

Impact of Family Structure on Household Economy in Malawi: A Case of Chinsapo 2 and Area 49, an Urban Setting in Lilongwe City in Malawi

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Abstract: This study assessed the impact of family structure on household well-being using family savings, family income and food security as variables. Data was collected from 102 households and analyzed using descriptive statistics by computation of means, percentages, variances, standard deviations and frequency distributions, and inferential statistics. The results show that there is a positive relationship between family structure and household economy, and that people living in the urban are better off than those in the semi-rural or rural areas. The study further indicated that female and youth headed households or families are disadvantaged as compared to male and adult headed households or families.

Keywords: Family structure, households, savings, income, migration, modernization, and food security

I. BACKGROUND

1.1. Introduction

Population dynamics is a macro-economic issue when it affects the entire world and a micro-economic issue when it affects individuals and families. The National Statistics Office (NSO) in Malawi, illustrates that a family consists of people who share a place of residence and are related through blood ties or legal contracts (NSO, 2008 Population and Housing Census, 2008). Most studies have demonstrated that there is high population growth in developing countries than in developed countries. However, due to the demographic transition, population growth is slowing down, and there are low birth and death rates, (C. Elbers, 2004); United Nations, 2007; Dutt, 2007; Wako, 2012; Atanda, 2012; Peterson, 2017; Todaro & Smith, 2020). (Perkins D. R., 2001) and Chamie & Mirkin, 2020 state that very few governments, for example, Japan promotes reproduction because it appeals to the value of freedom whilst India, Pakistan, the Republic of Korea, and Egypt in Africa are against reproduction because these countries had a high population density such that policies have been formulated that set a maximum number of children in a family.

Malawi has not come up with a policy that restricts or sets a maximum number of children in a family. However, it has a Sexual and Reproductive Health Policy that aims at providing a framework for the provision of accessible, acceptable and affordable, comprehensive sexual and reproductive and health rights services to all women, men, and young people of

Malawi through informed choices to enable them attain their reproductive rights and goals safely. It emphasizes the prevention of unplanned and unwanted pregnancies by providing family planning services.

In our context, a family structure refers to the combination of relatives in the home and does not only deal with the unweighted members in the household but it also deals with the sex and age of the household head (Bogenschneider, 2010). All families have protective factors and risk factors given the characteristic of the home. For example, a single parent family would provide more protection but be prone to poverty than a two parent home affected by alcohol and violence but less likely to be poor (Shin, 2008). Family structures differ from country to country. Nuclear families and single parent families are common in developed countries because most of them are commercial societies where the parents' source and obtain the family necessities, hence, a few people in the home. In developing countries, extended family households are common but are now being overtaken by nuclear households due to the population increase (Ruby, 2006).

Family structure is distorted by several factors such as births, which is an expression of women the fertility. For example, if a baby is born in a childless family, the structure changes to a nuclear family household. The increase in number is followed by an increase in the demand for goods and services. The family's wellbeing depends on the ability of the members to make informed decisions, clear choices and huge sacrifices concerning fertility. When a child is born, more efforts are needed to ensure adequate family life. Thus, the parents or guardians have to decide on who will have to stay home for the child and who will provide for the family or if they have to look for a nanny thereby creating extended family households (UNFPA, 2010). In developing countries, children are regarded as investments because they cost money to raise but can provide family stability later in life for their parents (World Bank, 2013). Indeed, children require both money and time to raise but the Least Developed Countries (LDC) think that it is less expensive to raise a child than it is in many modern countries (UNFPA, 2010).

Family structure is also distorted by death mortality as there is a decline in the number of people. This is the main reason for

single parent family households. (Todaro, 2012) states that women have a high expectancy rate than males in both Third World Countries and First World Countries. Therefore, most of the Female Headed Households are a result of deaths of their better halves (NSO, Malawi Demographic and Health Survey 2015-2016., 2016). Lately, according to the National Health Survey and the Malawi Demographic Health Survey, deaths of both infants and adults have decreased swiftly with the coming of the new, advanced, and sophisticated technologies (NSO, 2016).

Migration and modernization are other factors that change family structures. These are push and pull factors such as jobs, food, shelter, land, and education that make people move from place to place (Chalasan, 2012). However, a small percent of female headed, and youth headed households are as a result of migration (NSO, Malawi Demographic and Health Survey 2015-2016., 2016). Taking the case of people migrating from Malawi to South Africa, either to stay or visit friends and families, as the population is increasing in that country so is the number of both families and its members, hence, changing the household structure. Modernization, mostly affects family structures in developing countries because of the availability of high-tech equipment. This is because of an increase in innovations that enhance female education, which further enhance informed decision making to have a small family and entering the labour market hence delaying family formations (UN, 2010).

Each family is a single decision maker (McConnell, 2002). They demand goods and services from markets and supply land, labor, capital and entrepreneurial ability to resource markets. Household economy is the science that shows the relationship among production and the supply or flow of money among people dwelling under the same roof either related by blood or not (Mattila, 1999). It includes some ways in which a household acquire its income, its savings and by which it meets its own food and non-food needs (consumption) (Save the Children Malawi, 2008). The existing state of knowledge does not warrant any clear-cut generalization as to the effect of change in the structure of the family in a country's development in today's less developed areas. While many studies use the pessimistic theory arguing that population growth impedes economic development, others contend that the economic impacts of increased family sizes are rather simulative, thus the optimistic theory and some maintain that the two variables are not related at all.

1.2. Problem Statement

The size of a family household, age and sex of the head of a family influences a lot in the home. There are some factors that affect the well-being of each member if families are not managed properly. Youth headed families are mostly extended families and lack parenting skills and experience. They may be too busy to monitor others because they are working so hard to earn money for their wellbeing thereby leading to general poverty. This results to a high dependency

ratio and a burden as they all rely on the head for almost everything. By the time the children are old enough to contribute to the economy of the family household, they are already in absolute poverty. Female headed families are also exposed to absolute poverty because they generally hold no or less land than the others. The result is that, they have poor access to loans and struggle in terms of production, food security, income and savings. Therefore, it is widely held that developing countries have large families with more children and the elderly people who are in dire poverty (Dao, 2012). Therefore, the study was aimed at evaluating the impact of family structure on household economy using family savings, family income and food security as variables.

1.3. Significance of the study

The study has helped to explain the effects of family structure on household economy by showing economic relationships between family structure and household economy in terms of poverty levels. It has also added a body of knowledge that can be used by other researchers and many stakeholders in order to avoid re-inventing the wheel on the subject as the study has come up solutions and recommendations. The study has gone further to provide guidance and direction in general on what should be done with respect to the changes in family structure because there are many dimensions to family structure and household economy and many ways in which individuals and families are likely to respond to them.

