use of Information Communication Technology (ICT) in promoting the culture of saving one's earned income into financial institutions, i.e. banks.

This chapter elaborates methodology applied in conducting the research study; and the research philosophy used in guiding the entire research study. The chapter further pinpoints and explains the method used in selecting a representative sample within the area under consideration; the sampling techniques, and measurement procedures applied against each variable. The chapter further specifies methods of data collection and how the data are processed, specifically mentioning the tool of data analysis, such as SPSS or STATA or R and Excel.

3.2 The Research Philosophy

In this research study, Positivism Research Philosophy was viewed as a research guiding model wherein only realistic observations or facts established vide scientific measurements were considered trustworthy. Thus, in view of this positivism approach the researcher depended on data findings and interpretations to deduce conclusions on specific research objectives as outlined in Chapter one. Positivism philosophy believes

that reality is stable, can be observed and described from an objective point of view without interfering with the phenomena being studied, Crowther and Lancaster (2008). It further contends that the phenomena should be isolated and that observations should be repeatable. The Positivism philosophy was thus considered by the researcher as the critical methodology best suited to address the study problems under consideration.

3.3   Research Design

Research design defined as the manner structures within which the study is implemented; Burns & Grove (2001:223). The Research was descriptive in design and was intended to provide basic knowledge on the trend of savings in Tanzania.   The research further sought to establish the impact of Information Communication Technology (ICT) application in promoting saving and as well ascertaining the roll of employment in encouraging Tanzanians to practice saving. The researcher used both qualitative and quantitative approaches to gather the required data for the research study.

In handling these issues, the researcher applied multiple interviewing methods of both qualitative and quantitative nature. Thus data collection methods applied in this research included:

(i)   Literature reviews for secondary data sourcing;

(ii)   Interviews and self administered questionnaires for primary data sourcing;

(iii)   Unstructured and informal interviews in purposive sampling;

(iv)   Focus group discussions of five respondents (maximum) most of the time, discussing with the interviewers to validate both secondary and primary data.

(v)   Group dynamics were applied once to justify data provide by one financial institution, however without diluting the essence of the research study.

Under time constraints the researcher had to commission three Research Assistants to enhance data collection and timely completion of the research study.

3.2.1   Research Population

In identifying the research population, extra keenness was applied and employees of Ilala Municipal Council were adopted as the appropriate population sample conforming to representing the Tanzanian population.

3.2.1.1 Ilala Municipal Council - Background

The Ilala Municipal Council is an administrative District within the City Council of Dar es Salaam; the other administrative districts include Kinondoni and Temeke Municipal Councils. All Municipal Councils including the City Council itself are administratively under the Ministry of Regional Administration and Local Government. The Ilala Municipal Council has under its health portfolio a jurisdiction of two District Referral Hospitals along with a chain of Clinics and Dispensaries down-stream. It has under its education portfolio a command of over 20 Secondary Schools and about 150 primary schools. Again all major Financial Institutions including the Central Bank of Tanzania, have their Headquarters located in this very district. Agriculture and cooperative services portfolio is also having an active position in the district. Hence, the essence of having "Case of Banks and Government Employees" identified in this District. Thus with this wide coverage of economic

activities in the Municipal; it was justifiable to identify the 200 people population sample from within this Municipality.

3.2.2 Sampling and Sampling Criteria

Sampling refers to the process of selecting a portion of the population that conforms to a designated set of specifications to be studied. A sample is a subset of a population selected to participate in the study (Polit & Beck 2004:731; Uys & Basson 1991:87). Purposive sampling method was used in selecting particular (Banks & Social Security Institutions) who were knowledgeable in saving and its importance in financial services and economic prosperity. Other than observations to the above institutions, probability sampling based on the assumption that every member or sampling unit has an equal chance to be selected was applied but under the criteria that all participants were under employment within the Municipal Councils' registry or being employees in respective banks and Social security institutions. Further to the above the researcher was also guided to purposefully approach specific institutions National Bureau of Statistics (NBS) and/or officials and have a qualitative interview to establish findings on the above factors and many others.

3.3.6 Variables and Scales of Measurement

In this research study a set of independent variables were measured to establish their correlation in influencing the dependent variable i.e. saving. The type analysis used depended on the set of data processed as reflected in Table 3.3 containing variables presented in the Analytical Framework Model and which form the main subject for consideration.

Table 3.1: Variables and Scales of Measurements

SN	Description of the Variable	Type of data collected	Method of Measurement
i.	Financial Developments	nominal / ordinal / numerical	Multivariate Techniques using SPSS tested vide–multiple correlation & regression analysis
ii.	ICT Application	nominal / ordinal /	Multivariate Techniques using SPSS tested vide–multiple correlation & regression analysis
iii.	Demographic Effects	nominal / ordinal / numerical	Multivariate Techniques using SPSS tested vide–multiple correlation & regression analysis
iv.	Interest Rates Effects	nominal / ordinal / numerical	Multivariate Techniques using SPSS tested vide–multiple correlation & regression analysis
v.	Products Portfolio & Innovations	nominal / ordinal /	Multivariate Techniques using SPSS tested vide–multiple correlation & regression analysis
vi.	Effects of Social Security & Unemployment Benefits	nominal / ordinal / numerical	Multivariate Techniques using SPSS tested vide–multiple correlation & regression analysis

Source: Researcher, 2018

The set of data supporting all these variables had been grouped under nominal, ordinal and numerical data, data presentation commenced with nominal data which were of need in defining the gender, marital & employment status of respondents and subsequently followed by numerical data presenting such data as age, height and weight of respondents while ordinal data were classified into non-numerical or named categories. Establishing how each variable did influence the culture of saving has been the main cause of this research study. Table 3.3, presents a summary and how data collected were treated defining the same as either Quantitative (numerical) or Qualitative (categorical). Nonetheless, to make the data meaningful to this research study, the same had to be processed and measured under the commonly used likert scale for ordinal data and the number of observations in nominal scale counted

numerically in order to calculate proportions or percentages of all observations.

