

**EFFECTS OF DEVOLVED FUNDING POLICIES ON HOUSEHOLD  
WELFARE IN KENYA**

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**A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR  
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**2023**

**CERTIFICATION**

The undersigned certifies that he has read and here by recommends for acceptance by The Open University of Tanzania a dissertation entitled, **Effects of Devolved Funding Policies on Household Welfare in Kenya** In fulfillment of the requirements for the award of Degree of Ph D in Economics

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Signature

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Date

**DEDICATION**

To my wife, Flora Lun'ngahi, Children and extended Shivairo family.

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## ABSTRACT

The Government of Kenya has since independent implemented Policies and Programmes to reduce poverty and improve household welfare. Devolved funding policies are the latest policies being implemented. The extent to which these policies have impacted on the house welfare in Kenya has elicited a great debate with past studies yielding contradictory outcomes. The main purpose of this study was to assess the effect of devolved funding policies on the household welfare in Kenya and contribute to the debate. In the analysis of the objectives, the study adopted non-experimental pooled cross sectional research design and used primary data of households listed by Kenya Integrated Household Budget (KIHBS, 2019) sampling frame and a sample of 384 respondents was generated. Structured questionnaire was used as the main tool to collect primary data. To examine the influence of devolved Social Safety Funds on household welfare the study used Poisson regression model. To establish the influence of devolved enterprise funds on household welfare in Kenya, the study used a heteroskedastic probit model and to determine the influence of devolved health and education financing on household welfare in Kenya, the study used a probit model. The outcome of the study revealed that, household welfare increased by 36.3 percent with the social net funds recording the biggest effects of 56.5 percent leading to higher per capita expenditure. The findings concludes that the devolved funding policies has a positive effect on household welfare in Kenya. The government should strive to expand all programmes under these policies and reduce all the administrative and logistical challenge that impedes the success of the policies.

**Keywords:** *Devolved funding policies, Household welfare, and enterprise funds Health and education financing policies.*

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**LIST OF ABBREVIATIONS AND ACRONYMS**

BRICS	Brazil, Russia, India China and Singapore
CDF	Constituency Development Fund/ Community Development Funds
CRA	Commission of Revenue Allocation
DF	Devolved Funds.
GDP	Gross Domestic Product
GNI	Gross National Income
HDI	Human Development Index
HELB	Higher Education Board
IMF	International Monetary Fund
KNBS	Kenya National Bureau of Statistics
LATF	Local Authority Transfer Funds
MDG	Millennium Development Goals
OECD	Organisation of Economic Co-operation and Development
OVC	Orphan and Vulnerable Child
SDG	Sustainable Development Goals
UBE	Universal Basic Education
UHC	Universal Health Care
UNDP	United Nation Development Programme

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background Information**

The goal of this study was to investigate the influence of devolved funds and household welfare. Most economist and policy makers have maintained a view that fiscal decentralization (devolved Funding) is an effective approach to influence the economic growth and the general welfare of the people (Mutie,2014; Mapesa & Kibua, 2006). The introduction of the policies was expected to positively influence the level of economic growth rate and household welfare. According to United Nations Report (2015, Millennium Development Goals), Kenya has not achieved most of the Millennium Development Goals (MDG).

According to the Republic of Kenya (2007), the Gross Economic Growth rate was expected to grow by 10 per cent annually. Poverty levels were expected to reduce by more than half. Devolved Funding policies were expected to drive the achievement of these development goals (Simiyu et al., 2014; Mapesa & Kibua, 2006) and address the growing income inequality. Despite a significant drop in poverty levels from 46 per cent in 2009 to 36.1 per cent in 2016 (Republic of Kenya, 2016 and UNDP, 2018), there exists a growing multi-dimensional poverty which has affected the lifestyle and the living standard of households.

There also exist huge regional inequalities with the rural areas bearing the brand. There also exist county differentials with Nairobi and Turkana recording HDI of 64.1 and 27.8 respectively. Between 1990 and 2017 Kenya's Human Development Index (HDI) increased from 0.468 to 0.590 representing a percentage increase of

26.1(UNDP, 2018). Despite the positive changes in poverty levels, welfare indicators such as knowledge attainment and health care have experienced a relatively slow positive change (World Bank report 2018). Kenya's Gross Domestic Product (GDP Per Capita) grew from USD 361 billion in 1990 to USD 1,711 billion in 2018. Kenya's HDI indicators performance is better than most of Sub-Sahara Africa with an average HDI indicator of 0.537.

In the period between 1990 and 2017, the progress in each HDI indicator was very impressive. For instance, Kenya's life expectancy at birth increased by 9.8 years, expected years of schooling increased by 3.0 years, mean years of schooling increased by 2.8 years and Kenya's GNI per capita increased by about 28.9 per cent as shown in Table 1.1.

#### 1.1: Kenya's HDI Trends based on consisted Time Series Data

Year	Life Expectancy at birth	Expected years of Schooling	Mean years of schooling	GNI per capita (2011 ppp USD)	HDI
1990	57.5	9.1	3.7	2297	0.468
1995	53.9	8.7	4.5	2130	0.456
2000	51.8	8.4	5.3	2112	0.451
2005	55.8	9.4	5.8	2223	0.490
2010	62.9	10.7	6.1	2467	0.543
2015	66.7	11.7	6.3	2806	0.578
2016	67.0	11.9	6.4	2998	0.585
2017	67.3	12.1	6.5	2961	0.590

**Source:** UNDP (2017)

According to UNDP (2018), the overall objective globally is towards continued improvement in living standards and more states have recorded a rise in the HDI ranking. Europe and North America continue to record the highest index with Switzerland, Ireland, Germany and Norway leading the rank. Between 1990 and

2017, the Pacific region and East Asia recorded the second-highest growth in HDI of about 41.8 per cent. Latin America and South Asia recorded the highest increase in HDI growth among the low-income states with 45.3 per cent since 1990. Sub-Saharan Africa has also witnessed a dramatic improvement in the human development index with about twelve countries moving from a lower development group to a medium development group, a growth of 35 per cent since 1990.

However, four countries-Botswana, Gabon, Mauritius and Seychelles have moved to the high-development group. In the last 40 years, life expectancy at birth in developing countries has risen by 20 years (World Bank Report, 2018). However, this increase was not evenly distributed. However, these gains are likely to be eroded due to the HIV/AIDs epidemic and the COVID-19 pandemic. It is important to note that global disparity in HDI (Welfare) has continued to negate the great achievement the world has made to improve living standards with Sub-Saharan Africa Recording the least Index of 0.537 and Europe with highest index of 0.717 (UNDP, 2017).

Determinant of the wellbeing of individual and households in developing societies are mostly linked with financial security, job satisfaction, purchasing power, good health and education, food security, housing and clothing. Ferrer-i-Carbonell and Van Praag, (2003), explained that household income, employment status, marital status, household structure, social capital, religion and environmental factors can influence the wellbeing of individuals and households. The measure of welfare is based on consumption expenditures rather than income, in line with past poverty reports for Kenya (Republic of Kenya, 1997, 2000 and 2007) and international best practice.

The empirical literature on the relationship between income and consumption has established that consumption is not strictly tied to short-term fluctuations in income, and that consumption expenditures are smoother and less variable than income. For instance, rankings of well-being based on consumption tend to be more stable for households whose income fluctuates a great deal from one year to the next or even within the year; such as households dependent on income from agricultural production. The measure of nominal household total consumption expenditures can be computed following the best-practice guidelines provided in Deaton and Zaidi (2002), which is an aggregate measure, which consists of expenditures on two main components: food and non-food consumption.

To ensure good or satisfactory standards of living and to address the inequitable access of the poor to social services, it is the role of the national government to formulate policies and programmes that will reduce inequalities. This will also provide the path ways through which citizen at the grass root will enjoy freedom, food security, and access to affordable health services, better education and generally good life. The previous government approaches to addressing these issues from the central authority was not rather feasible and thus, the governments brought the services closer to the public through devolved funding policies. Governments came up with policies to enable decisions being made for local areas and ensure public services are equitably funded, that is the delegation of power and funding from national to local government (Finch & Omolo, 2015).

### **1.1.1 Welfare Improvement Strategies in Kenya**

Improvement in household welfare is the main objective of all economic

development programmes. To achieve this objective, the government has continuously formulated and executed policies and programmes in various parts of the country and particularly, the rural areas. The implementation of these programmes was a function of the central government and the citizen had little contribution.

Many of these programmes had little or no influence on the welfare of the household and in particular, at the grass root. These policies were poorly implemented and particularly their management which was marred with corruption and other bottlenecks. Devolved funding policies are actually one of the latest pro-poor policies that were meant to correct the ills of the previous programmes that aimed at reducing poverty and improve welfare. The introduction of devolved funding was a strategic response to the failure of past economic policies, strategies and programmes. An executive evaluation of the effectiveness of these policies needs to be carried out. The outcome of such evaluation should guide policy formulation for developing countries.