1.4. Objectives of the study

1.4.1. Main objective

1. To assess the impact of family structure on household well-being.

1.4.2. Specific objectives

1. To determine the impact of family structure on family household food security.
2. To assess the impact of family structure of the family household on income.
3. To determine the impact of family structure on family household savings.

1.5. Research Questions

In order to examine and understand the impact of family structure on family household's well-being the following research questions were formulated to guide the study:

1. What is the relationship of factors influencing family structure on household food security?
2. What is the extent of factors influencing family structure on household income?
3. What is the relationship of factors influencing family structure on family savings?

1.6. Research Hypothesis

The study hypothesized that there is a positive relationship between family structure and household well-being. This

position is also taken by (Thomas & Sawhill, 2005) who showed that different living arrangements affected families' economic well-being. They illustrated that a married-parent and cohabiting households, for example, can benefit from economies of scale and from having two adult earners. (Ross, E C; Mirowsky, J; Goldsteen, K, 1990) who in their study titled *Positive Aspects of Family Dynamics and Food and Health* found that a family's social support is one of the main ways that a family positively impacts health and that social relationships, such as those found in close families, decrease the likelihood of the onset of chronic disease, disability, mental illness, and death.

1.7. Scope and Delimitations

This study focused on the households with both large and small families either headed by women or men. The results were compared to their wellbeing and cohesion. However, the journey has not been so flowery and easy because some respondents had to be coaxed to respond to the questionnaire to avoid repeat visits.

For the purpose of clarification, the following important terms used in the study have been defined as follows:

Birth rate. Refers to the number of births per thousand of the population.

Farm income. Refers to the money obtained from farm products either by selling or barter trade or from working in the field they own or owned by other people in their area or someone else to provide for their families.

Fertility. Denotes the average number of live children born each year to a woman in an age group.

Food security. Denotes the access to food required by all people for a healthy life.

Household. Refers to a person or a group of persons related or unrelated, who live together in the same dwelling unit, who make common provisions for food and regularly take their food in the same pot or share the same grain store (nkhokwe), or who pool their income for the purpose of purchasing food.

Household economy. Refers to the science that shows the relationship among production, trade and the supply or flow of money among people dwelling under the same roof either related by blood or not.

Household head. Denotes a person who makes economic decisions in the household.

Household income. Refers to a measure of the combined money earned by all people in a household. It includes every form of income.

Household production. Refers to the production of goods and services by the members of a household for consumption using their capital and unpaid labor.

Migration. Denotes the movement of people from one place to another.

Orphan. Refers to a child under the age of 18 who has lost one or both parents to death from any cause.

Population dynamics. Refers to the branch of knowledge which is concerned with the sizes of population and the factors involved in their expansion, decline and maintenance.

II. LITERATURE REVIEW

II.1. Introduction

The study intends to provide answers on the relationship of family structure and household well-being. Many studies on this subject indicate that there is positive relationship between family structure and household wellbeing. Families progress through stages that vary in social-emotion and economic demands. This means that children are born, attend school if possible, leave home and start their own homes, one or both spouses retire if employed and die. Friends and relatives visit them every now and then (Mattila, 1999). Decisions are also made in terms of resource allocation, income earnings and gender division of labor (McConnell, 2002).

II.2. Literature Review

LDCs are mostly worried with the population growth. According to the United Nations Population Division survey done in 2010, it was established that more than 70 per cent of the LDCs governments have concerns about high fertility, high population growth and are therefore pursuing policies that are addressing these challenges, (Elbers & Withagen, 2003; United Nations, 2007; Dutt, 2007; Wako, 2012; (Atanda, Aminu, & Alimi, 2012) Peterson, 2017; (Todaro & Smith, 2012)). It has been highlighted that population growth is causing extreme poverty among households in LDCs due to no or less land which must be divided for cultivation and settlement thereby producing less output (United Nations, 2010).

In developed countries, the notable increase in one person homes has been an important demographic change which has contributed to the size reduction of families (Demuth, 2004). Also, there has been a demographic shift of the family structure in developing countries from extended families to one person families and nuclear families although the proportion in developing countries is relatively small compared to the developed countries. This tendency is more noticeable in those developing countries that are engaged in the rapid process of modernization (WB, 2013).

People in developing countries suffer from high dependency burden (Todaro & Smith, 2012) and they rely highly on others for almost everything regardless of the structure and or composition of the family. This enhances laziness and poverty among families. For example, FISP enhances poverty among people because they do not know how to support themselves without some help from someone (Baltzer and Hansen, 2011).

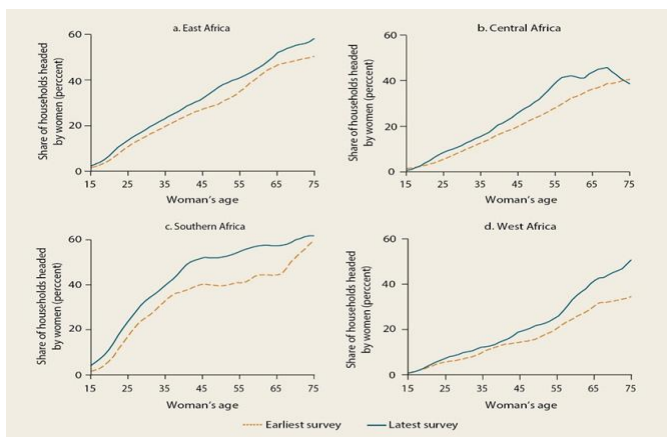
Reverend Malthus suggested that rich people with wages above the subsistence level had a way to change population since people tended to marry earlier when financially secure

and well to do families have the financial capacity to support more children (Pollard, 1990). The structure of a family will change once people get married since they will move away to start their own homes. The situation is quite different and more complex in some developing countries especially in the Indian sub-continent where there are more joint families and children stay with their parents to a much later age (Dao, 2012). Hence, either way, changing the family structure.

Extended family households are mostly found in Agro-based economies though they are increasing all over the world. This is so because of incompatible activity requirements between the parents (Ruby, 2006). When the work of a mother is cultivating the fields or gathering food and that of a father like warfare, trading trips and wage labour to be done outside the home make it difficult for them to take care of the children and do other household tasks then extended families are created. These family households are also formed because of financial difficulties or because older relatives are unable to care for themselves alone (Save the Children Malawi, 2008).