The numerical scale on the other hand combined data related to Intervals and Ratios but inclined to quantitative operations: such as ranks and classified equal intervals and ratios between observations e.g. weight, height, reaction time, speed. The "Likert scale" had been recommended as the most appropriate tool of measure or judgement in this study for its renowned capability to measure attitudes and /or opinions even in extreme cases of intensity in attitudes; it is easy in application of statistical analysis especially when one is interested in showing effect of several variables to dependent variable.

Table 3.2: Questionnaire Rating Sequence Rated with Likert Score Rating

Sn	Questionnaire rating sequence	Likert Score ratings	Wording & Descriptions
1	1	6	Very strongly agreeing/believing/increasing / aware
2	2	5	Strongly agreeing/believing/increasing/aware
3	3	4	Agreeing /believing/increasing/aware
4	4	3	Disagreeing/disbelieving/decreasing/unaware
5	5	2	Strongly disagreeing / disbelieving / decreasing /unaware
6	6	1	Very strongly disagreeing/ disbelieving/ decreasing /unaware

Source: Researcher, 2018

In rating intensity of attitudes, the researcher used point ratings to measure scores on questions raised against each variable. However Table 3.4 interprets rating sequences in questionnaires with Likert scores to be used in the data analysis. Data findings from the questionnaire would then be treated using multivariate techniques of multiple correlation and/ or regression analysis.

3.4 Data Collection Method

3.4.1 Primary Data

In this research study, the researcher collected primary data by way of self administered questionnaire and qualitatively through conducting interviews with respondents to observe workers' attitudes and opinions on culture of savings. Also to establish the extent to which ICT in respective working places had facilitated respondents to exercise the culture of savings in banks. Thus in this research study both qualitative and quantitative research methods had been applied. This was particular so mostly in banks and financial institutions due to the later exercising extreme secrecy in data controls; under such conditions the qualitative approach was necessary for positive response.

3.4.2 Secondary Data

Secondary data in the other hand were obtainable from secondary sources other than the original respondent. In this study most secondary data were sourced from the World Bank database and the Tanzania Bureau of Statistics. The search of data through personal contacts and interviews with specified respondents was purposely done to validate secondary data already in hand and to check/ establish the situational position of respondents at the particular time of study undertaking.

3.4.3 Data Validity and Reliability

Validity and reliability of data under consideration have depended on respondents' response to answering the questionnaire which was presented to them for self administration. Prior to filling the questionnaire the researcher had been given ample time to explain to respondents the purpose and importance of the questionnaire; and

that whatever information provided would remain confidential but should strictly true and unbiased. They were further reminded that mentioning one's name was not necessary just to put them free of any impeachment on what they were presenting. And on top of each questionnaire the above message has been clearly stipulated; thus the researcher trust data collected was true and reliable with no bias.

Prior to data collection, the researcher had presented the draft questionnaire to the supervisor for scrutiny, moderation, relevance and use approval. Recommendations, suggestions and tests on clarity and understanding of the draft were adopted in preparation of the final questionnaire presented for data collection. Reliability of research instrument refers to the extent to which research instrument yield consistent result or data after repeated in trials; reliability of the research instruments was confirmed after the researcher had administered the questionnaires as a pilot study on twenty respondents from diverse groups with great success after each was able to properly comprehend and coming up with unquestionable results. The final questionnaire was thus circulated after approval and full blessings from the supervisor.

3.4.4 Data Analysis

Data analysis commenced with data screening, validation of the measurement and evaluation of the structural model. Data fitness was tested to establish judgmental reliability on hypothetical testing as pre-organized, categorized, tabulated, and transformed. Statistical Package for the Social Sciences (SPSS) version 21 was used in data screening test to check if there were missing or unrelated data. The result from data screaming revealed that there are no anomalies in data presentation. The

researcher processed further the descriptive statistics to determine sample characteristics that would influence the research conclusion. Descriptive statistics summarized all gathered data processes and presented a description of the data analysis in an appropriate format. Since the research study was empirically established to involve a number of six independent variables against one dependent variable, multiple regression analysis was used in this analytical process to put on test the pre-meditated hypotheses.

The regression equation was presented as follow:

$$\dot{S} = \c{C} + \c{C}_1 (DEt_1) + \c{C}_2(FDt_2) + \c{C}_3(IRt_3) + \c{C}_4(PPIt_4) + +\c{C}_5 (ICTt_5) +\c{C}_6(SSt_6) + \varepsilon$$

Where:

S	= Savings
DE	= Demographic Effects
FD	= Financial Developments
IR	= Interest Rate
PPI	= Products portfolio and Innovations
ICT	= Information Communication and Technology
SS	= Social security and unemployment benefits
$\c{C}$...... $\c{C}_1$..... $\c{C}_6$	= are consumption parameters to be estimated
ε	= Margin of error

Thus, the regression equation above has presented the inter-relationship between demographic effects, financial developments, interest rates, products portfolio and innovations, information communication and technology, social security and unemployment benefits on the one side and savings on the other.

3.4.5   Chapter Summary

Chapter Three relates to Research and Methodology; the chapter mainly provides the tools and means on how the research was actually conducted and to ensure correctness, reliability and acceptability of the research findings to the general community. Of great importance, the chapter has outlined the bases of the Research philosophy and design; the research population including selecting the population sample. In this respect the sampling process and sampling criteria were outlined; identification of variables and scales of measurements pre-determined. Data collection methods based on primary and secondary data sourcing were established but strictly observing important aspects of data validity and reliability along with actual data analysis mentioning the statistical package applied.