To mention but a few of the pro-poor policies introduced and implemented in the past included the Swynnerton plan of 1952/54, The Sessional Paper No. 10 of 1965 on African Socialism and its Application to planning in Kenya, the district Focus for Rural Development of 1983, The Sessional Paper No. 1 of 1986 Economic Management for Renewed Growth, The World Bank and IMF Structural Adjustment Programme of 1990s, the Social Dimension Development, launched in 1994, the National Poverty Eradication Plan of 1999-2015, Poverty Reduction Strategy Paper of 2000-2003, Poverty Reduction Strategy for Wealth and Employment Creation of



2003-2007, Mid-Term Expenditure Frame Work (MTEF), Millennium Development Goals (MDGs), and Vision 2030 and currently the Sustainable Development Goals (SDG) have outlined policies and strategies to reduce poverty. It is argued that most of these development programs failed to consider public participation which was very critical to the welfare of people at the grass root. Inadequate funding, obsolete technology in production, under developed institutions and lack of political support emerged as some of the factors that impacted negatively the effectiveness of these policies.

Most of the research conducted in the recent past on the subject matter has since established the main causes, determinants and strategies that have aided to entrench and deepened poverty levels in Kenya. These studies have revealed that continuous dismal performance of Kenya's economy for a long time has increased absolute poverty. This has increased food insecurity, inaccessibility to social amenities such as education and health care, lack of clean water, poor sanitation and inadequate affordable housing which has affected a large population. Poor policy formulation, planning, initiation and implementations of anti-poverty programs have been identified as the main factors escalating poverty situation in Kenya.

Further, Studies conducted have also revealed that most pro-poor policies are formed and implemented without due consideration to the stake holders themselves mostly the poor at the grass root. For a long time, the poor have been neglected and are not involved in decision-making. They have been reduced to mere passive participants and this has reduced their ownership of poverty alleviation programs at the grass root.

In theory, devolved funding policies are expected to effectively reduce poverty and hence increase household welfare. The policies are inclusive as they tend to enhance public participation in the decision and implementation of the policies at the grass root (Sepulveda & Martinez-Vazquez, 2010). The poor and the vulnerable on the grass root are involved in identifying projects and programs that directly impact their livelihood. Public participation enables the stakeholders to access quality public goods and services.

Devolved funding also provides an avenue to address the historical ethnic and political hegemony that has wrecked the society for a long time and allows the common public at the grass root to have greater control over resources and decision-making. This will increase transparency and accountability in resource mobilization and utilization among the public and is expected to reduce inequality and vulnerability of the poor at the grass root levels. Studies have also shown that good governance in public affairs and resources is an impetus for improvement in human development with (Abimbola, Baatiema & Bigdeli, 2019).

However, the effectiveness of devolved funding may not be realized in situations where the government may not have the ability to execute its basic functions. For instance, in failed states, governments cannot make and implement policies including pro-poor policies. Devolved funding may also not be very effective in a society with high levels of income inequality. In both cases, devolved funding may worsen the poverty situation instead of reducing it (Bardhan & Mookherji, 1998; Silas Wawire, & Okelo, 2018). These analyses suggest that the relationship between devolved funding and reduction of poverty is opaque and efforts to establish the link

are likely to be influenced by factors including country-specificities, as well as by the design and structure of devolved funding.

In Kenya, Devolved Funding policies are implemented through cash transfers to the deserving household or inform of the provision of credit to support entrepreneurs particularly available only to women and the youth. Another portion of devolved funding is allocated to capitalizing development projects in healthcare, education and other arrays of infrastructural development particularly in rural areas (Irungu et. al., 2009; Ikiara, 2009 Kimenyi, 2005)). Devolved funds have also been used to improve feeder roads in rural areas, and increase water and electricity supply, and security among others. The devolved funds are meant to increase the provision of public goods and improve the livelihood or welfare of the citizen. Makori et al., (2013) indicated that devolved funds are intended to give the citizens at grass root levels the opportunity to settle on informed consumption choices that are equipped to augmenting their welfare.

### **1.1.2 Devolved Funding Policies and the Rest of the World**

Devolved funding is not just a localized phenomenon but a global approach to fight poverty and improve household welfare. Globally it is contextualized in form of fiscal decentralized and according to Mugrave (1956) and Oates (1972), it is supposed to enhance efficiency in resource allocation of resources by aligning pro-poor strategies and policies with the public taste and preferences (Oates 1972), and enhance production efficiency by maximizing output (Ahmad et al., 2008) hence becoming a positive force in poverty reduction. Globally, fiscal decentralization adopted by many industrialized countries such as the USA, Germany, Great Britain

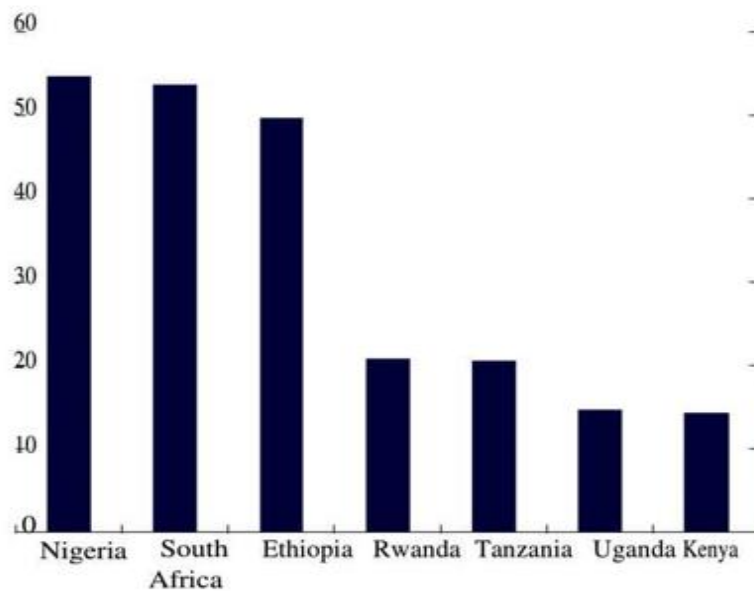
and other OECD has been the main reason for rapid economic growth, significant reduction in poverty and income inequalities as indicated by Tadlock et al. (2005). These countries enjoy the highest levels of HDI (UNDP, 2017). The rapid growth in GDP and improvement in welfare indicators experienced in countries such Brazil, Argentina, India and China (BRICS) is significantly attributed to fiscal decentralization (Bockmeyer, 2003).

According to Tadlock et al. (2005), the USA regional governments has so regularly been the reason for significant imbalances concerning economic development, taxes, opportunities, administrative performances and so on. Such disparities can be diminished by fiscal equalization and a significant assurance for equivalent dissemination of good open administrations inside the whole organization. Numerous states likewise have instilled fear that self-rule will turn into the initial step for the last severance. Independent units may develop an appropriate character and, in this manner, contend with the personality of the government state. In Brazil on the other hand is now considered a modern economy with highly developed devolved units that accounts for 50 percent of the public expenditure. (Bockmeyer, 2003). The ongoing devolution changes in social insurance across Africa have shown some intriguing results, although a key propensity remains that local government are hesitant to relinquish power (Kilonzo, Kamaara & Magak, 2017).

### **1.1.3 Devolved Funding Policies Reforms in sub-Saharan**

In sub-Saharan, Fiscal decentralization policies are well grounded in Republic of South Africa, Nigeria and Ethiopia, where budgetary allocation to the devolved units accounts for over about a half or more of total public expenditures (Bartley et al.

2008). However, in countries such as Kenya, Uganda, Tanzania and Rwanda, budgetary allocation to the devolved units represents about 15-20 percent of the total government expenditures. Studies have also shown that more countries in the Sub-Saharan Africa including Mali, Zambia, Lesotho, Madagascar and Liberia are rapidly adopting fiscal decentralization. Budgetary expenditures to the devolved units in these countries has been kept at the same level to the other developing countries but way below the levels found in advanced markets such as Organization for Economic Co-operation and Development (OECD) countries (figure 1.1).



Sources: Organization for Economic Co-operation and Developments database; and IMF staff calculations.

**Figure 1.1: Subnational Government Spending (*Percent of general government spending*)**

Fiscal decentralization is well established in South African Republic. Most of the large cities in this country are able to sustain themselves financially (Bartley et al. 2008). For instance, cities like Capet town and Johannesburg have attained greater levels of autonomy in making their spending decisions. These cities rely only for 8

percent and 15 percent respectively grant support from the central government to meet their budgetary needs. Political influence or interference is limited to legislation levels only. All planning, policy formulation and implementation and operation is a function of the technocrats. However, in some countries like Uganda, the central Authority still exercises a greater controls over devolved units and is heavily relied upon to provide budgetary support and grants to most of the devolved services such health care and education. Similar instances are replicated in Ghana although the devolved units have not achieved much autonomy as South Africa and Nigeria.

#### **1.1.4 Devolved Funding Policies in Kenya**

Devolved Funding policies were introduced in Kenya largely as a respond to persistent high poverty levels that affected majority of the citizen. These policies were as a result of the NARC government effort to fight and reduce poverty levels and hence improve the living standards of majority citizen at the grass root. The proponents of these policies argued that its operation will reduce the dominance of central government in mobilization and distribution of national resources. Laws enacted opened space for the common citizens to participate in decision making with regard to the resource allocation.

Devolved funding policies is implemented through direct cash transfers, provision of credit and capitation of projects and programs that direct impact on the welfare of the citizens at the grass root (Irungu et. al.,2009; Ikiara, 2009). Kenya has had strong history of devolved funding policies since independence. According to (Auya & Oino, 2013), some of the devolved funding policies introduced by various

governments since independent includes the Special Rural Program (1969/1970, the District Focus for Rural Development (1983-1984), District Development Program of 1966.), District Development Planning (1971), and the Rural Trade and Production Centre (1988-1989). The primary aim of all these policies was fast tract economic development particularly the rural economies that had bred massive poverty and deprived the public at the grass root of their livelihood. However, most of these policies failed to achieve their objective due to lack of support from the central government and technical incompetency, lack of political will, challenges in planning and implementations of the policies (Ngiri, 2016).