Female heads in homes are increasing all over the world. The proportions may not be the same all over the world, for example, countries in the Southern Africa have substantially higher rates while families in the West are least headed by women (Shin, 2008). Figure 2.1 thus shows the probability of the African woman to head a household at various age groups. It is evidenced that there is a high increase in families headed by females in Africa for all ages and regions since the 1990's. For families in East Africa, female headed homes are increasing at a high rate in all the ages. Those in Central Africa are increasing at a decreasing rate for people aged from 15-55years old and decreasing for people aged 70 and above. In Southern Africa, FHH are increasing at an increasing rate for the youth (15-40years old) and increasing at a decreasing rate for the elderly (41years old and over). Lastly, female headed homes in West Africa are increasing at a decreasing rate for people aged 15-55years and increasing at an increasing rate for people aged 56years and over.

Figure 1: Probability of an African woman heading a household, World Bank, 2015.



One notable change in the structure of families from policy perspectives, is that female heads are a diverse group. The growing number of homes headed by single persons particularly unmarried, divorced, separated or widowed women are likely to remain in poverty compared with married people and unmarried men (Edward, 2014). This is so because they have not chosen the headship but simply have no option. In homes where married women with a nonresident husband or educated women who may choose and socially and economically afford not to be married or remarry are expected to be well off (Milazzo, 2015). A study on marriage and men's health in 2010 shows that approximately 32.2 percent in single mother families who were poor during the first two months of 2009 continued to be in poverty for 36 months (Chety, 2014).

One exception is the study by (Dreze, 1997) who utilized disaggregated data on family structure to analyze the economic position of female headed homes. If a female is heading a large family, health is affected if she cannot manage to provide the day to day necessities. In such a case, more food will be demanded but unlikely to be met. This can lead to high cases of malnutrition. In the end, contribution to production or production itself is lessened, thereby enhancing poverty (Whitney, 2008).

On the other hand, the male heads of a family decide to gain more income for the upkeep of the home hence look for several jobs elsewhere (Baltzer and Hanse, 2011). Women heads prefer to work in farms than in other places hence earn a little income resulting to poverty (Dreze, 1997).

Just like the feminization of poverty theory states, female headed homes, mother headed homes or women headed homes are much more likely to be poor (Shin, 2008). This theory is a change in the levels of poverty biased against female headed homes. Thus, aims to narrow the income inequality gap between male heads of a family and female heads of a home (WB, 2013). All in all, poverty is falling faster in female headed homes in Africa (Milazzo, 2015).

Most of the Youth headed families are a result of deaths of parents due to many factors such as wars, HIV/AIDS and Covid 19 leaving the children orphaned hence poverty. In many African cultures, relatives often adopt the orphaned children but because of resource constraint due to the violent disruption during or after war, HIV/AIDS and Covid 19, many people barely have enough resources to keep themselves together. As a result, the children are left alone to fend for themselves and their siblings (Nzinyane, 2010). They lack support in many aspects as they struggle to earn a living and bring up their siblings because it is difficult for them to find work due to their limited skills and high rates of unemployment hence are referred to as vulnerable groups (Fruechting, 2014).

A study done by (Ntaganira, 2012), which involved 692 interviews with youth headed families comprising members

aged 13 to 24, a large percentage of the youths indicated that they isolated themselves from the community which they felt was there to harm them than help them (Mirza, 2006). According to the research by the (UNICEF Malawi, 2011), this may be true because of the trauma they might have due to the war and the death of the parents making it difficult for them to conform into the community again.

Some of the youth headed homes mostly found in urban areas are not disadvantaged since they are graduates who are excited and want to start their own life and families hence not hit by poverty. They have skills and therefore they can afford to find a good job and help family (siblings) without much struggle (Fruechting, 2014). Some youth heads that rush into early marriages (common in rural areas) are disadvantaged. They are quickly hit by poverty and may not be able to bounce back from it.

II.3. Chapter Summary

The chapter has reviewed studies made related to Family Structure on Household Economy. Key issues that came out were that many studies have been conducted in developed countries with very few in developing countries because there is not much literature on developing countries. More also, latest literature on the topic was hardly available. The studies have shown that there is positive relationship between family structure and household economy and that people living in the urban are better off than those in the semi-rural. The studies further indicate that female and youth headed families are disadvantaged as compared to male and adult headed families. The next chapter will look at the research design, theoretical framework and empirical frame.

III. METHODOLOGY

III.1. Introduction

The study was conducted in Lilongwe, the capital City of Malawi. It is in the central region of Malawi and it has a population of 989,318 (National Statistics Office, 2018). Samples were drawn from two different areas namely; Chinsapo 2 (a semi-rural area and where the population density is high assuming a couple of extended families) and Area 49 (an urban area where the population density is low assuming more nuclear families).

III.2. Sampling Design

A combination of cluster sampling and systematic random sampling techniques were used to select a sample of the population from the two selected areas. This ensured every family household to have an equal chance of being selected into the study. The proportionate probability sampling (PPS) was used for clusters with different population sizes.

III.3. Sample Size

One hundred and two (102) family households were selected for the study and in order to obtain correct estimates, 10% was added to account for the non-response rate. The design effect

of 50% was introduced because large clusters were used. Confidence interval of 95% was considered in order to reduce sample errors.

The sample was determined by using a sampling formula which is below:

$$n = \frac{Z^2(1-p)p}{e^2}$$

Where;

n =	sample size (102)
Z =	tabulated level of confidence (1.96)
p =	estimate of percentage (0.5)
e =	desired error allowance (± 0.1)

III.4. Sources of Data

Cross-sectional primary data obtained from a formal survey where a semi-structured questionnaire was used. Personal interviews were conducted to collect data from the selected respondents.

III.5. Data analysis

Raw data does not convey any meaning to its users until it is processed and turned into information that can be used to make judgements, interpretations, conclusions and recommendations. (Miles & Et Al, 2013) define data analysis as “the process of inspecting, cleaning, transforming and modeling data with the goal of discovering useful information, suggesting conclusions and supporting decision-making”. Data analysis consists of actions such as examination, categorization, tabulation, and re-combination of data. In that regard, the data analysis in this study was based on responses collected using the questionnaires.

III.5.1. Theoretical framework

A probit model was used to analyse the impact of family structure on household food security and family savings. The theory behind the probit model is that it uses marginal impact which specify values for each of the independent variables in the model, and then compute the probability of the event occurring for the variable(s) with those values. In other words, it measures the effect on the conditional mean of the dependent variable of a change in one of the regressors. In this case, probit provided a good approximation to the amount of change in income (Y) that was produced by a 1-unit change in Xk. Among other things, normal distribution and a multivariate normal distribution exists in probit model. This means one can jointly estimate several response variables at a time and apply adjustments to the covariance matrix.

A multiple linear regression was used to analyse the impact of family structure on household income. As a predictive analysis, it was used to explain the relationship between one continuous dependent variable and two or more independent variables. The independent variables can be continuous or

categorical (dummy coded as appropriate). Multiple linear regression was important because it helped to identify the strength of the effect that the independent variables had on a dependent variable. It was also used to forecast impact(s) of changes. That is, multiple linear regression analysis helped to understand how much the dependent variable changed when the independent variables change. For instance, the change of GPA and the expected increase (or decrease) for every one-point increase (or decrease) in IQ. Or, predicting trends and future values to get point estimates.