CHAPTER FOUR

INTERPRETATION AND DATA ANALYSIS

4.1   Introduction

This chapter presents findings in light of data gathered in response to specific questions contained in the questionnaire directed towards achieving research objectives as presented in chapter one. The data collected from the field represent ideas and facts covering characteristics of various respondents within the area covered by this research exercise. The analysis covered the nature and type of respondents in terms of gender, age groupings and marital status. The analysis further presented the status position of potential factors that would impair some of the specific objectives of this research study such as the level of saving culture among Tanzanians.

The potential factors in this regard included: the number of children and other dependants in respective families, level of education of various respondents, nature of employment and the amount of disposable income (salary) earned per month. Not only was the analysis of data substantive but also involved other factors contained in the questionnaires as they were well presented to facilitate reaching reasonable conclusions on general objectives of this research study. Key factors to be established were those which promote savings among Tanzanians.

4.2   Characteristics of Respondents, Result and Interpretation

The total number of respondents who willingly represented the national population in conducting this research study was 132 and was found to possess the following characteristics:

4.2.1   Descriptive Data on Biographical Information of Respondents

A summary descriptive data of respondents in terms of percentage format are hereafter presented under Table 4.1 to 4.8: covering the gender, age and marital status of the population sample. Table 4.1 below presents the gender description of respondents whereas out of the population sample of 132 people 73 equivalent to 55.3% were male respondents and 59 equivalent to 44.7% were female respondents.

Table 4.1: Gender of Respondents

Categorization		Frequency	Valid Percent	Cumulative Percent
	Male	73	55.3	55.3
	Female	59	44.7	100.0
Valid	Total	132	100.0	

Source: Researcher, 2018

Table 4.2 on the other hand depicted the age of characters in the population sample that range from 33 people under the youthful group of within the age between 20- 30 years who make 25% of the population;44 people of the middle aged group between 31-40 years accounting for 33.3% and 38 people that were the old aged ranging between 41-50 accounting for 28.8% and finally 17 people or 12.9% favoring the older age towards retirement summing up to 100% of the population sample.

Table 4.2: Age of the Respondents

Categorization		Frequency	Valid Percent	Cumulative Percent
	20-30	33	25.0	25.0
	31-40	44	33.3	58.3
Valid	41-50	38	28.8	87.1
	51+	17	12.9	100.0
	Total	132	100.0	

Source: Researcher, 2018

Table 4.3 presents the marital status of respondents; the situational status had a great impact on and caused basic decisions on how to apportion earned incomes. Thus whether to save a sizeable portion of income for future use or purposely consume less with precautionary motives of attending unforeseen family issues befalling the future well being of respective members within the population sample depended on strength of the marital status. Thus within the 132 respondents, 35.6% were single while 57.6% were married. The widowed representing 6.8% of total respondents and summing up to 100% of all the respondents put together. Married couples were assumed to be more responsive to saving for security and wellbeing of their respective families upon retirement and old age living as compared to other categories.

Table 4.3: Marital Status of the Respondents

Categorization		Frequency	Valid Percent	Cumulative Percent
Valid	Single	47	35.6	35.6
	Married	76	57.6	93.2
	Widow	9	6.8	100.0
	Total	132	100.0	

Source: Researcher, 2018

The number of children and dependants had a great impact on decisions of whether to save something for future use or make an outright consumption of whatever was earned. Research findings as per data gathered and analyzed in this study established that female respondents outnumbered men in terms of carrying over the burdens of attending family responsibilities in form of number of children and dependants to care for, thus becoming more disadvantaged in remaining with extra income for saving compared to men who were less burdened. This is vividly analyzed in Tables 4.4 & 4.5 here below where the number of children was revealed to be standing at 34.1% on

males against 65.9% for females while on dependants the same stands at 29.5% on males against 70.5% females. Under these circumstances therefore women respondents were forced to lag behind in practicing the culture of saving due to being overburdened with dependants to care for.

Table 4. 4: Number of Children

Categorization		Frequency	Valid Percent	Cumulative Percent
Valid	Male	45	34.1	34.1
	Female	87	65.9	100.0
	Total	132	100.0	

Source: Researcher, 2018

Table 4.5: Number of Dependants

Categorization		Frequency	Valid Percent	Cumulative Percent
Valid	Male	39	29.5	29.5
	Female	93	70.5	100.0
	Total	132	100.0	

Source: Researcher, 2018

In essence it was trusted that the level of education highly mattered in assimilating useful information's/teachings or knowledge on the importance of practicing the culture of savings for future use. The population sample as presented in Table 4.6 below stands reputed for having a high number of respondents with the ability to grasp such knowledge as 47.7% of respondents were educated to degree level and in addition supported by a 20.5% batch with masters degree level and 20.5% being another batch of graduates with diploma certificates while the remaining 11.4% were descending down academically from diploma certificates to form six and four levels respectively. Hence this population sample was clearly knowledgeable on what the research study was underpinned upon i.e. savings and its social - economic impact on

life after retirement age. Thus ideas and opinions of this population sample should be highly respected as indeed representing thoughts of both the elite and general population of the Tanzanians.