In the last two decades, more well-structured forms of devolved funding programs were introduced including entrenching devolved governance in the constitutional review of 2010. They include HIV/AIDS Fund (1997, Rural Electrification Programme (1998), Road maintenance levy Fund (1993) and Secondary Schools Education Bursary Fund (1993). Other devolved funds established over the years include Poverty Eradication Funds (1999), Youth Enterprise Development Fund (2006), Local Authority Transfer Fund (1999), Water Service Trust Fund (2002), Free Primary Education Fund (2003), Women Enterprise Development Fund (2007), and the Constituency Development Fund (CDF) (2003). These policies are in operation although they have gone through various amendments to improve their effectiveness to achieve the intended objectives.

There are strong indications that devolved funding policies are intended to give the citizens at county levels the opportunity to settle on educated consumption choices that are equipped to augmenting their welfare. A large portion of these advancement

ventures are in education, health, economic empowerment as well as infrastructure developments, which are the principal challenges confronting network improvement since most countries' independence (Kimenyi, 2005). It is therefore, critical to note that stronger devolved funding policies with good legislation and regulation may enhance equitable distribution of national resource and provide citizen of Kenya with an opportunity to participate in decision making particularly with regard to resource mobilization and allocation.

The involvement of the public in decision making is an impetus to increase transparency and accountability and effectively influence resource allocation. This will increase equity and access to key opportunities (such as quality education, energy, water and sanitation) in the Kenyan society (World Bank, 2018). The degree to which County governments have genuine choice capacity to decide the distribution of their use or to raise their own income likewise seems to matter (Kinuthia & Lakin, 2016). Therefore, the current study, based on the above backdrops, was seeking to investigate the role the devolved funding policy plays in improving household welfare in Kenya.

## **1.2 Research Problem Statement**

Kenya has formulated policies and programs to drive a desirable level of economic growth, create employment, reduce poverty and improve household welfare. According to Republic of Kenya (2007), the growth rate was expected to be 10 per cent annually. Extreme poverty was to reduce by half from 56 per cent in 2000 to less than 28 percent by 2015 (Republic of Kenya 2007). Further, Kenya was to achieve Universal Basic Education (UBE) and Universal Health Coverage (UHC) by



2015. However, Statistics from the National Treasury (Republic of Kenya, 2019; World Bank Document, 2019) indicated that most of these targets have not been achieved. Economic growth rate has maintained an average growth rate of 5 per cent for the last ten years.

Poverty levels are still high at about 36.1 per cent, widening income gap and regional inequalities over the years (Republic of Kenya, 2016). Universal Health Care is far away below the target and the country is yet to realize 100 percent transition rate in basic education (World Bank, 2019; Gok, 2018; Musyoki & Gakuu, 2018). According to the Kenya National Bureau of Statistics (KNBS), the rate of unemployment is still high at 25.6 percent (Republic of Kenya, 2018). The Kenya's Vision 2030 pillars that range from healthcare, food security, and low-cost housing to education has not seen improvements on the ground.

In the recent past, Kenya has established policies and programmes to grow the economy, reduce poverty and more importantly improve the quality of life of the households particularly at the grassroots. These policies were marred with corruption and mismanagement and therefore failed to achieve the intended objectives. Devolved funding policies is the new kid on the block but since its inception, it has elicited debate on whether it provides the effective tool in reduction of household poverty and increase in human welfare.

There are also a lot of doubts on whether it has had any impact on rates of economic growth in Kenya. A number of studies have revealed a positive impact of devolved funding policies on welfare (Beramendi, 2003; Kanbur & Zhang, 2005; Bonet, 2006;

Neyapti, 2006), while others have revealed a negative influence on the same (Akai & Sakata, 2004; Shankar & Shah, 2003; Canaleta *et al.*, 2004; Ezcua & Pascual, 2008; Tselios, *et al.*, 2011). These different outcomes are as a result of reliance on cross-country data base which can hardly be assigned, to a specific country (Ezcua & Pascual, 2008; Tselios, *et al.*, 2011; Sepulveda & Martinez-Vasquez, 2011; Sacchi & Salotti, 2011). This study, therefore, seeks to contribute to the on-going debate as well as attempt to answer the question as to whether or not the deployment of devolved funding policies had improved household welfare. In addition, some previous investigations appeared to have centered on examining of the challenges and deficiencies in management and administration of the policies, this study focused on assessment of the effectiveness of the policies in influencing household welfare.

### **1.3 Objectives of the Study**

#### **1.3.1 Main Objective**

The main objective of this study is to examine the effect of devolved funding policies on household welfare in Kenya.

#### **1.3.1 Specific Objectives**

**The Specific Objectives are to**

- i. Examine the influence of devolved Social Safety funds on household welfare in Kenya.
- ii. Assess the influence of devolved enterprise funds on household welfare in Kenya.
- iii. Determine the influence of devolved health financing on household welfare

in Kenya.

- iv. Analyse the influence of devolved education funds on household welfare in Kenya.

#### **1.4 Research Hypotheses**

**H<sub>01</sub>:** There is no significant effect of social safety funds on household welfare in Kenya.

**H<sub>02</sub>:** There is no significant effect of devolved enterprise funds on household welfare in Kenya.

**H<sub>03</sub>:** There is no significant effect of devolved health financing on household welfare in Kenya.

**H<sub>04</sub>:** There is no significant effect of devolved education funds on household welfare in Kenya.

#### **1.5 Significance of the Study**

This study evaluated different aspect of devolved funding policies and how their influences have impacted on welfare indicators in Kenya. The various gaps identified in the study will enable the policy makers to formulate appropriate policies and implementation framework that will enable both central and county government to roll out programmes that will go into improving the welfare of the people at the grass root. For instance, the realization that social safety net has a greater impact on house hold welfare, will guide the government (Central and County) in formulating policies and programmes towards enhancing and redirecting more resources to the priority area that may touch majority of the beneficiaries.

In addition, the government should also use the results to develop strategies of reaching more people at the grass root. The government should also use the results to create and provide enabling environment for the SME to operate and thrive with minimal obstacles. This should include increasing financial literacy to the beneficiaries and reducing bottlenecks inhibiting the growth and expansion of the micro finance institutions in Kenya. Furthermore, this study shall contribute greatly to the academic world discourse on the influence of devolved funding policies on household poverty and welfare.

### **1.6 Scope of the Study**

This study analyse the effect of devolved funding policies on household welfare in Kenya. Specifically, the study focused on; the influence of cash transfer funds on household welfare in Kenya; the influence of women enterprise funds on the household welfare in Kenya; the influence of devolved health financing on household welfare in Kenya and influence of education funds on household welfare in Kenya. The study focused on rural and urban household. In addition, the study also used micro and small enterprises to analyse the effect of devolved funding policies on the growth and development of youth and women enterprise in Kenya. Concerning geographical scope, the study covered the Nairobi metropolitan area (Nairobi, kajiado, machakos and kiambu) counties. The data that was used in the study was collected in the year 2021.

### **1.7 Organisation of the Study**

This research is divided into six chapters. The opening chapter consists of introduction which includes background information, statement of research

problems, general and specific research objectives, importance of study and scope. Chapter two comprised of theoretical and empirical literature, the research gap and theoretical frame work. Chapter three consist of the guiding philosophy, the research technique, the study design, sources and type of data, pilot study, theoretical model formulation, model specification and hypothesis testing. Chapter four presents descriptive analysis of devolved funding policies, Chapter five presents empirical analysis and discussion on household welfare effects of devolved funding policies, and finally chapter six presents discussion of results and conclusion, implication and recommendations, contribution of research results to the body of knowledge and suggestion of gaps for further research.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Chapter Overview**

In this part, all theoretical and empirical literature is addressed. In comparison to many theorist arguments, the study of theories will significantly aid the reader's understanding. In the sample, concepts are used to highlight potential relationships. The empirical review enabled the researcher to examine current studies pertinent to the aims of the study and to identify potential gaps. The conceptual framework enabled the creation of a mental image illustrating the interrelationships of many factors.

#### **2.2 Conceptual Definitions**

##### **2.2.1 Devolved Funding**

This is the flow of fungible funds from the central authority to the grassroots. This may come in form of cash transfers and support for development programmes. This is a form of Fiscal decentralization that involve the methodology and mechanisms of budgetary allocation or distribution of public revenues among all levels of government (Cheema & Rondinelli, 2007; UNDP, 2005). Four aspects of fiscal decentralization affect the success of devolved finance policies: central government loan guarantees, clear income obligations, explicit spending duties, and intergovernmental collaboration (UNDP, 2005).

Fiscal decentralization usually follows political and administrative decentralization. As per Wachira's (2010) findings, devolved funds policies support and promote citizen participation in decision making in respected to their development priorities.

This argument emphasizes the responsibility of citizens in ensuring development resources are being used efficiently and effectively. In Kenya, fiscal decentralization is a mixture of tax transfer to counties and devolved funds.

The devolved funding comes in form of cash transfer and funds for specific programs such as Constituency Development Fund (2003) and women and youth Enterprise Funds (2006). It is important to note that, fiscal decentralization is assessed according to the degree of autonomy in designing, delivery and financing spending program Decentralized funds made to facilitate development at the local level (Republic of Kenya, 2016). The working and implementation of devolved funding is guided by the devolved funding policy. The philosophy underlying devolved funding is the participation of the people towards a priority and needs-responsive development.