III.5.2. Conceptual framework

Conceptually, a family structure may have direct and indirect impact on its members. For example, extended families may directly be able to take advantage of bulk discounts associated with larger purchases of a given commodity, for example cereals. This helps to achieve a greater level of utility than could a smaller family and indirectly enhance the health of the population and their savings.

The study, therefore, illustrated that there is a significant positive relationship between household economy and family structure using the economic theory. See Figure 3.1

Figure 3.1: Conceptual framework

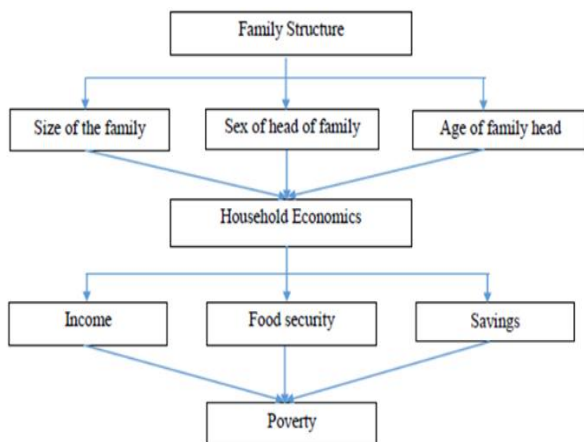


Figure 3.1 conceptualizes that a family structure is determined by family size, sex of the family head and age of the head of the family. The structure of the family influences the economy of the household, thus, the family income, food availability in the family and the ability of the home to save money. If the family is not able to access enough income, find food for the

members in the home and not able to keep some money in any financial institution for investments, the well-being of the entire household will be affected negatively thereby escalating poverty.

III.5.3. Empirical framework

This section describes the theoretical framework and how it relates to the empirical models used in the data analysis. The theoretical framework provides a means to help explain the relationship between family structure and household well-being and it assumes that family members have imperfect information.

The following are the frameworks:

1. Food security and Family savings:

$$Y^* = \begin{cases} 1 & \text{if } Y_i = \text{food security} \\ 0 & \text{if } Y_i = \text{food insecurity} \end{cases}$$

$$Y^* = \begin{cases} 1 & \text{if } Y_i = \text{savings} \\ 0 & \text{if } Y_i = \text{no savings} \end{cases}$$

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \beta_5x_5 + \beta_6x_6 + \beta_7x_7 + \beta_8x_8 + \beta_9x_9 + \beta_{10}x_{10} + \beta_{11}x_{11} + \beta_{12}x_{12} + \beta_{13}x_{13} + \beta_{14}x_{14} + \epsilon$$

Where; β_0 = intercept parameter

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9, \beta_{10}, \beta_{11}, \beta_{12}, \beta_{13}$ and β_{14} = slope parameters

- x1= Age of household head
- x2= Family size
- x3= Land ownership
- x4= Disposable income
- x5= Village
- x6= Gender
- x7= Education level
- x8= Marital status of head
- x9= Occupation of head
- x10= Type of family
- x11= Dwelling tenure
- x12= If the household borrow money
- x13= Family eat in between meals
- x14= How the household acquires its food
- ϵ = Error or stochastic term

Table 1: Variables in Food Security Model and expected signs:

Dependent variable			Sign
Food security			
Independent variable	Measures	Rationale	+/-
Age of household head	Years	The older the head, the secure the home in terms of food.	+/-
Family size	Number	Food insecurity is high in large families than small families.	+/-
Land holding size	Acres	Land owners are food secure.	+/-

Family income	Kwacha	Higher incomes result to food security	+
Location of family	0-Chinsapo, 1-Area 49	Families residing in Area 49 are food secure than those in Chinsapo.	+
Sex of FH	0-Female, 1-Male	Male headed homes will be food secure than female headed homes.	+/-
Education level of FH	0-No education, 1-Primary, 2-Secondary, 3-Tertiary/ Above	Families where the head at least went to school are food secure than households where the head never went to school.	+
Marital status	0-Not married, 1-Married	Married headed homes are food secure than others.	+
Occupation of FH	0-Business, 1-Working	Households where heads are working are food secure than those that own a business.	+
Type of family	0-Nuclear family, 1-Extended family	Nuclear family households are more secure than extended households.	+
Dwelling tenure	0-Rented, 1-Owner	Households that live in their own houses save more than those who rent a house.	+
Debts	0-No, 1-Yes	Families that borrow money save more.	+/-
Eating in between meals	0-No, 1-Yes	Families which eat in between meals are likely to be food secure than those which do not.	+
Acquire food	0-Production, 1-Purchasing, 2-Production and Purchasing	Families that produce and purchase food at the same time are food secure than those that only produce or only purchase.	+

Table 2: Variables from Household Savings Model and expected signs

Dependent variable			Sign
Household Savings			
Independent variables	Measures	Rationale	+/-
Age of household head	Years	The older the head save more.	+/-
Family size	Number	There is less savings in large families.	+/-
Land holding size	Acres	A unit increase in land ownership ensures more savings.	+
Family income	Kwacha	Higher incomes result to more savings.	+
Location of family	0-Chinsapo, 1-Area 49	Families residing in Area 49 save unlike those in Chinsapo.	+/-
Sex of FH	0-Female, 1-Male	Male headed homes will save than female headed homes.	+/-
Education level of FH	0-No education, 1-Primary, 2-Secondary, 3-Tertiary/ Above	Families where the head at least went to school will save money than households where the head never went to school.	+
Marital status	0-Not married, 1-Married	Married headed homes are bound to save than others.	+/-
Occupation of FH	0-Business, 1-Working	Households where the heads are working save than where the heads own a business.	+
Type of family	0-Nuclear family, 1-Extended family	Nuclear family households save unlike extended households.	+/-
Dwelling tenure	0-Rented, 1-Owner	Households that live in their own houses save more than those who rent a house.	+
Debts	0-No, 1-Yes	Families that borrow money save more.	+/-
Eating in between meals	0-No, 1-Yes	Families which eat in between meals are likely to save than those which do not.	+/-
Acquire food	0-Production, 1-Purchasing, 2-Production and Purchasing	Families that produce and purchase food at the same time save more than those that only produce or only purchase.	-

2. Family Income

A multiple regression model was used to find the impact of family structure on income since it is a continuous variable.