Table 4.6: Level of Education

Categorization		Frequency	Valid Percent	Cumulative Percent
Valid	Form four	4	3.0	3.0
	Form six	11	8.3	11.4
	Diploma	27	20.5	31.8
	Degree	63	47.7	79.5
	Masters	27	20.5	100.0
	Total	132	100.0	

Source: Researcher, 2018

Good enough 74.2% of the population presented in Table 4.7 was made up with employees engaged under permanent terms of employment implying that they were assured of a continued flow of monthly salary incomes and remunerations along with associated social benefits for times ahead. Meanwhile 22.0% of the population sample was composed of employees engaged under temporal terms while 3.8% were ex-employees and working on self employment terms to which a continuous flow of income may over time be un-assured and hence affect what would have been a continuous flow of income to plan and execute the culture of financial savings for one's future use.

In case of the issue of adequate income one needs to satisfy one's monthly consumption needs remained ambiguous and varied from one family to another taking into account Friedman's PIH that on the rational choice of spending one's income. It as well took into consideration James Duesenberry two version of his RIH philosophy.

Table 4.7: Terms of Employment

Categorization		Frequency	Valid Percent	Cumulative Percent
Valid	Permanent	98	74.2	74.2
	Casual	29	22.0	96.2
	Self employed	5	3.8	100.0
	Total	132	100.0	

Source: Researcher, 2018

Further, considering Keynesian AIH philosophy which takes a form of linear function with a constant marginal propensity to save (MPS), the flow of income (disposable income) presented in Table 4.8 demonstrated the real expected flow of income, a portion of which should have been saved for future use while the other would be consumed outright depending on the rational choice and /or the substitution effect theory. 56.1% of the population sample was earning between Tshs. 500,000 - 999,000 while 15.2% and 6.1% were the next high earning groups with benchmarks of Tshs. 1,000,000 -1,500,000 and Tshs. 1,500,000 – 2,000,000 respectively..

Table 4.8: What are Respondents' Current Levels of Monthly Incomes (Salaries)

Categorization		Frequency	Valid Percent	Cumulative Percent
Valid	100,000-499,000	15	11.4	11.4
	500,000-999,000	74	56.1	67.4
	1,0000,00-1,499,000	20	15.2	82.6
	1,500,000-2,000,000	8	6.1	88.6
	Above 2,000,000	14	10.6	99.2
	Self employed (no salary)	1	.8	100.0
	Total	132	100.0	

Source: Researcher, 2018

The highest group earner accounting for 10.6% received over Tshs. 2,000, 000; it was from these three top groups the researcher expected to gauge success of the culture of

savings as against conspicuous spending. The low income group with meager monthly earnings ranging between Tshs. 100,000 – 500,000 accounted for only 11.4% implying their non-significance in case the idea of promoting the culture of saving flopped

4.2.2 Descriptive Data on Savings

Questions inciting respondents if savings had been in their minds, revealed results presented below in Table 4.9. In that 92.4% of respondents (population sample) highly affirmed that the culture of saving actually had been borne in them and that they had previously been practicing the culture of saving at various levels on realization of disposable incomes.

Table 4.9: Do you save any Income? (Is Saving Part of you)?

Categorization		Frequency	Valid Percent	Cumulative Percent
	YES	122	92.4	92.4
Valid	NO	10	7.6	100.0
	Total	132	100.0	

Source: Researcher, 2018

It was only 7.6% of respondents who had shown negativity towards saving for one reason or other of the following as established in Table 4.10: (i) 30% of 7.6% outright stated they were not interested, (ii) 50% of 7.6% adduced the high dependence rate (iii) while 20% of 7.6% revealed that they did not find benefits from practicing savings.

Table 4.10: Reasons for not Savings

Categorization		Frequency	Valid Percent	Cumulative Percent
Valid	Not willing	3	30.0	30.0
	Many dependants	5	50.0	80.0
	No benefits	2	20.0	100.0
	Total	10	100.0	
	Group in support (Table 4.9)	122		
Total		132		

Source: Researcher, 2018

One critical question to study was whether the rate of saving was on the increase or decrease? Based on data findings presented in Table 4.11, respondents whose saving rates were on decrease outnumbered those with saving rates on the increase. 49.2% were on the decrease while 43.2% were on the increase; 7.6% of respondents stood midway between savings and consumptions.

Table 4.11: Is the Rate of saving on the Increase or Decrease?

Categorization		Frequency	Valid Percent	Cumulative Percent
Valid	Increasing	57	43.2	43.2
	Decreasing	65	49.2	92.4
	Non responsive	10	7.6	100
	Total	132	100.0	

Source: Researcher, 2018

Table 4.12 presents possible factors causing the decrease in rates of savings. Important findings at the outset were to do with the main factors based on data findings which remained unclear due to a large number of non-respondents. 43.9% opted to remain passive i.e. non- responsive. Nonetheless, despite the unclear situation, the responsive position had surpassed 50% adding up to 56.1% of respondents. Reasons cited herein were quite significant to represent views of the majority in this respect.

Table 4.12: If Decreasing then Why? What are Main Factors for the Decrease?

		Frequency	Valid Percent	Cumulative Percent
Valid	Meager income	16	12.1	12.1
	Low interest rate	17	12.9	25.0
	Simply not willing	4	3.0	28.0
	Many dependants	36	27.3	55.3
	Unaware of saving benefits	1	0.8	56.1
	Non responsive	58	43.9	100.0
	Total	132	100.0	

Source: Researcher, 2018

The factor of many dependants (in this case the group of dependants being inclusive of one's own young children) was sighted by most respondents 27.3% as factor number one in retarding the rate of savings followed by low rates of interest on deposits accounting for 12.9% and lastly the factor of meager income / disposable income 12.1%. Other factors such as non-willingness and unawareness of saving benefits were mere excuses characterized by inadequate disposable incomes. These other factors together accounted for 3.8%.