### **2.2.2 Household Welfare**

Household welfare can be defined as a good or satisfactory condition of existence where the household have sufficient income, good health, food secure, housing and the ability to participate in society (Mutie, 2014; Mapesa & Kibua, 2006; Lekobane & Seleka, 2017). Many countries continue to use access to basic services as a metric for measuring and distributing poverty. Officials in these nations believe that consumption indicators derived from household surveys pose significant challenges for the measurement of poverty. This is due to the fact that consumers pay widely varying prices for basic services such as water, electricity, and gas. Consequently, it is sometimes argued that consumption aggregates based on nominal expenditures do not reflect real welfare levels (Natali & Moratti, 2012; Lanjouw & Hentschel, 1999).

Access to essential utilities for the poor, such as electricity, water, sewerage, and gas, is often viewed as critical to household welfare. Access to such services should be seen not just as a reflection of a household's welfare condition, but also as a deciding factor. In many cases, fundamental services will be inputs into or indirectly support economic activity. For example, domestic power connections are widely used by informal home-based companies; time saved from fetching water or collecting fuelwood may be diverted to income-generating activities; and access to drinkable water and sewage saves household members from diarrhea and other ailments (Lekobane & Seleka, 2017; Johanni, 2011).

Total consumption as a household-level welfare indicator for measuring poverty has been widely questioned since it is thought to ignore differences in access to and cost of publicly supplied services. However, consumer expenditure is regarded the most prevalent and preferable wellbeing measure since it provides the potential for substantial time and money savings (Johanni, 2011). Consumption and income may be justified as wellbeing indicators since they reflect a person's capacity to get goods and services (Lekobane & Seleka, 2017).

## **2.3 Theoretical Literature Review**

### **2.3.1 Keynesian Economics Theory**

This theory emphasizes on aggregate demand in the economy and its impact on production, employment and changes in general prices. The theory maintains that the consumer demand is the major driving force in an economy strongly supporting the expansionary fiscal policy a (Keynes, 1937). The theory was, based on the principles of the General Theory of Employment, Interest, and Money (Schumpeter, 1936;



Blinder, 2008). The use of the expansionary policies, enables the government to inject money into the economy in order to boost the declining state of employment and welfare of the economy (Keynes, 1936). The Keynesian description for rectifying economic downturn aims to increase aggregate demand through discretionary fiscal and monetary policies. This theory is very relevant to the third world economies and particularly Kenya. The underdeveloped world has a higher marginal propensity to consume and therefore, the multiplier effects due to increased money supply as a result of expansionary policies, will spur growth and reduce unemployment.

Introduction of devolved funding policies are therefore expansionary fiscal and monetary policies meant to increase the flow of money into the economic system to boost output hence reduce poverty and increase welfare. Social Safety Net Funds and financing of the pro-poor development programs at the grass roots are the channels through which the government use to increase the flow of money into the economy. This will serve to strengthen the purchasing power through increase in income and creating employment opportunities for the people at the grass root. The development programs financed by the devolved funds, involved construction and improvement of health care and educational facilities and this is expected to release more funds for household expenditure and hence reducing poverty and improve household welfare.

However, Keynesian distractors argue that expansionary fiscal and monetary policies may not produce the intended effects. The weak macroeconomic conditions that characterize the underdevelopment economies, makes it difficult to transmit all the effects of expansionary fiscal and monetary policies.

The Keynesian theory is supported with the fiscal decentralization idea (Mugrave, 1959; Oates, 1972). According to the theory, it is always more efficient for devolved unit of government to produce Pareto-efficient levels of production within their area of control than the central government compelling to use a predetermined and uniform level of output across all jurisdictions (Oates, 1972). The two ideas give the theoretical justification for delegating budgetary responsibility for the provision of public goods and services from the national government to the devolved governments.

As a result, the theory is used in the present research since it strongly supports government involvement in the economy to increase employment and economic wellbeing. However, in countries where the state lacks the ability to carry out its fundamental tasks and in surroundings with large inequities from the start, there is a real danger that fiscal decentralization would exacerbate rather than alleviate poverty (Bardhan & Mookherji, 1998; Silas, Wawire, & Okelo, 2018). This ambiguity demonstrates that there is no clear link between fiscal decentralization and poverty reduction, and that the outcome is significantly influenced by national factors as well as the form and design of fiscal decentralization.

### **2.3.2 The Utility Theory**

This theory is concerned with people's choice, preferences and decision making about consumption (Fishburn, 1968). The theory was first coined by Pareto (among other economists) in the early 19th century (Pareto, 1971). According to Paretian theory, an improvement in welfare occurs or can be justified given a new government policy, some individual will benefit without making others worse off.

The aim of the theory is to conceptualize the role of ordinal and cardinal utility theories with respect to the law of diminishing marginal utility, using a generalized total utility function (Batley, 2008). Utility theory explains the behaviour of consumers towards a choice of a commodity. Unit of utility also referred as Utils, which is a hypothetical unit introduced by classical economist such as Alfred Marshal & Allen (Batley, 2008)

Utility is said to be the level of satisfaction or pleasure derived from consumption of a particular product, which is the measure of happiness or pleasure that represents consumers preference ordering among option set (Debreu, 1954). Utility is roughly synonymous with satisfaction, welfare, pleasure, benefit, etc. (Kapteyn, 1985). This theory rehearses the theory of deterministic choice (Determinism-all events are determined by previously existing causes; Indeterminism-some events occur randomly) and the theory was first coined by Pareto (among other economists) in the early 19th century (Pareto, 1971). The aim of the theory is to conceptualize the role of the law of diminishing marginal utility and its application in modern utility theories; the ordinal and cardinal utility theories (Batley, 2008).

Given the meaning of utility, the theory asserts that the consumer seeks to maximize his utility, and therefore direct all his/her efforts towards achieving this objective. Because each person has distinct preferences, the theory is a preference-based method that gives a rank ordering of possibilities (Fishburn, 1970). The Cardinal utility method is advocated by neoclassical economics who think that utility is quantifiable and that customers may express their happiness in numerical terms. This prompted criticism of the concept, which gave rise to the Ordinal Utility theory that

stated that utility from consumption of a good cannot be measured quantitatively. The proponents of this theory argued that individual can only express their utility qualitatively through ranking of preferences (Peart & Levy, 2005). Thus, the two notions work together to describe consumer behavior in terms of products and services consumption.

The theory of utility is premised on the fact that individual consumers make consumption decision by placing an assumed value of satisfaction to a monetary scale. This idea of marginal diminishing utility is supported by Lin and Peng (2019) who points out the problems of the two modern approaches. The principle of diminishing marginal utility is a factor to be considered among ordinary people's experience in their daily lives as their marginal utility (or marginal satisfaction) decreases with more consumption of a particular commodity. Thus, based on the above, the theory majorly assumes rationality, and maxim of satisfaction. The theory also emphasizes on the importance of choice in decision making which is expressed in terms of profit by looking at the contributions and outcomes of the decision in monetary terms. And, since utility signals degrees of happiness, individuals behave as if they are maximizing utility rather than the quantity of money seen (Faccarello & Kurz, 2016).

Utility theory contributes greatly to the measurement of social welfare on the basis of domestic and corporate production. That is, it has been used in this study to ground household welfare. Theoretically, the welfare economy is examined from the point of view of the development of usable measures of change in the welfare of consumers and producers following actions or interventions of the government

regarding the use of public resources. It is important to note household’s main objective is to derive the highest satisfaction from consumption of both goods and services subject to certain constraints. These constraints includes prices and income among others. This concept leads to the development of the utility function as follows:

$$U = f (X_1, X_2) \dots\dots\dots(2.1)$$

Where:

U = Household welfare. (Proxied by poverty)

X<sub>1</sub> =Consumption. (Food Consumption Score)

X<sub>2</sub> = Human capital. (Education & Health)

Where human capital is in terms of education and health, which is necessary for reducing poverty. The household allocates its income on the consumption of the two goods and seeks to maximize utility so it will choose the combination of x<sub>1</sub> and x<sub>2</sub> that maximize its utility.

**2.4 Empirical Literature Review**

This section discusses the empirical studies that relate to social safety funds, enterprise funds, Education and Health Financing and how they affect household welfare. These studies have been reviewed on the basis of their relevance to the study.

**2.4.1 Social Safety Funds and Household Welfare**

Skoufias and Di Maro (2008) investigated the effects of Progresa programme of adult’s participations in the job market and the time they spent for leisure and its effects of the programme on poverty levels in Mexico affects. This study has its

theoretical foundation in the theory of utility and the theory of welfare by Alfred Marshal. The research adopted an experimental design and quantitative research approach. The experimental design had a treatment and a control group with the treatment group for the study comprising recipient while the control group was selected from people who did not benefit from the cash grants. These two groups were comparable in all respect except for their inclusion in the intervention.

The sample size for the study was 24,000 respondents selected using stratified random sampling. It consisted of beneficiaries from treatment villages and non-beneficiaries from control villages. A well-structured questionnaire was used to collect the primary data and the secondary data were collected from Progresa panel data. The study measured variables such as: participation in the job market, leisure hours and rate of poverty rates on a ratio scale. The study found that the scheme does not have any significant influence on adult job force participation and the leisure time of men or women at the 10 percent level. The results on the impact of the programme on adult job market participation and leisure hint that the scheme did not 75 negatively affect the desire to work for income.