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \beta_5x_5 + \beta_6x_6 + \beta_7x_7 + \beta_8x_8 + \beta_9x_9 + \beta_{10}x_{10} + \varepsilon$$

Where; β_0 = intercept parameter

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9$ and β_{10} = slope parameters

x1= HHH_age
x2= fam_size
x3= as_own_land
x4= village2

x5= gender2
 x6= edulv_H2
 x7= marital_state_H2
 x8= occupation_H2
 x9= household_type2
 x10= dwelling_tenure2

Table 3: Variables from Family Income model and expected signs

Dependent variable			Sign
Family Income			
Independent variables	Measures	Rationale	+/-
Age of household head	Years	Adult headed homes have high income than youth headed homes.	+
Family size	Number	The larger the family, the higher the income.	+/-
Land holding size	Acres	A unit increase in land ownership ensures more family income.	+
Location of family	0-Chinsapo, 1-Area 49	Families residing in Area 49 have high income unlike those in Chinsapo.	+
Sex of FH	0-Female, 1-Male	Male headed homes have more income than female headed homes.	+
Education level of FH	0-No education, 1-Primary, 2-Secondary, 3-Tertiary/ Above	Families where the head at least went to school accumulate more income than households where the head never went to school.	+
Marital status	0-Not married, 1-Married	Married headed homes are bound to have more income than their counterparts.	+/-
Occupation of FH	0-Business, 1-Working	Households where the heads are working have high income than where the heads own a business.	+
Type of family	0-Nuclear family, 1-Extended family	Nuclear family households have high income unlike extended households.	+
Dwelling tenure	0-Rented, 1-Owner	Families that stay in their own houses have high incomes than those that rent a house.	+

IV. DATA ANALYSIS, FINDINGS AND DISCUSSION

IV.1. Introduction

The collected data was organised into descriptive statistics based on responses from 102 observations, with mean age of 44 years for household heads that ranged from 21 to 85. Variables such as family size had a minimum of 2 and

maximum of 11. Area of residence, sex, education level, type of household (whether nuclear or extended), land ownership, money saving, money borrowing, source of income were categorical which helped to group households during analysis for better comparisons. Below is table 4, which summarize and describe variables that were used in the study.

Table 4: Summary and Descriptive statistics

Variable	Obs	Mean	Std. Deviation	Minimum	Maximum
Village_Area	102	0.5	0.5024692	0	1
HHH_Sex	102	0.8039216	0.3989892	0	1
HHH_age	102	44.95098	14.21642	21	85
edulv_HHH	102	2.196078	0.8792348	0	3
ms_HHH	102	0.5686275	0.4977137	0	1
occ_HHH	102	0.5784314	0.4962488	0	1
fam_size	102	5.372549	1.923907	2	11
HH_type	102	0.3921569	0.4906424	0	1
tenure_dwel	102	0.6078431	0.4906424	0	1
as_own_land	102	1.403922	1.541179	0	8.5
if_save_money	102	0.5686275	0.4977137	0	1
if_borr_money	102	0.1666667	0.3745184	0	1

food_sec	102	0.7156863	0.4533145	0	1
food_inbt_meals2	102	0.7352941	0.4433551	0	1
std_inc	102	12.22194	1.647989	7.600903	16.1181

Table 5 shows education levels of household heads residing in Chinsapo and Area 49. Both areas had 51 household heads each. For Chinsapo, 3.92% had no education while in area 49, everyone attended school. 47.06% only attained primary school education as compared to the 1.96% of the household heads residing in Area 49. 86.27% of the household heads in area 49, managed to get through tertiary education while only 9.8% of household heads in Chinsapo managed to get through tertiary education.

Table 5: Education level of the head of the family based on location

Area	No Education	Primary	Secondary	Tertiary
Chinsapo (51)	3.92	47.06	39.22	9.8
Area 49 (51)	0	1.96	11.76	86.27

The type of family household influences a lot in the home. Table 6 shows that there are more nuclear families in the semi-rural area and more extended families in the urban area contrary to what current literature proposes. This is the case since most families cannot provide for the large population in the family, so they send some of the children to relatives in urban areas. It is true that extended families are taking the place of nuclear families but in general, there are many nuclear families in the country.

Table 6: Type of family HH versus the Area or location of the respondent

Area	Nuclear family	Extended family	Total
Chinsapo	34 (66.67%)	17 (33.33%)	51
area 49	28 (54.9%)	23 (45.1%)	51

Due to the growing population in semi-rural areas, a lot of families get their foods through exchange than own production and/ or production and purchasing. There have also been zero cases of gifting which is contrary to what literature says. A lot of families in the urban areas prefer to produce and purchase their food which is what other sources say. This has been indicated in table 7 below.

Table 7: How families get their food for consumption

Area	Production	purchasing	Both
Chinsapo	4	31	16
area 49	8	21	22

Table 8 shows that all the youth headed households are from Chinsapo, semi-rural. This is the case because there have been

cases of early marriages and parents dying from HIV and AIDS related deaths just as literature postulate.

Table 8: Age type of the head of the household

Area	YHH	AHH
Chinsapo	5	46
Area 49	0	51

Table 9 indicates that 60% of the youth headed households are advantaged and eat in between meals and 40% of the YHH are disadvantaged. 26.47% of the families headed by an adult do not have food in between the meals and 73.53% eat in between meals.

Table 9: Age type of household head vs eating in between meals

Eat in between meals	YHH	AHH
No	2 (40%)	25 (26.47%)
Yes	3 (60%)	72 (73.53%)

As (Milazzo, 2015) suggests, FHH are submissive to any shock and cannot bounce back quickly from the shock. From analysis, 20 families headed by a female most of which do not have not much access to credit. This may be the case because most of them do not own land or property that can be used as collateral. 12 FHH are located in the semi-rural area while 8 live in the urban area. 60% of the FHH are large, thus, comprise of more than 5 people meaning that management of the family will not be easy. Most female heads did not go much further with school (dropped out in Primary school). About 55% of FHH earn income of more than MWK100,000.00 and even though they get that much, most of these families do not save any money since they have to manage large households on their own. 15 FHH, thus, 75% are food secure meaning that they consume food equal to and/or above the international calorific content (2100 calories).

Dao, 2012, stated that the widely held view is that larger families have more young children and more elderly people meaning there is a high dependency ratio. According to the analysis, this statement is true.