4.3   Results and Discussion

4.3.1   Normality Test

Table 4.13: Normality Test

Variables	N	Skewness	Kurtosis
Interest rate on savings	132	.302	.246
Financial Development	132	-.346	.059
Demographic Effects	132	.615	-.035
Social Security and Retirement Benefits	132	-.258	.024
Information Communication Technology	132	.534	.412
Products Portfolio and Innovations	132	.180	-.653
Saving	132	-.292	.135

Source: Researcher, 2018

SPSS version 21.0 has been used to screen data and conduct Normality test for kurtosis and skewness evaluations. Kurtosis test was applied to determine peaked-ness of frequency distribution relative to the distribution curve; skewness was on the other end used to measure the mode of data distribution; Pallant (2011). Recommendable data values of skewness and kurtosis range between -1.5 and +1.5; Tabachnick and Fidell (2013). Thus Table 4.13 of the Normality test provide a proof that all value indicators in respect of skewness and kurtosis are within the recommendable range and therefore qualify to be within the normal distribution curve.

4.3.1 Measurement Validity

Further to normality test, Measurement Validity was conducted to verify ability of the scale applied to give appropriate results of data presented for measurement. The researcher again using SPSS version 21.0 measured sample adequacy and performed multiple regression analysis to establish existence of any statistically significant differences between means of three or more unrelated groups (cross tabulation). The researcher using the Keiser-Meyer-Olkin (KMO) scale to verify sampling adequacy and Bartlett's test of Sphericity and satisfied the research on fitness of the factor analysis. Thus based on the KMO scale, values greater than 0.5 are considered significant (Hair et al., 1992).

Table 4.14: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.620
Bartlett's Test of Sphericity	Approx. Chi-Square	665.524
	Df	210
	Sig.	.000

Source: Researcher, 2018

KMO value findings are as presented in Table 4.14 the same stands at 0.620 hence is appropriate for use in this study while the value of Bartlett's Test of Sphericity is highly significant ($p < 0.05$), therefore support the appropriateness of factor analysis of this study.

4.3.2 Reliability Test

Reliability test Table 4.15, is another concept through its stability and consistency in application needs to be standardized against all variables. Analysis and findings put on scale translate how much each item measure in respect to reliability tests. The reliability test is commonly measured in form of internal consistency applying Cronbach's Alpha which present results in the form of a coefficient of inter-item correlation. And correlation of all items combined together with all other relevant items is gauged for multi-item scales: Cohen at al., (2007). Consistency of Coefficient is between 0 and 1, and the higher the coefficient the more consistency.

Table 4.15: Reliability Statistics

Cronbach's Alpha	N of Items
.697	7

Source: Researcher, 2018

4.3.3 Regression Analysis

Multiple Regression Analysis is applied to test whether there is influence between independent variables and dependent variable. Dependent variable of the study is culture of saving and independent variables are Product Portfolio and Innovations, Financial Development, Demographic Effects, Interest Rate, Information Communication Technology, Social Security and Unemployment Benefits. Table 4.16

presents the model summary and the relationship between the dependent variable, and independent variables.

The value of R portrays the correlation between the worked findings on savings and the aggregate values of all independent variables. The R value varies within -1 to 1 while the positive or negative sign dictates direction of their relationship; with value rating standing at 0.665, this implies that there is a positive correlation between saving and other components in the set of independent variables. The regression model applied gives a prediction of up to 66.5% variance in favor of saving culture. R^2 reflects the change that would occur in view of changing factors befalling the eight independent variables. In this study with R^2 staggering at *0.442*, the change implies that saving interacting with all independent variables did contribute 44.2% of variations in performance while the remaining portion is relates to other factors in the economy.

The value against the Adjusted R Square on the other hand reflects the strength and goodness fit of the model in population as it stands close or equal to R^2; Field (2009). The value difference in this respect R^2 minus Adjusted R^2 in the model summary produces a difference of 0.032 (0.442-0.410); such closeness implies that the model had actually been derived from the population rather than a mere sample.

Table 4.16: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.665[a]	.442	.410	2.227

Source: Researcher, 2018

a. Predictors: (Constant), product and innovation (PP_I), social security (S_c), Demographic effect (D_M), Financial Development (F_D), interest rate (I_R), ICT

Table 4.17 this ANOVA table stands to testify if predicted results from the model are significantly better than workings calculated using mean. The F-Test for regression model is 13.943 with a significant value of 0.000 (p=.000< 0.05) demonstrating the goodness fit of the model in predicting final outcome of variables.

Table 4.17: ANOVA^s

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	553.344	8	69.168	13.943	.000^b
	Residual	699.490	141	4.961		
	Total	1252.833	149			

    a. Dependent Variable: SAV_V(saving)

    b. Predictors: (Constant), PP_I, IC_T, F_D, I_R, S_c, D_M,

Source: Researcher, 2018

Table 4.18 the Coefficient table demonstrates strength of independent variables in enhancing operational performance of the dependent variable-Saving. Basing on Field (2009) the unstandardized (B) coefficient explains the relationship between the dependent variables and each of the independent variables (predictors). However results (coefficients) under consideration have all registered positive coefficients indicating existence of positive relationship throughout. Analysis of findings has also revealed that for every increased in independent variables there has been an increase in dependent variable (savings). The B values express the extent each predictor would contribute towards realization of positive results in savings other predictors remaining constant.

Meanwhile, standard error calculation work out to demonstrate the extent predictor values would vary across different samples and as well to signal possibilities of *Beta* values differing significantly from zero under t-statistical test. It thus follows if the t-

test relationship to B value is significant, then the predictor is making significant contribution to the model; and under this circumstance what follows is the smaller the value of sig. $p < 0.05$ the greater the contribution of that predictor to the model. For example predictor S_ c has registered the smallest sig. value $p < 0.000$ what follows is that it should have the greatest contribution value, = 4.179 in t-test; the same if followed by D_M with $p < 0.001$; contribution per t-test is = 3.316 which is the second largest. Thus the significance of t-statistical tests is in detecting the impact to be contributed by each predictor in the respective model; thus the B value and significance levels are crucial signals to be under constant observation.