Additionally, regardless of the age cluster examined, participation in Progresa appears to have no bearing on job market participation. Finally, it surfaced that the Progresa programme led to major declines in poverty among the extremely poor population. The poverty reduction effects are greater for the poverty gap and severity of poverty measures. Skoufias and Di Maro (2008) concluded that the accomplishment of asocial assistance programme at reducing existing poverty depends on whether and the extent to which cash transfers affect adult work

incentives.

According to Beegle et al. (2018), in order to fully realize the potential of social safety nets for addressing issues of equality, resilience, and opportunity for Africa's poor and vulnerable people, programs must be brought to scale and maintained at scale. Peterman et al. (2017) examine the relationship between social safety nets and childhood violence in low- and middle-income countries. Song and Imai (2019) investigated the impact of a hunger safety net program on multidimensional poverty reduction in Kenya. More broadly, social safety net initiatives have been found to increase consumption while also increasing the frequency and variety of spending patterns (Davis et al., 2016; Bastagli et al., 2016).

Song and Imai (2019) investigated the impact of a hunger safety net program on multidimensional poverty reduction in Kenya. The research found that ultra-poor families profited much more from program participation than poor and non-poor households, indicating that the HSNP is effective at reducing poverty, however it might be fine-tuned to concentrate limited development resources on the ultra-poor sector. However, due to insufficient institutionalization of social safety; in program execution and finance, there was a negative and statistically significant link between program participation and multidimensional poverty reduction.

Household consumption has been identified as one of the important pathways of an intervention's effect since impoverished households are expected to utilize the social safety net to meet fundamental household requirements, including food and nonfood staple commodities (Andrews, Hsiao & Ralston 2018). Evidence gives useful

information on the effects of various initiatives on equity. Of the 35 cash transfer studies analyzed, 25 (9 in Africa) were shown to have a substantial influence on increasing household spending (Bastagli et al., 2016).

More broadly, social safety net initiatives have been found to increase consumption while also increasing the frequency and variety of spending patterns (Davis et al., 2016). In another study by (Stoeffler, Mills, & Premand 2016), Cash transfer beneficiaries in Niger saw long-term growth in livestock assets. There is further evidence of social safety nets increasing spending on house modifications, such as metal or plastic sheeting for roofs and walls, in the Give Directly program in Kenya, the Lesotho Child Grants Program, and the CfW in Sierra Leone (Haushofer & Shapiro, 2016; Rosas & Sabarwal, 2016).

Consider the data published on Kenya's Orphans and Vulnerable Children (OVC) program about the effects of total consumption. Andrews, Hsiao, and Ralston (2018) showed that household consumption increased by 80 percent of the transfer value. Expenditures on durables (tools and other agricultural and business equipment) increased by 10 percent compared to the baseline, a lesser but still considerable gain.

Durables include agricultural tool investments, such as Ethiopia's Social Cash Transfer Pilot Program, Malawi's SCTP, and Zambia's Child Grant Program (Berhane et al., 2015). There is further evidence of social safety nets increasing spending on house modifications, such as metal or plastic sheeting for roofs and walls, in the Give Directly program in Kenya, the Lesotho Child Grants Program, and the CfW in Sierra Leone (Haushofer & Shapiro, 2016; Pellerano et al., 2014;



Rosas & Sabarwal, 2016).

#### **2.4.2 Devolved Enterprise Funds and Household Welfare**

Copstake et al. (2001) examined the impact of microfinance on household welfare in Zambia. Specifically, the research investigated the direct and indirect impacts of two large microcredit programmes on borrowers, their Small Medium Enterprises (SME) and their household income. The sample data comprised 420 respondents' (clients) selected randomly from three groups namely; borrowers who obtained their first loan between one and two years before the reference month; borrowers who obtained their first loan between one year and eight months before the reference month and borrowers who had yet to receive a loan by the end of the reference month. This last groups of potential borrowers also acted as a control group in the study.

By using `with and without`, least squares regression and qualitative enquiry methodologies, they found mixed results. The study found out that individuals who graduated from their first to the second loan experienced significantly higher performance in their enterprise profits and household income, as compared with individuals who had near similar businesses but did not graduate to the second loan or seek for any credit. Second, the study established that 52 percent of borrowers 39 were better off after the microcredit, while the rest were left worse-off. While the study provided useful insights, the problems of endogeneity and self-selectivity were not adequately addressed as the methodologies used could not overcome them. To address this, the current study employed a treatment effects model. This model uses the inclusion of the Inverse Mills Ratio (IMR) as an additional regressor to take care

of the unobserved variables and therefore corrects for the endogeneity or self-selection biases.

In spite of the government efforts to promote businesses through the provision of devolved funds, a number of challenges have been observed. They include; inadequate finances or capital due to the lack of collateral to secure loans, difficulties in transportation and marketing, persistence of primary products or raw materials exist. Furthermore, it led Kamau (2014) to study the access and impact of the funds transferred on female-owned and poor enterprises in the southern sub-county of Gatundu. The study uses raw data based on 80 groups and probit models to analyze the relationship between access and impact of the transferred funds and of women and poor-owned enterprises.

The results of the study show that the Rotation Fund of the Commission for the Elimination of Poverty for Women (CWEF) and the Rotation Fund of the Commission for the Elimination of Poverty (PECRF) play an important role in improving women's lives. The duration of the group, the guarantee and gender had significant effects on access to funds, while PECRF had a significant effect on business development. The study made a series of policy recommendations: conducting capacity building training for groups, training citizens on what is required of them to access funds and expanding the CWEF and PECRF to reach more groups.

Gedion, Oyugi, and Munyithya (2015) reported that credit boosted women's and household earnings. Women's and household incomes benefit from the Women's Enterprise Fund. In general, the socioeconomic welfare of women and their homes

improved. Al-Shami, Majid, Mohamad, and Rashid (2017) conducted a survey of 495 previous and new borrowers to examine the effect of a productive loan offered by Amanah Ikhtiar Malaysia (AIM) on women household welfare and empowerment. According to the findings, microcredit has a considerable favorable impact on borrowers' household income and personal asset acquisition. However, although microcredit empowers female borrowers in household decision-making, it has little influence on women's authority over small financial matters.

Mohamud and Ndede (2019) researched 200 youth groups in Wajir County, Kenya, to determine the link between youth business development financial services and youth empowerment. According to the report, attending entrepreneurship training is vital for boosting company performance and, as a result, promoting young empowerment in the county. Opil (2019) investigated the impact of a women's entrepreneurial fund on the socioeconomic empowerment of women. In Nakuru County, Kenya, the women were socially and economically empowered because they received trainings that allowed them to share knowledge with others, as well as increased money from income-generating activities that complemented their existing sources of income.

#### **2.4.3 Devolved Health Financing and Household Welfare**

According to Mugo (2004), the processes and measures of population healthcare indicators are diverse and imperfect. It results in a wide range of population health indicators ranging from traditional indicators such as birth and death rates, mortality and morbidity indicators to quality adjustment measures such as Quality Adjusted Life Years (QALYs) and Disability Adjusted Life Years (DALYs). Review of

various researches, show that the most common measure of health outcomes used are life expectancy and mortality rates (age-specific or actual mortality) (Nixon & Ullmann, 2006). These correspond with the indicators of the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs) (United Nation, 2015).

Mohammed, et al., (2018) evaluated the association between several forms of healthcare expenditures (public, private, and total) and three major health status outcomes in the region: life expectancy at birth, crude death rate, and infant mortality rate. In order to investigate the effects of healthcare spending on health outcomes, a panel data analysis was conducted using the World Bank data collection for 15 countries over a 20-year period (1995-2014) was set. Total health expenditures, public health spending, private health spending, GDP per capita, improved sanitation, life expectancy at birth, crude death rate, and infant mortality rate were the main variables assessed.

Infant mortality rates were significantly reduced by total health expenditure, public health spending, and private health spending, with private health spending having a greater influence than public health spending. Lowering the crude mortality rate was significantly influenced by private health spending as well. Greater population health in the area was also significantly influenced by higher per capita income and better sanitary infrastructure. In their study Ellis and Mwabu (1991), used the utility maximization approach to attempt to explain the impact of price changes on the demand of healthcare services in Kenya. The investigation was based on the expectations that the user fee to access healthcare services were still in force

notwithstanding the suspension by the state. The demand model was estimated using data captured on weekly and daily basis from sampled institution across the country. The findings revealed that user fees deter people from using health care services. Utilization of health services decreased by 38 per cent when user fees were implemented, but increased to 29 per cent once the costs were suspended.

One of the independent variables in studies examining the influence of public spending on health expenditures on health outcomes is some measure of health expenditure (Robalino, et al., 2001). As an independent variable, health spending as a proportion of GDP and per capita health expenditure are often utilized. The spectrum of socioeconomic characteristics varies across research depending on the data available, the venue, and the significance. The majority of studies, however, also take into account dietary factors like alcohol consumption and calorie intake as well as health system variables like medical personnel density (the number of doctors and nurses per 100,000 people), hospital beds and cots, demographic and economic variables, education index, and the percentage of health expenditures covered by the government. Political rights, the proportion of white-collar workers, and the coefficient of decentralization are further specific characteristics.