IV.2. Model Analysis

IV.2.1. Food Security Model

Table 10: Food security regression output

Food secure	Marginal Impact	Std. Error	z	[95% Conf. Interval]	Interval]
HHH_age	0.0010617	0.0165396	0.33	-0.026896	0.0379379
fam_size	0.0463282	0.1320864	1.82*	-0.0179653	0.499804
as_own_land	0.0267538	0.2033792	0.68	-0.2594886	0.5377433
std_inc	0.109398	0.2645849	2.15**	1.087476	-0.0503229
village2	0.3816434	1.365382	1.39	-0.7810699	4.571129
gender2	-0.1720306	0.73989	-2.02**	-2.943799	-0.0434835
edulv_H2	0.2090844	1.152334	1.49	-0.5455231	3.971542
edulv_H3	0.3484737	1.337133	2.4**	0.5926556	5.83412
edulv_H4	0.763433	1.591052	2.52***	0.8931446	7.129953
marital_state_H2	0.2276825	0.9386464	1.14	-0.7662028	2.913224
ocupation_H2	0.1704942	0.4370953	1.87*	-0.0407727	1.67261
household_type2	-0.222945	0.5292769	-1.92*	-2.051783	0.0229437
dwelling_tenure2	0.1166095	0.4897356	1.15	-0.3975205	1.522208
borrow_moeny2	-0.0250026	0.5582611	-0.22	-1.217947	0.9703965
food_inbt_meals2	0.565994	0.5891697	3.41***	0.857065	3.166568
how_Hh_acq_food2	0.0155891	0.6813542	0.12	-1.25445	1.41641
how_Hh_acq_food3	0.0629246	0.7173543	0.48	-1.061565	1.750412

***p<0.01, **p<0.05, *p<0.1

In the study; family size, income, gender of the family head, education level of the family head and eating in between meals were determinants of food security.

To begin with, a unit increase in the number of members in the family increases the probability of the family to be food secure by 4.6% (p<0.1). Large families take advantage of bulk discounts associated with larger purchases of a given commodity indirectly enhancing food security (Olayemi, 2012). Also, as the family size increases, so is the human capital (labor) which is a factor for increasing food production hence food security (Bonke, 1992). Quite different to most studies which indicate that as family size increases household food security decreases.

The study shows that there is a direct relationship between food security and income. A unit increase in the income earned by the family household increases the probability of food security in the family by 10.9% (p<0.05). Household income enhances households' food supply and this is in line with the (FAO, Committee on World Food security Rome, 2001) report that household must have sufficient income to purchase the food they are unable to grow.

Male headed households are more likely to be food secure than FHH by 17% (p<0.05). This is the case because men are not homemakers and providers of food within the family and for others. Thus, they do not ensure that all family members are present to consume the meal(s). In addition to this, it is felt that a proper meal can only be cooked by a woman (Bonke, 1992).

Having high level education like attaining secondary school and tertiary or above tertiary education ensures food security than not attaining school at all by 35% (p<0.05) and 76% (p<0.01) consecutively. Family households where the head is educated earn more income hence have relatively high consumption (Burney, 1992). Educational attainment by the household head leads to awareness of the advantages of modernizing agriculture by means of technological inputs (Sabila, 2014). For example, they can read instructions on fertilizer packs increasing productivity.

The study also investigated the influence of occupation on household food security and shows that households with the head working are more probable to be food secure than those which have a business by 17% (p<0.1). When one is at work, networks and connections are established which provide strong support for households and negotiate when faced with challenges such as being food insecurity (Martin, 2004).

Extended family households reduce the probability of the household being food secure by 22% (p<0.1) than nuclear family households. Findings are consistent with the hypothesis that individuals belonging to the same nuclear family have stronger ties, enabling them to commit to more efficient contracts unfeasible for those connected through an extended family relation hence achieve efficiency in consumption and production decisions-food security (Kazianga, 2015).

Finally, eating food in between the meals increases the chance of the household to be food secure by 57% (p<0.01). Food

security is defined as, “When all people at all times have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO, The State of Food Insecurity in the World 2012. Economic Growth is

Necessary but not Sufficient to Accelerate Reduction of Hunger and Malnutrition, 2012). Households that consume main meals, afford the accessory stuff and are able to maintain that food norm are food secure than others (Bonke, 1992).

IV.2.2. Savings Model

Table 11: Savings Model Regression Output

Save Money	Marginal Effect	Std. Error	z	[95% Conf. Interval]	Interval]
HHH_age	-0.0054307	0.0131455	-1.04	-0.0394854	0.0120439
fam_size	-0.0588606	0.1102642	-1.35	-0.364826	0.0674018
as_own_land	0.062409	0.1238153	1.27	-0.0849963	0.4003509
std_inc	0.2019239	0.2409	2.12**	0.0380085	0.9823191
village2	-0.4828309	0.8127834	-1.61	-2.898723	0.2873297
gender2	0.5295077	0.5032491	3.04***	0.5412106	2.513911
edulv_H2	-2.204348	225.6275	0.02	-436.6524	447.791
edulv_H3	0.8665363	225.6275	0.02	-437.3715	447.0718
edulv_H4	0.9717866	225.6276	0.02	-437.7357	446.7083
marital_state_H2	-0.4226401	0.5877055	-1.94**	-2.289707	0.0140559
ocupation_H2	-0.2346475	0.3944555	-1.54	-1.379058	0.1671787
household_type2	0.0645934	0.3900872	0.42	-0.6007932	0.9283203
dwelling_tenure2	-0.0204103	0.3783296	-0.14	-0.7931219	0.689903
borrow_moeny2	0.3314861	0.4651865	2.03**	0.0310562	1.854554
food_inbt_meals2	0.5321629	0.5183707	2.87***	0.4729428	2.504918
how_Hh_acq_food2	-0.039014	0.5289591	-0.19	-1.135361	0.9381201
how_Hh_acq_food3	0.167424	0.5302998	0.81	-0.6096296	1.469107

***p<0.01, **p<0.05, *p<0.1

Determinants of household savings were income, gender, marital status, if the household borrow money and if the family eats food in between meals.

A one-unit increase in income increases the probability of household savings by 20% (p<0.05). This is because households with higher income have a greater propensity to save than their lower income counterparts. In other words, there is increased amount of money from disposable income after allocating to consumption (Perkins D. R., 2001).

Studies show that sex of household head have positive effect on saving behaviour. Having a male heading a family household increases the probability of the family to save by 53% (p<0.1) than a family headed by females. This is due to the fact that women spend more as compared to men since females have fewer well-defined savings strategies than males (Sunden, 1998). This means that men have more financial knowledge than women which both savings and portfolio choices of women.

Changes in marital status matter empirically. The model above shows that being married reduces the probability of

saving income by 42% (p<0.1) than not being married. This could be explained by the fact that housing consumption expenditures could increase which will reduce savings (Lupton, 1999).

The study found that families that borrow money are more probable to save income by 33% (p<0.05) than families that do not borrow any money. A loan serves as a commitment device that generates self-inflicted punishments for non-investment hence one is indebted to save so as to repay the loan (Basu, 2016).