Table 4.18: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	3.434	1.243		2.762	.007
	I_R	.201	.109	.138	1.842	.068
	F_D	.312	.142	.181	2.201	.029
	D_M	.360	.108	.248	3.316	.001
	S_c	.397	.095	.346	4.179	.000
	IC_T	.298	.108	.225	2.747	.007
	PP_I	.204	.136	.120	1.499	.136

a. Dependent Variable: SAV_V (saving). P=000<0.05

Source: Researcher, 2018

In addition to the above impact indicators SPSS version 21.0 offer standardized *beta* coefficients through which performance indicators are easily interpreted since they are free of units measured through variables calculations; SPSS apply standard deviations numbering to predict the outcomes in each predictor. For example the *beta* value of S_C is provided as .346 this value tells us straight forward that S_C has practically greater impact in the model. Therefore the results indicate there is significant effect

Social Security and Unemployment benefits but the great impact was predicted to be negative as per respective hypothesis; it hence imply that Social security is dis-promoting saving. On the contrary I_R (Interest rate) with beta value 0.138 is established to have a weaker impact implying that it is insignificant in promoting saving. This is further verified by the respective p value which was supposed to be p $=0.000 < 0.05 =$ but here it is p = 0.068; the same applies to Product Portfolio and Innovations with a beta value of 0.120 implying a much weaker impact on saving and verified so by p value readings which stand as follows p = 0.000 < 0.05 but here it reads p = 0.136 outright refuting the null hypothesis on product portfolio & innovations. All other variables have proved ok on test as per their respective hypotheses and are explained empirically as below.

I__R: Interest rates effects to saving tested by Dasmin Bin Hashim, Fauzi Bin Pin (2017) in Malaysia and established to be positive but the same has proved otherwise / insignificant in this study.

F_D: Financial Development tested in Tanzania context by Tesha (2013) and proved to be a key determinant of private saving in Tanzania; it stands so in this study as well.

D_M: Demographic effects in view of dependency ratio to negatively affect saving rates in developing countries tested by Loazya, Schmidt-Hebbel and Serven (2000), the same has highly been confirmed so in this study.

S_c: Social security and Unemployment Benefits negatively responded to saving was tested by Bloom et al. (2001) concluding that higher life expectancy in Asia the

increase in rate of saving while lower the life expectancy in Africa the lower the saving rates.

ICT: ICT is positively responsive to growth in any business as tested for impact of ICT on successful business process redesigning, Broadbent et al.(1999) and consideration of the future role of ICT systems Orlikowski and Iacono (2001).

PP_ I: Product Portfolio and Innovations is currently on test at NMB bank as per recommendations of Aneth Kasebele and Anne Ong Lopez (2016). Result findings to this experiment should come in three years period from now.

4.3.4 Chapter Summary

Chapter Four is the core chapter that conducts the actual data interpretation and analysis. While the previous chapter three dwelled in research and methodology, this chapter mainly processed and analyzed data findings from the research field. Characteristics of respondents were established, and result findings interpreted. The main outcome hereafter was establishing descriptive data of respondents on one end; e.g. characteristics to their age, sex, marital status and many other data as required; while on the other data on respective variables were as well processed. Finally actual research findings after analysis were presented affront for discussion. The bases of data analysis and result findings were pre-established standard norms calibrated against each test conducted. In respect of this, normality test was conducted for kurtosis and skewness evaluations; also measurement validity was conducted to verify the ability of the scale applied to present accurate results. To establish each independent variables' relationship to the dependent variable in our case (Savings); a

reliability test was conducted with results presented in the form of coefficient units. And since savings as a variable was being measured against six other variables the recommendable tool of analysis to apply was through regression analysis; final results of which are presented in Table 4.18.

CHAPTER FIVE

CONCLUSSION AND RECOMMENDATIONS

5.1   Conclusion

The main objective of the study was to establish factors that promote savings among Tanzanians. The approach recommended was to achieve the same but through replies to the following three specific objectives:

(i)   To assess factors promoting savings among Tanzanians and their impacts.

(ii)   To assess the impact of ICT on savings among Tanzanians; and

(iii)   To ascertain the specific role played by employment in promoting savings among Tanzanians.

Based on descriptive statistics, Regression / ANOVA Results and the hypothetical tests; it has been established that saving can be inculcated into Tanzanians. Also to a great extent the study has revealed that ICT has a substantial positive impact on saving. Statistics in support of these revelations are all in chapter four as worked in the Regression coefficient Table 4.18.

The study was guided by the following six hypotheses which by and large became null except for one. Thus:

(i)   Hypothesis 1: Saving Is Positively Influenced By Interest Rates Effects.

(ii)   Hypothesis 2: Saving Is Positively Influenced By Financial Development

(iii)   Hypothesis 3: Saving Is Negatively Influenced By Social Security And Unemployment Benefits

(iv)   Hypothesis 4: Saving Is Positively influenced by technological advancements in Information Communication Technology (ICT).

(v)   Hypothesis 5: Saving is positively influenced by demographic effects

(vi)   Hypothesis 6: Saving is positively influenced by product portfolio and innovation

In all hypotheses the findings showed that the p value p = 0.000< 0.05 except for only two variables as presented in the Coefficient Table 4.18 wherein the Hypotheses have thus been rejected.

(i)   Saving is positively influenced by interest rates effects in Tanzania but p=0.068=>0.000 hence rejecting the null hypothesis.