According to certain research on health spending and health outcomes (Bokhari et al., 2007; Jaba, et al., 2014), health spending lowers death rates. Using food expenditure shock as an indication of vulnerability, Li et al. (2015) discovered that a considerable fraction of higher income quintile families in South Africa use private healthcare even when not covered by private medical insurance. Lower-income families, on the other hand, who cannot afford high-cost private healthcare, are more

likely to depend on the overburdened public healthcare system. Kabajulizi, Keogh-Brown, and Smith (2017) explored the welfare consequences of public healthcare finance in Uganda using a macro-micro simulation model. According to the report, raising the government's portion of the health budget allows for greater healthcare services, better population health, faster sectoral growth, and lower poverty.

A study by Rono (2017) on cash transfer for healthcare fee and their impact on poverty reduction and welfare of the poor in both urban and rural regions in Kenya on poorest households in both rural and urban areas, revealed that the poor had a larger share of catastrophic health expenses than urban families. In addition, the size of the household, income, private health facilities and member of household under 5 or over 50 years, physical injuries/accident, gender of head of household, chronic illness, malaria, respiratory disease, type of hospital, insurance status, and income were factors determining catastrophic health care expenditure. The effect of out-of-pocket payments for healthcare on poor headcount was stronger in cities than in rural areas.

The majority of these researches are cross-national, with just a few country-specific investigations. The influence of government spending on health may varies greatly from one nation to the next, owing to differences in wealth, and infrastructure (road network, access to better water sources, and sanitation, among other things) (Bokhari et al., 2007). The preceding research have shown that increasing/availing delegated health funds to the people aids in their access to health care services, which is a positive copy of excellent and healthy working capital. Based on the preceding findings, the present research intends to investigate the impact of devolved health

finance as a government devolved funding strategy on welfare in Kenya.

#### **2.4.4 Devolved Education Funding and Household Welfare**

Using data from K.I.B.S (2005/06), Demery and Gaddis (2009) used benefit incidence technique to assess those household that benefited from public sector expenditures particularly on education and healthcare. The study computed both average and marginal benefits. The findings indicated that public expenditures on education sector benefited more household from the lowest quintile compared to the upper quintile of the society. However, the study also showed that out of the 18 percent of public expenditure on health financing; only 14 percent reached the poorest at the grass root and 27 percent reached the wealthiest.

The coefficients of the estimate indicating that the incidence of marginal benefits increases with the increase in the public expenditures in social sectors such as education and health care and this follows a similar trend elsewhere in the world. This trend indicates that the poor are likely to benefit more from the public expenditures in social sector than the rich however, distributional imbalances was likely to negate on these gains. The study also showed that there no significant gender disparities in the gains from investments in education. However, the benefit from public investments in primary healthcare was greater in female than males. Further observation indicated that more females from the rich benefited more than those from the lowest quintile. The same trend was observed for male.

Most nations' access to basic education is viewed as both a responsibility and a right. Most governments are expected to guarantee the availability of this public good, while citizens are occasionally required by law to complete education up to a

certain level. Ogundari and Aromolaran (2014) intended to study the effects of public expenditure on education on household wellbeing in Nigeria. According to data, household per capita spending, increases with the increase in the number of years a household head spends in tertiary education greater than new years of basic, secondary, and postgraduate education. As a result, advances in household economic prosperity in Nigeria are driven more by higher education by household heads than by lower levels of education.

Study by Okeyo (2015) conducted research on the “Contribution of Contribution of Development Fund Bursary on Secondary Education of Ogiek Girls in Njoro Sub-County, Kenya.” The study's major goal was to determine the role of CDF bursaries in the provision of secondary education for underprivileged Ogiek girls in Njoro sub-county. The specific goals were to determine the impact of the CDF bursary on the retention of Ogiek girls in public secondary schools, assess how eligible the Ogiek girls were for the CDF bursary, determine the girls' awareness level of the availability of the CDF bursary for their education, and determine how accessible the CDF bursary was to the girls in public secondary schools.

She presented structured questionnaires to 111 Ogiek girls who were responders using a cross-sectional study design and snowball sampling approach. The data was evaluated using frequency distribution and chi-square testing, and it was discovered that although 98 percent of the girls qualified for the program because they were partly orphans or from low-income households, only 10 percent received a bursary in the preceding three years. The survey also indicated that the CDF bursary had no effect on the retention of females in school since the amount of money provided was



just Ksh 3,000/= per year, which did not cover the minimum costs of Ksh 20,000/=. She said that, although people were aware of the existence of the fund, the vast majority did not apply owing to a shortage of application forms and a lack of reaction from the CDF administration (Olendo, 2009). The report suggested that more information about the fund be distributed and that the girls be instructed on how to apply for the scholarship.

The research, however, solely looked at the impact of CDF on the retention of females in public secondary schools. It was also conducted in a narrow geographic region with just one kind of responder, a girl, and so failed to prove equality in terms of gender parity in the granting of CDF bursaries. The present research was therefore required to determine if equitable considerations were adhered to, particularly in the distribution of CDF bursaries to disadvantaged students at public secondary schools. The research had a broader scope and a greater number of respondents of various categories. It also employed a triangulation of data sources to learn more about the impact of CDF on equality, including gender parity and the economic position of CDF bursary beneficiaries.

Goksu and Goksu (2015) analyzed the many uses of higher education finance systems and examined the contributions of the United States, Europe, and Korea to higher education financing. Higher education must be of high quality and efficient in order for the country's human capital to attain a high level. Each nation has a unique higher education finance approach, with varying degrees of success. While some nations rely primarily on private sector funding, others rely on public-sector funding for higher education. Goksu and Goksu (2015) Naliaka (2018) attempted to assess

the diversity of HELB financing for public university education and its influence on access in Kenya, as well as to provide appropriate remedies. The research discovered that the funds provided for students are insufficient, and that the criterion for dispensing of funding is highly contentious due to a lack of openness and accountability. Furthermore, the money available from well-wishers is insufficient to meet the strong demand for students, which is growing year after year.

Muyanga, Olwande, Mueni, and Wambugu (2010), as well as Owuor (2018), corroborated an increase in enrollment and retention of children, particularly from low-income families, as a result of free primary education inputs on educational results in Kenya. However, there are still barriers preventing students from poorer homes from attending secondary school owing to unequal access to educational amenities such as uniforms and food, among other things.

According to Moyi (2017), FPE has enhanced the opportunity for children with disabilities to attend school despite their overwhelming demands. Moshoeshoe, Ardington, and Piraino (2019) studied the Effect of the Free Primary Education (FPE) Policy on School Enrollment and Relative Grade Attainment in Lesotho and found that the FPE policy boosted primary school-age attendance by 19 percent between 1999 and 2002. However, the strategy had a detrimental impact on relative grade attainment: children had 0.15 fewer grades per year of age after FPE than before FPE.

Musee (2013) investigated the variables that determine the awarding of academic bursaries to students in public secondary schools in Machakos District's Central Division. This research was influenced by the Human Capital Theory. The study

used a descriptive research approach. This research discovered a significant association between household factors and bursary distribution. Children from low-income homes were prioritized for bursary funding above those from wealthy ones. Furthermore, there was a significant association between gender and bursary allocation.

Adan and Orodho (2014) performed research on the socioeconomic and cultural consequences of the Subsidized Secondary Education Policy (SSE) on equity and quality in Mandera West District, Mandera County. Despite the fact that their research did not focus on access, the data demonstrated that SSE had increased student enrollment in the area. However, the research found that equity concerns in secondary schools in Mandera County were being violated, as there was growing inequality that was adversely impacting female child education, owing to socio-cultural factors, school-based issues, poverty, and poor parental educational level. The report advised that greater campaigns be launched to strengthen communities' economic position and counter their unfavorable views about education in order to create fairness. As a result, CDF was seen as a valuable instrument that could be utilized to empower communities by distributing monies to the grassroots in order to build a solid economic basis among the people. This would allow them to send boys and girls to school.

In "Higher Education Loans Board: Undeserving Students Get Study Loans, a Case Study of Bungoma District, Kenya," Wachiye (2012) performed a case study on education subsidies. The research was qualitative in nature, with 140 parents of university students in the district participating in in-depth interviews. According to

the data, students from wealthy households get bigger loan allocations than students from low-income families. In his early research conducted in Colombia (Jallade, 2000) confirmed by the findings of Wachiye, (2012) that students from a high-income household had benefited more from funds set aside for the needy students from low-income households. The study discovered that income disparity was never considered as a factor determining the access to these funds.

The above studies have provided a confirmation that devolved education funds are instrumental in alleviating poverty and improving the household welfare of the country. This is because, education funds enable the citizens' access to education which in turn confirms the strengthening of the human capital. Based on the Keynesian theory, likewise, acknowledges that when the human capital is in a better position to increase and create employment and thus improve the overall welfare of the economy. It is thus, based on the above previous evidence provided that the current study seeks to explore the influence of the devolved education funds as a government devolved funding policy on the welfare in Kenya.

#### **2.4.5 Disbursement Characteristics and Household Welfare**

Donkoh, Alhassan, and Nkegbe (2014) conducted a survey on household welfare and consumption expenditure in Ghana. The study confirmed theoretically and empirically that as households become wealthier as the proportion of disposable income spent on food is reduced, and raise the share of the budget on food as a result causes decrease in welfare. Female-headed households, elderly households, household's size, education, marital status, residency, geographical region and distance from the capital city, were found to spend a greater proportion of their

income on food.