Families that eat any kind of food in between meals increase the probability to save part of their income earned by 53% (p<0.01) than other families that do not eat in between meals. Households belong to different food regimes and of course, they divide their food expenditure into many categories. Snacks account for 18% of the total food budget and for families to ensure that they maintain their food regime, they ought to save (Bonke, 1992).

Table 12: Income Model Regression Output

Income	Coefficient	Std. Error.	t	[95% Conf.	Interval]
HHH_age	0.0008032	0.0069259	0.12	-0.01296	0.0145649
fam_size	0.0677031	0.054681	1.24	-0.04095	0.1763531
as_own_land	0.1043806	0.0610008	1.71*	-0.01683	0.2255879
village2	1.94597	0.3355776	5.8***	1.279185	2.612756
gender2	0.1775331	0.2360188	0.75	-0.29143	0.6464975
edulv_H2	-0.945197	0.6686811	-1.41	-2.27385	0.383458
edulv_H3	-0.2833037	0.6931119	-0.41	-1.6605	1.093895
edulv_H4	0.57829	0.7247472	0.8	-0.86177	2.018347
marital_state_H2	0.4673255	0.2666012	1.75*	-0.06241	0.9970565
occupation_H2	-0.0262216	0.1946907	-0.13	-0.41307	0.3606247
household_type2	0.0607189	0.20174	0.3	-0.34013	0.4615719
dwelling_tenure2	0.0910309	0.2059103	0.44	-0.31811	0.5001703
Cons	10.25621	0.8111367	12.64***	8.644502	11.86792

***p<0.01, **p<0.05, *p<0.1

Below are the factors that determine household income.

Land ownership has a positive influence on the income the family acquires. The study shows that a unit increase in land owned by the family increases income of the household by 0.1043806. Land is the original source of all material wealth. This is supported by (FAO, The State of Food Insecurity in the World 2012. Economic Growth is Necessary but not Sufficient to Accelerate Reduction of Hunger and Malnutrition, 2012) which states that secure rights to land, thus the right to manage land ensures the control of income that comes from it after leasing, renting and/ or selling.

Residing in the urban area increase family income by 1.94597 than residing in the rural area or semi-rural area. It is well documented that in urban areas, a few middle-income households and a vast majority of upper income households live further from the city center leaving cities as segregated domains for the poor. This means that the poor and many middle incomes households' tax themselves while upper income households escape these tax burdens. This therefore provide an unspoken and regressive redeployment of income (Wheaton, 1977).

Married couples increase income in the family household by 0.4673255 than they're not married colleagues. Married individuals are more productive that unmarried individuals thereby, receive greater rewards. Married workers also engage in greater effort and are committed to their work to support and be appreciated by their other halves hence increase in income (Gorman, 2017).

IV.3. Chapter Summary

This section presented data analysis, findings and discussion based on the responses from the respondents. It is established from the study that there is a positive relationship between

family structure and household wellness. The next chapter discusses the findings, conclusion and suggests recommendations.

V. CONCLUSIONS AND RECOMMENDATIONS

V.1. Introduction

Family households in the semi-rural area of study, Chinsapo 2, comprised a few economically active members than family households in the urban area. From the findings of the research, most of these households have more children (who are not economically active).

Literature review in this study, has shown that most nuclear families comprise of a few people than extended families which have many people. Despite being large households, extended families manage to take care of themselves and the economy in the family or household balances very well. There was a twist from the data collected and used in this study in that many nuclear families are larger than extended families meaning that it is not always that extended households have many members.

The study reveals that the two areas are different but regardless, more people reside in their own house rather than renting. Thus, the number of people living in permanent homes was 60.78% of the total population. We also found out that the proportion of large and small families in the rural area was the same in the urban area, thus, 27 families and 24 families respectively.

43.14% of the families in the rural area are headed by a single parent which was not the case in the urban area where a high proportion are couple type families which are decreasing.

V.2. Conclusion

Family structure is interesting in terms of its relationship to several important outcomes. This paper has mapped a range of indicators of household structure across the semi-rural and urban setting in Lilongwe, the Capital city of Malawi and how it relates to household economy.

Household economy can be looked from different dimensions and in this study it has been measured in terms of poverty, calculated on the basis of the sum of the incomes of all family members, the savings of the family whether the household is food secure or not. Of course, well-being is not the only outcome related to family structure.

Children's later outcomes in terms of educational achievements, future earnings and so on, are affected by the structure of the family in which they grow up even after accounting for the impact of poverty associated with certain family structures. Older people's health status is also related to family structure.

One of the long-term linear trends affecting the transformation of family structure is the continuous decrease of fertility due to the increasing policies and human rights awareness by the general public. Women are involved in making informed decisions involving their reproductive health and are encouraged to go further with education through tons of scholarships and funding. Another important driving force behind the changes in family structure is the decline in the proportion of people living in a union.

Summarily, in this situation, household economy is being measured or derived from 3 dimensions namely: food security, family savings and family income which also symbolizes poverty in one way or another. The family may be better off in terms of food security but not better in saving money or the income earned making it hard to define the wellbeing of the family.

V.3. Recommendations

The study has portrayed that the subject under the study has been stagnant and more also it has not addressed the important issue of how or why family structures are evolving. We are unable to answer this question definitively with the cross-sectional data we have used. However, we have made inferences based on evidence drawn from elsewhere.

According to the analysis of the data and desk literature, extended family households are taking the place of nuclear households in the urban setting and nuclear families taking the place of extended households in the rural setting. The findings of the study do not explain as to why such a thing is happening, hence, a topic worth studying.

There is not much literature on the relationship between family structure and the risk of poverty particularly relating to gender or sex of the household head, family size, type of the family household and the age of the family head in the branch

of economics. This notion should be investigated further in order to understand the reasons so that appropriate strategies should be developed that will pull out people from being labeled as poor to non-poor. For example; according to the analysis done in the study, it is seen that almost all youth headed families are from the semi-rural area and are disadvantaged hence the government can formulate policies to help the so called poor and vulnerable households.

In conclusion, the study was unable to generalize the results with much certainty and also failed to conclude the results precisely to say that they are a true reflection of the whole country because only data from one district out of 28 in Malawi was used. Therefore, the study recommends that a similar study should be undertaken in all districts if generalization must be made. We were unable to conduct the research in all the district in Malawi because of the time and budget constraint.