(ii)   Saving is positively influenced by Products Portfolio/Innovations in Tanzania but p=0.136=>0.000; hence the hypothesis has been rejected.

5.2   Recommendations

In view of the above findings and analysis derived in Chapter Four, the researcher makes the following key recommendations against each of the three specific objectives:

(1)   Factors that promote savings among Tanzanians in priority ranking are proved as follows:

(i)   Demographic effects has ranked top in influencing savings significantly registering p = 000 < 0.001.

(ii)   Followed by ICT which has registered p = 000 < 0.007;

(iii)   Followed by Financial Developments with p = 000 < 0.029;

(iv)   But outright refuting interest rates effects and products innovations having least significance in promoting savings after registering   p = 000 < 068 and p = 000 < 0.136 well above the limits p = 000 < 0.05.

(2) The impact of ICT in Promoting Savings:

(i) Information Communication Technology (ICT) which is synonymous with digitalization of transactions is of core importance in promoting savings. Study findings have proved the impact of ICT to be significantly high with *p = 000 < 0.007* only superseded by Demographic Effects which has ranked top in significance registering *p = 000 < 0.001*

(ii) Proper ICT technology and programs (including security programs) should be put in place to ensure their use in promoting savings in Tanzania.

(3) Ascertaining specific role played by employment in promoting savings in Tanzania:

(i) Employment although it has caused most employees to operate bank accounts for which case it has registered the highest scores in p value $p = 000 < 0.000$ reading is but negated as set in the hypothesis that Social Security is negatively influencing saving on facts that most employees are avoiding to run dual saving systems since Social Security endowment program is well set to care for them upon retirement.

5.3   Friedman's Permanent Income Model

The Friedman's Permanent Income Model is based on the understanding that household members have a standard survival baseline level of income for their lifeline. And that members' Marginal Propensity to Save (MPS) is dependent on members' permanent and transitory incomes factored against other unavoidable factors (variables) in life; these factors are in the form of budgetary constraints to be considered in the consumption behavior. This study has thus established existence of

six factors (variables) which either promote / affect the MPS to be including: *demographic effects, financial developments, information communication technology (ICT), product portfolio and product innovations, interest rates effects*; and the other factor which has actually been proved to negatively promote saving under this study is the *social security and employment benefit*.

5.4   Areas for Further Research

This study which primarily aimed to establish factors which could promote the culture of savings among Tanzanians had without recourse identified ICT and "employment" but with reservations as among key factors and determinants to improving saving. In light of study findings, the researcher further invites into an in-depth study to establish firstl*y* the specific type of ICT knowledge for inclusion in promoting the culture of saving; and secondly a study to critically establish underlying causes that promote the culture of spending rather than promoting the culture of saving (revisit findings in Table 4.11) in a developing country like Tanzania.

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APPENDICES

Appendix 1: World Bank Economic Indicators through GDP Evaluation

Year	Tz- Gross Domest. Saving % Of Gdp	Ssa Gross Domest. Saving % Of Gdp	Global Gross Domest. Saving% 0f Gdp	East Asia & Pac. Gross Domest. Saving % Of Gdp	East Asia & Pac. Philipines Gross Domest. Saving % Of Gdp	East Asia & Pac. Singapore Gross Domest. Saving % Of Gdp
1988	**-**	**16.15**	**25.69**	**-**	**-**	**40.69**
1989	-	16.72	26.13	-	-	43.46
1990	1.28	14.01	25.72	-	18.32	43.52
1991	2.96	16.59	25.15	-	18.59	44.64
1992	0.32	11.65	25.28	-	19.09	46.78
1993	4.60	12.01	24.80	-	18.52	44.06
1994	1.64	11.96	25.24	-	22.10	48.25
1995	2.36	14.60	25.16	-	18.96	50.28
1996	4.63	18.42	25.10	34.42	19.90	49.45
1997	5.43	14.46	25.19	34.25	21.44	53.46
1998	7.48	10.40	24.91	33.91	29.26	53.13
1999	7.22	14.78	24.81	32.15	35.80	49.69
2000	10.06	20.45	25.37	32.32	40.55	45.71
2001	13.17	13.60	24.57	32.20	42.42	41.62
2002	14.93	14.44	24.89	32.28	43.57	38.97
2003	14.92	13.30	24.71	34.29	46.79	40.49
2004	16.16	15.54	25.57	35.62	49.28	41.31
2005	16.22	17.81	25.98	36.00	53.17	43.45
2006	18.14	23.48	26.65	37.36	52.77	47.48
2007	20.08	17.62	26.87	38.16	52.18	49.22
2008	19.94	19.64	26.09	37.41	52.47	45.01
2009	16.22	14.89	23.47	36.22	58.03	44.64
2010	16.91	19.75	24.81	37.05	60.78	51.68
2011	17.96	19.10	24.73	35.74	44.90	
2012	16.68	18.40	24.85	35.50	-	
2013	16.91	17.60	24.68	-	-	
2014	19.76	16.70	25.04	-	-	
2015	23.15	14.30	25.05	-	-	
2016	5.58	13.90		-	-	

Source: World Bank 2017

Appendix 2: Questionnaire

INTRODUCTION

The purpose of this Questionnaire is primarily: "To establish factors that promote the culture of saving in individuals, households, public and private enterprises; in general savings among Tanzanians.

Specific objectives include:

(i)   To assess the level savings among Tanzanian nationals;

(ii)   To assess the impact of ICT savings among Tanzanians;

(iii)   To ascertain the particular role of employment in encouraging the culture of savings among Tanzanian employees.