Wang et al. (2017), investigated the link between household wellbeing and ecosystem dependence in China's Miyun Reservoir watershed. According to the research, household structure, household education and skill level, and proximity to Beijing all have a major influence on household wellbeing, while the amount of natural capital and eco-compensation fund both contribute considerably to ecosystem dependency. Maintaining a proper household size and age structure, boosting education and skill levels, and enhancing payment for environmental services would be beneficial measures to improving the wellbeing of low-income families. Asfaw and Davis (2018), investigated the impact of cash transfer programs on household resilience in Sub-Saharan Africa. The findings indicate that such programs have significant consequences for household resilience. Furthermore, families receiving cash transfers suffered much less from weather shocks, with the poorest households benefiting the most, and food security improved, but to varying degrees across countries.

## **2.5 Research Gap**

Following the foregoing literature review, it is obvious that there is still some knowledge gap to link devolved funding to poverty and household welfare. The existing literature on the relationship between devolved funding, poverty and household welfare do not provide convincing results. This could be explained by the different empirical models used, the scope and the time period for the study. For example, Goksu and Goksu (2015) discussed the various approaches to financing education system of higher education and analysed the role of various players

participating in financing of higher education. The study presents both contextual and conceptual gap, since the focus was only on higher education in USA and European countries. The findings may not be generalizable to Kenya since her educational and governance system is not as developed as the said economies. Naliaka (2018) focused on the HELB funding of public university education in Kenya and failed to address the issue of household welfare by looking into primary and secondary education.

Furthermore, one of the critical issues in most of the studies in this area is the question on how devolved funds are defined and measured. There is no standard measure and design, and different studies have used different approaches with different outcomes. Different studies have also considered different factors including political system, the degree of institutional development, income disparity, population, and the level of economic development among others. Ogundari and Aromolaran (2014), Wang et al. (2017) and Bocoum et al. (2018) household welfare in Nigeria, Lesotho, Ghana, China in Burkina Faso respectively.

In Kenya for instance, the scope adopted by Ochieng, (2017), was skewed to the health sector alone leaving unaddressed areas in the education, employment and security. Likewise, Simiyu et al. (2014) based the study in Kimilili thus, presenting a contextual gap. Miathi (2017) used data mainly from revenue transferred from the national government to the counties and excluded data from other devolved funds. These differences in contexts could pose a generalizability problem of the finding. This study finds beyond doubt a background to extrapolate from previous studies in the following aspects: by looking into devolved funding policy and household

welfare in Kenya. Secondly, the study used the most recent period covering 2018.

**Table 2.1: Summary of Empirical Literature and Research Gaps**

<b>Author/Year</b>	<b>Issue of Study / Location of Study</b>	<b>Research Design</b>	<b>Results</b>	<b>Research gaps</b>
Copstake et al. (2001) Zambia	Examination of the impact of microfinance on household welfare in Zambia.	Mixed methods were used. The population included the recipient and non-recipient. Used purposive random sampling and used structured questionnaire.	Individuals who graduated from their first to the second loan experienced significantly higher performance in their enterprise profits and household income.	Problems of endogeneity and self-selectivity were not adequately addressed as the methodologies used could not overcome them.
Skoufias & Di Maro (2008) Mexico	Effects of Progressa Programme of Mexico and adults' participation in the job market and poverty evaluation in Mexico.	Adopted Quantitative approach. The population included the recipient and non-recipient. Used Stratified random sampling and used structured questionnaire.	The programme had no impact on the recipient in job market participation and reduced poverty.	The study did not mention the impact of the programme on the leisure time decision.
Demery and Gaddis (2009)	Assessment on the impact of public expenditure on education and healthcare outcomes.	Mixed methods and applied benefit incidence technique to conduct the analysis to compute both average and marginal benefits.	The findings indicated that the poor are likely to benefit more from the public expenditures in social sector than the rich.	However, BIA does not specify a model resulting in the observed distribution of benefits.
Wachiye (2012) in Kenya	Impact of education subsidies on number of years of schooling. A case study of Bungoma District in Kenya	Qualitative research approach. Purposive random sampling of 140 respondents.	From the findings, students from wealthy households get bigger loan allocations than students from low-income families.	The study discovered that income disparity was never considered as a factor determining the access to these funds.
Musee (2013) Kenya	Investigated of the determinants of the awarding of academic bursaries to students in public secondary schools in Machakos District's Central Division in Kenya.	Mixed methods using descriptive research approach. Raw data was collected using questionnaire.	Children from low-income homes were prioritized for bursary funding above those from wealthy ones	The descriptive research design was not sufficient enough to establish the link.
Kamau (2014) Kenya.	To investigate the access and impact of the funds transferred on female-owned and poor enterprises in the southern sub-county of Gatundu-Kenya.	Mixed methods. Raw data based on 80 groups and probit models to analyse the data.	The results indicate that the Women Development Fund and the Commission for Women empowerment Fund had a significant role in the improvement in the welfare of the women who benefited.	Problems of endogeneity and self-selectivity were not adequately addressed as the methodologies used could not overcome them. However, this was sorted by application of treatment effects model

<b>Author/Year</b>	<b>Issue of Study / Location of Study</b>	<b>Research Design</b>	<b>Results</b>	<b>Research gaps</b>
Rono (2017) Kenya.	Studied cash transfer for healthcare fee and their impact on poverty reduction and welfare of the poor in both urban and rural regions in Kenya.	Mixed Methods approach as well as an experimental design. Both primary and secondary data was used.	The effect of out-of-pocket payments for healthcare on poor headcount was stronger in cities than in rural areas.	The study did not consider the role of household demographic characteristics that has influence on the decision on the use of the funds.
Mohamad, and Rashid (2017) Malaysia.	To examine the effect of a productive loan offered by Amanah Ikhtiar Malaysia (AIM) on women household welfare and empowerment.	Qualitative and used a well-structured questionnaire to collect a raw data on a sample size of 495 respondents	Microcredit has a considerable favorable impact on borrowers' household income and personal asset acquisition	The study did not consider the role of household demographic characteristics that has influence on the decision on the use of the funds.
Wang et al. (2017) China.	The research investigated the link between household wellbeing and ecosystem dependence in China's Miyun Reservoir watershed.	Mixed methods using panel data research design and data obtained from both primary and secondary.	household structure, household education and skill level, and proximity to Beijing all have a major influence on household wellbeing	This study presented a conceptual and contextual gap.
Andrews, Hsiao, and Ralston (2018)	The effects of Social Safety Net Funds on household consumptions in Kenya	Mixed methods. The population of study included beneficiaries and non-beneficiaries. Used stratified random sampling and employed a well-structured questionnaire.	Social Safety Nets increased spending on house modifications such as metal or plastic sheeting for roofs and walls,	This study presented a conceptual and contextual gap.
Beegle et al. (2018)	impact of a hunger safety net program on multidimensional poverty reduction in Kenya	Quantitative and qualitative approaches. The population included the recipient and non-recipient. Used Stratified random sampling and used structured questionnaire.	Safety net initiatives have been found to increase household consumption in Kenya.	The study did not consider the role of household demographic characteristics that has influence on the decision on the use of the funds.
Mohammed et al. (2018)	Evaluated the association between several forms of healthcare expenditures (public, private, and total) and three major health status outcomes in 15 countries.	Quantitative approach and employed panel data analysis with data from the World Bank collected from 15 countries.	The study indicated that there were higher levels of good health recorded by those who visited private health providers.	There is no evidence that the problem of heteroscedastic common with such data was treated.
Song and Imai (2019)	impact of a hunger safety net program on multidimensional poverty reduction in Kenya	Mixed methods. The population of study included beneficiaries and non-beneficiaries. Used stratified random sampling and employed a well-structured questionnaire.	Significant reductions in poverty among the extreme poor in Kenya.	The study did not consider the role of household demographic characteristics that has influence on the decision on the use of the funds.

**Source:** Author's Compilation (2023)



## **2.6 Discussion from the Table**

From the above table, it is knowledgeable that majority of researchers used experimental and case studies designs particularly where there was a treatment group and control groups. However, quasi or non-experimental designs were used where there were no control group. Case study designs were also used to assess the effectiveness of the various policy interventions to have an in-depth examination of the impact of the policy. Specifically, while the experimental design was employed mainly in determining change in welfare levels, the case study design was employed in evaluating the effectiveness of the policy on household welfare.

It also became evident from the review that studies employed quantitative, qualitative and mixed methods research approaches in studying the issues on the devolved funds. Mixed methods came in handy because the approach permits the use of both qualitative and quantitative measures, in terms of data collection and analysis in a study. The purposive sampling was very common in the designs. Questionnaire stood out as the most preferred data collection tool. Others included, interview guide and focus groups. These methods assisted in the gathering of data from beneficiaries, non-beneficiaries and other categories of respondents. The collection of data using varied methods ensured reliability, validity, adequacy and sufficiency of the data.

Measurements of the key issues were on the nominal and ratio scale levels. The measurement of issues relating to labour market participation, school attendance, consumption, investment and income were mostly on a ratio scale while the uses of grant, access to healthcare, and challenges were measured on a nominal scale level.

Descriptive and inferential statistics were the main tools of analysis in most of the studies reviewed. The use of regression was, however, not appropriate since it does not aid in determining differences. Analytical methods such as ANOVA, t-test, Wilcoxon Signed Ranks test and Mann Whitney u test are some of the statistical methods appropriate for analysing differences.