REFERENCES

- [1] Atanda, A. A., Aminu, B. S., & Alimi, Y. O. (2012). The role of population on economic growth and development: evidence from developing countries.
- [2] Basu, K. (2016). A behavioral model of simultaneous borrowing and saving. New York: Hunter College.
- [3] Bogenschneider, K. N. (2010). Improving Health Care Quality While Curbing Costs: How Effective are Consumer Health Savings Accounts and Pay for Performance? Madison: USA: Meg Wall-Wild.
- [4] Bonke, J. (1992). Choice of Foods-Allocation of Time and Money, Household Production and Market Services. Copenhagen: University of Copenhagen.
- [5] Burney, N. a. (1992). Socio-economic Characteristics and Household Savings". An Analysis of Household Saving Behaviour in Pakistan. The Pakistan Development Review, 3(1), 31-48.
- [6] C. Elbers, W. C. (2004). Environmental policy, population dynamics and agglomeration.
- [7] Chalasani, S. M. (2012). Migration among adolescents from rural Malawi. New York: Population Council.
- [8] Chety, R. (2014). The Geography of Intergenerational Mobility in the United States. American Economic Review Papers and Proceedings, Vol. 104, No. 5, pp. 141-147.
- [9] Dao, M. (2012). Population and Economic Growth in Developing Countries. International Journal of Academic Research in Business and Social Sciences, 2(1), 503-518.
- [10] Demuth, S. a. (2004). Family structure, Family Process and adolescent delinquency: Significance of Parental Absence versus Parental Gender. Journal of Research in Crime and Delinquency, 41(1), 58-81.
- [11] Dreze, J. a. (1997). Impact of Household Size and Family Composition on Poverty. India: University of Essex.
- [12] Elbers, C., & Withagen, C. (2003). Environmental Policy, Population Dynamics and Agglomeration. Contributions in Economic Analysis & Policy.
- [13] FAO. (2001, May-June). Committee on World Food security Rome. Food and Agricultural Organization, pp. 14-15.
- [14] FAO. (2012). The State of Food Insecurity in the World 2012. Economic Growth is Necessary but not Sufficient to Accelerate Reduction of Hunger and Malnutrition. Rome: FAO.
- [15] Fruechting, P. (2014). The Subjective Well-Being of Youth Heads of Households in Rural Southern Malawi. Milwaukee: The University of Wisconsin.
- [16] Gorman, E. (2017). Marriage and Money: The Effect of Marital Status on Attitudes Toward Pay and Finances. Work and Occupations, 27(1), 64-88.

- [17] Kazianga, H. a. (2015). Norms of Allocation within Nuclear and Extended-Family Households. San Francisco: Oklahoma State University.
- [18] Lupton, J. a. (1999). Marriage, Assets and Savings. Michigan: University of Michigan.
- [19] Martin, K. S. (2004). Social Capital is Associated with Decreased Risk of Hunger. *Social Science Medicine*, 58(12), 2645–2654.
- [20] Mattila, P. (1999). Economic Theories of the Household: A Critical Review. Finland: The United Nations University.
- [21] McConnell, R. a. (2002). Economics: Principles, Problems and Policies (15th Edition ed.). New York: McGraw-Hill Companies Inc.
- [22] Milazzo, P. A. (2015). “Women Left Behind? Poverty and Headship in Africa”. Washington DC: The World Bank.
- [23] Miles, A., & Et Al. (2013). A new model of social class? Findings from the BBC’s Great British Class Survey experiment. *Sociology*, 47(2), 219-250.
- [24] Mirza, S. (2006). Childhood Bypassed: Rwanda’s Youth Headed Households. USA: The Johns Hopkins University.
- [25] National Statistics Office. (2018). Malawi Population and Housing Census Report.
- [26] NSO. (2008). 2008 Population and Housing Census. Zomba: Malawi: National Statistical Office.
- [27] NSO. (2016). Malawi Demographic and Health Survey 2015-2016. Zomba, Malawi: National Statistical Office.
- [28] Ntaganira, J. H. (2012). Sexual Behaviors Among Youth Heads of Household in Gikongoro, South Province of Rwanda. Kigali: National University of Rwanda.
- [29] Nzinyane, L. (2010). Practice Guidelines for the Integration of Child-Headed Households in South into Extended Families. Pretoria: UNISA.
- [30] Olayemi, A. O. (2012). Effects of Family Size on Household Food Security in Osun State, Nigeria. *Asian Journal of Agriculture and Rural Development*, 2(2), 136-141.
- [31] Perkins, D. R. (2001). Economics of Development (5th Edition ed.). New York: W.W. Norton and Company Limited.
- [32] Perkins, D. R. (2001). Economics of Development (5th Edition ed.). New York: W.W. Norton and Company Limited.
- [33] Pollard, A. Y. (1990). Demographic Techniques (3rd Edition ed.). Sydney: Pergamon Press.
- [34] Ross, C. M. (1990). The Impact of the Family on Health: The Decade in Review. *Journal of Marriage and the Family*. 52., 1059-1078.
- [35] Ross, E C; Mirowsky, J; Goldsteen, K. (1990). The impact of the family on health. The decade in review. *Journal of Marriage and the Family*, 1059-1078.
- [36] Ruby, B. a. (2006). The Incidence of Extended Households among Black and White Women. *Journal of family Issues*, 10(1), 147-168.
- [37] Sabila, S. C. (2014). Factors that Influence Food Security in Rural Households of Mount Elgon Sub County, Kenya. Nairobi: Kenya: University of Nairobi.
- [38] Save the Children Malawi. (2008). Protecting Children in a Time of Crisis: Annual Report. USA: United Nations.
- [39] Shin, H. (2008). Female Headed Households, Living Arrangements and Poverty in Households. Texas: The University of Texas at Austin.
- [40] Sunden, A. E. (1998). Gender differences in the allocation of assets in retirement savings plans. New York: American Economic Review.
- [41] Thomas, A., & Sawhill, I. (2005). For love and money? The impact of family structure on family income. *The Future of Children*, 57-74.
- [42] Todaro, M., & Smith, S. (2012). Economic Development, Eleven Edition.
- [43] Todaro, M. a. (2012). Economic Development (11th Edition ed.). Boston: Addison-Wesley.
- [44] UNFPA. (2010). Population Dynamics in the Least Developed Countries s: Challenges and Opportunities for Development and Poverty Reduction. Washington: United Nations Population Fund.
- [45] UNICEF Malawi. (2011). Malawi Child Protection Strategy 2012-2016. Lilongwe: Malawi: UNICEF Malawi Country Office.
- [46] United Nations. (2010). Bridging the urban divide. Earthscan. State of the world’s cities 2010/2011.
- [47] WB. (2013). Poverty Assessment: Assessing a Decade of Progress in Reducing Poverty, 2000-2010. Dhaka: World Bank Office.
- [48] Wheaton, W. C. (1977). Income and Urban Residence: An Analysis of Consumer Demand for Location. *The American Economic Review*, 67(4), 620-631.
- [49] Whitney, E. a. (2008). Understanding Nutrition (12th Edition ed.). US: Wadsworth Cengage Learning.