The researcher seeks for your sincere courtesy in attending this questionnaire to facilitate success of the research study which is carried out in fulfillment of the requirements for a Masters Degree Award in Business Finance at the Open University of Tanzania.

Rating to most of the questions shall be made in application of the Likert Scale Technique; with marking rates matched as follows:

6:-Very strongly agreeing/believing/increasing / aware

5:-Strongly agreeing/believing/increasing/aware

4:-Agreeing /believing/increasing/aware

3:-Disagreeing/disbelieving/decreasing/unaware

2:-Strongly disagreeing / disbelieving / decreasing /unaware

1:-Very strongly disagreeing/ disbelieving/ decreasing /unaware

You are asked not to write your name in responding to this questionnaire; thus feel free to express your genuine opinion in response to/on any issue herein by <u>encircling</u> the relevant opinion in response to each question in this research questionnaire. Take note that any information and /or opinion received from you in respect of this study will be treated with extreme confidentiality.

1.0 Personal Particulars of Respondents

1.   Age.........................Sex...

2.   Marital Status ....Married/Single...

3.   No. of Children..................... Male................Females.......................................

4.   Dependants (no.)..................................... Male.................Females.....................

5.   What's the highest level of education attained..

6.   Are you employed: Yes or No...

7.   If Yes what is your job title?...

8.   What is your current/latest gross salary per month?..

9.   Do you save any income? Yes / No ....

10.   If Yes where do you save....................and Since when ....

11.   If No then why? (select appropriate answer below) ....

1)*Meagre income 2) low interest rate 3) not willing 4) many dependants 5) no benefits*

12.   If banking which type of Account are you operating: *Current A/c or Saving A/C?* (Choose either) ....

13.   What made you open an Account? *1) Personal Will; 2) Conditional (salary remittance)*...

14.   How often do you use your A/C per month *1) very frequently 2) frequently; 3)*

Occasionally; 4) Rarely; 5) very Rarely; 6) Never

15. Is your rate of saving on the increase or decrease?

....

16.   If increasing, to what extent is the increase when compared with previous year trends?

1*) Very strongly increasing 2) Strongly increasing 3) Increasing   4) Decreasing 5) Strongly decreasing   6) Very strongly decreasing*

17. If decreasing, then why?   Which is main factor among these five speculative reasons?   *1) meagre income 2) low interest rate 3) simply not willing   4) many dependants 5) simply unaware of saving benefits*

2.0 Research Variables

The Dependant Variable - SAVING

1.0   *"There is never going to be enough money to save"* but always save part of any income earned; does this statement promote the culture of saving?

1)   Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree

2.0   If members of your society have negative attitudes to saving; will part of any incremental income thus earned end up in savings as per Keynesian *AIH* theory?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree

3.0   Evaluating members of your society, are their social attitudes inclined towards the culture of spending?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree

4.0 Again evaluating members of other adjacent society, are their social attitudes inclined towards the culture of saving?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree

5.0 Voluntary saving in Tanzania is motivated mostly by the desire of capital accumulation for capital re-investment; is this hypothetical statement a truism?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree

6.0 Forced saving in Tanzania is one among tools of the fiscal policy that promote saving and public capital accumulation; is this means of capital accumulation desired in the country?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree

Independent Variables:

a) Interest rate on savings

1.0 To what extent do you agree that a rise in real bank deposit interest rate would stimulate an increase in saving?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree

2.0 Given specific market conditions where products are on offer at reasonably low

prices; do you agree low real bank interest rates may still be stimulants to savings

to meet shortfalls in the would be accrued rate of returns?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not

agree.6) Very strongly do not agree

3.0 In most developing countries financial deepening has had negative impacts in

promoting the rates of saving. Has this situation affected savings rates in

Tanzania?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not

agree.6) Very strongly do not agree

b) **Financial Development**

1.0 It has been established that ***Foreign Aids*** in developing countries do hinder

domestic savings mobilization and therefore promoting dependency syndrome; has

this situation affected saving rates in Tanzania?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not

agree.6) Very strongly do not agree

2.0 Existence of macroeconomic stability in a country is an important element for

promoting the culture of saving; is this statement a reality in Tanzania?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not

agree.6) Very strongly do not agree

3.0 Per capita income growth is the most important determinant of savings in the

country; is this a reality in Tanzania under prevailing economic conditions?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree

c)   Demographic Effects

1.0   Is high dependency ratio in Tanzania affecting saving rates in the country?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree

2.0   Higher life-expectancy in Tanzania causes an increase in saving rates while low life-expectancy discourages saving; is this hypothesis a truism?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree

3.0   ***"Taking the bank to the youth"*** is the rightful age to inculcate the culture of saving; do you support this hypothesis in Tanzanian contest?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree

d)   Social Security and Retirement Benefits

1.0 As an employee receiving your pay through bank remittances, has employment played the role of inculcating you into the culture of saving?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree

2.0 Employees under Social Security Endowment Schemes have been discouraged to run another parallel saving scheme for either precautionary motives or preparations for retirement has this negativity discouraged the trend of saving in Tanzania?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree

e)   Information Communication Technology (ICT)

1.0   Most commercial banks have now turned digital, in your opinion has this move made an impact in changing attitudes of employees/employers towards banking practices?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree

 Has application of ICT in banks promoted peoples' culture towards saving in commercial banks?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree

f)   Products Portfolio and Innovations

1.0   Quite a number of commercial banks are aggressively instituting a number of product ranges and innovations such as attracting clients with hefty rewards, increased deposit interest rates, easy access to business credits and bonus issues; are you in support of this move as means of promoting the culture of saving?

1)Very strongly agree; 2) strongly agree; 3) agree 4) do not agree 5) Strongly do not agree.6) Very strongly do not agree