### 2.1 Conceptual Framework

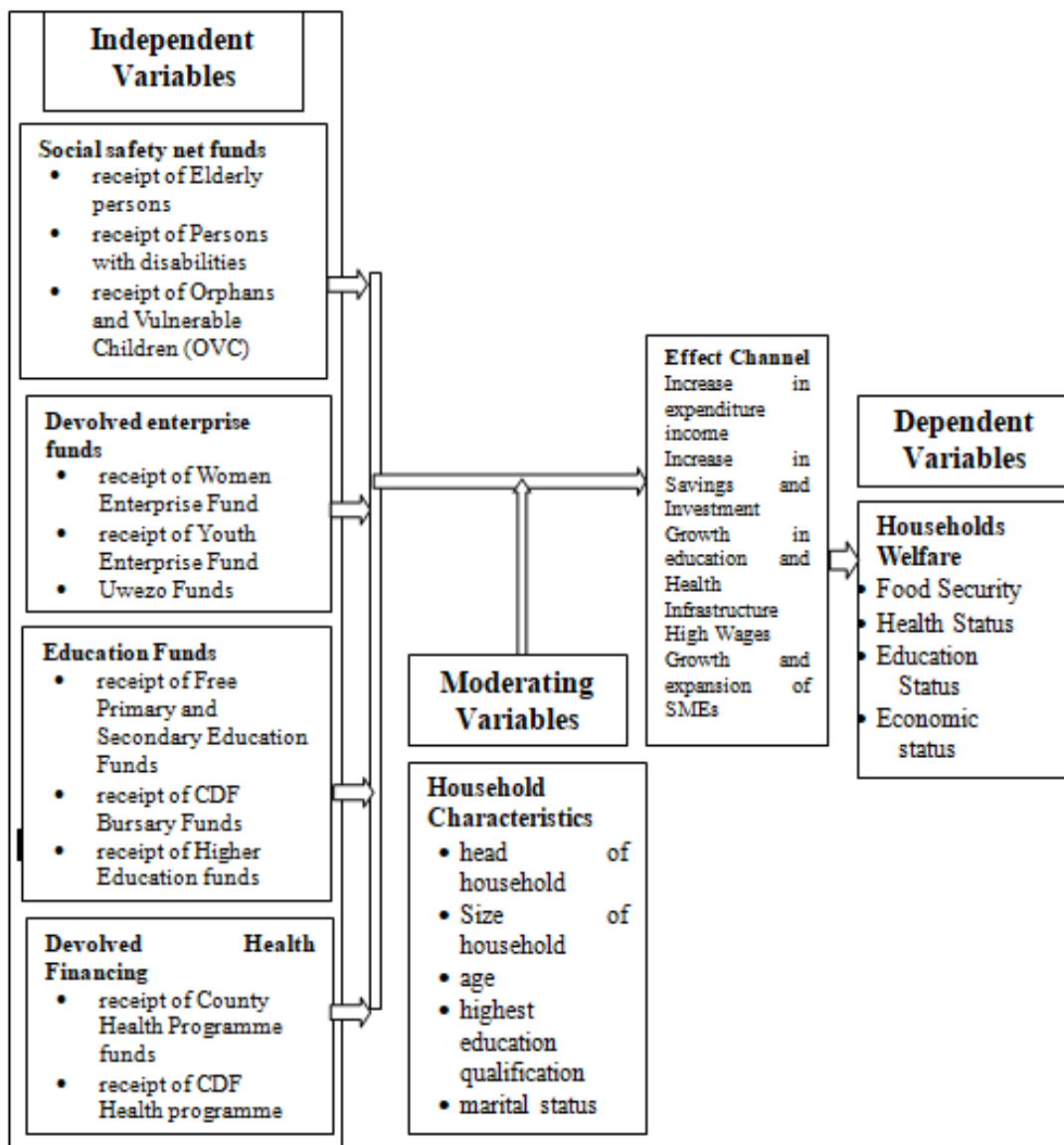


Figure 2.1: Conceptual Framework

Access to social safety funds is expected to increase the level of household welfare. This is only through the reduction of poverty, specifically through increased access of fund to Elderly persons, Persons with disabilities, Orphans and Vulnerable Children which in turn increase the household income to be used to access essential food and non-food item besides giving the household the freedom of choice. Cash transfers promote household welfare and food security. Importantly, the majority of them are from families impacted by shocks, for whom welfare consequences outweigh transfer amounts.

While droughts cause significant welfare losses, cash transfer recipients are able to completely buffer these costs and maintain consumption levels. Several mechanisms work together to improve resilience. Cash transfer recipients are more likely to join saving organizations and save more money. Beneficiary families are also more likely to be able to smooth revenue from agricultural and non-agricultural home businesses when shocks occur. With minor inequalities in home durables or livestock, the saving culture is more likely to boost asset accumulation. Overall, cash transfers increase people' ability to safeguard their income from shocks, which explains the extent of the welfare effects of cash transfers among drought-affected households.

Access to enterprise funds is expected to increase the level of household welfare through the education and poverty alleviation, specifically through receipt of Women Enterprise Fund, receipt of Youth Enterprise Fund and Uwezo Funds. With access to microcredit, investments in company assets and self-employment revenue grow significantly. The increase in employment income may increase the probability of household expenditure income and accumulation of assets resulting in positive

changes in household welfare. Access to education funds is expected to increase the level of household welfare through the education upgrade, specifically through receipt of Free Primary and Secondary Education Funds, receipt of CDF Bursary Funds and receipt of Higher Education funds.

Education is expected to increase the probability of an individual to participate in the job market and improvement in decision making in allocation of resources. These includes investment and consumption decisions that may increase income and wealth hence improvement of welfare through access to food security, improved health status, and reduction in poverty. Access to health financing funds is expected to increase the level of household welfare through the medical covers, specifically through receipt of receipt of County Health Programme funds and receipt of CDF Health programme funds. Healthy people are more valuable in the labor market. Improved productivity frees up resources for the development of new technologies, enterprises, and riches, leading in increased economic growth and human wellbeing.

Health has a major and beneficial impact on economic development. The government has been observed allocating more cash to health sectors since it is projected to play a crucial supporting role in maintaining a healthy working population, which is required for Kenya to match its global rivals' growing productivity. Increased health-care spending expands access to health-care facilities, lowering household morbidity and infant mortality and, as a result, increasing life expectancy at birth and so improving household welfare.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Chapter Overview**

This chapter gives a description of the research philosophy that guided the study. It also outlines the research methodology, description of research design adopted and its justifications, Nature and type of data collected including the instrument used in data collections, theoretical models, empirical model specifications and the statistical approaches to analysis of data.

#### **3.2 Research Philosophy**

The study relied heavily on the philosophical theory of positivism. This theory was proposed by Augustine Comte (1798-1857) who argued that the nature of human behavior is always being objective and can be scientifically determined numerically using statistical and mathematical analysis. The realization of the fact that human behavior is influenced by external or environmental factor, guided the choice of research methodology which involved the collection, observation, analysis and interpretation of data and therefore positivism philosophical approach was adopted to provide the explanations and predictions into the world of inquiries.

Positivists belief that human character and behavior are shaped by external factors such as social structures, institutions and system and that internal factors such as value beliefs, opinions and motivations, do not have any influence on human behavior. Positivism emphasizes on the role of factual knowledge which demands the adoption of quantitative research approach as opposed to qualitative research. The nature of inquiry in this study prompted the researcher to use scientific

instruments in collection of collect data and analyse it in order to make meaning out of it. Positivism philosophical approach has been used to guide research in business and economic worlds where facts and figures are needed to help in policy decision making. Positivism philosophical approach dissociates human interest completely from the phenomenon under investigations.

Positivism seems to emulate all scientific approaches in problem solving and adopts quantitative approaches in many disciplines of knowledge including biological, chemical and many other natural sciences (Remenyi, et al., 1998). Phillips and Burbules (2000) argue that knowledge should be objective and free from values, beliefs and bias of the researcher. They value reliability and validity of the knowledge fact. It proposes methods of testing hypothesis to generate and validate scientific knowledge. Positivists investigate pattern and linkages between social factors, determining their relationship through analysis of facts (data), interpreting the finding and making use of it to make policy decision. This investigative approach is best done through quantitative analysis that involves collection of data (information), establishing the patterns, trends, correlations and finding cause-effect through statistical analysis. Positivist use approaches such surveys, laboratory experiments among others to investigate phenomena (Sudeshna & Datt, 2016).

Positivism is very relevant in the study of economics and has stretched its tentacles into the great debates between positive and normative economic philosophies. The study of economic entails the analysis of human behavior in response to economic environment. Positive economic philosophy involves the analysis and establishment of relationship between variables under investigations. Positive economic statements

focus more on data, facts, and figures and not on personal values, views and opinions. It provides a more scientific and calculated clarification on economic issues. The researcher applied positive economic in an attempt to establish the link between devolved funding policies and the household welfare in Kenya.

### **3.3 Research Design**

The research design adopted was determined by the nature of data. In this study, the data obtained was mainly categorical and this warranted, the adoption of both descriptive and inferential research design to analyse the four research objectives. The descriptive statistics was mainly in the form of frequency distributions, measure of central tendency and variability. Descriptive statistics describes the nature and characteristics of the data set. Inferential statistics was employed to establish the relationship between the variables under observation. The design enabled the researcher to make conclusions, interpretation and predictions/forecast about the population under study. This study adopted the concurrent mixed methods design because all the four objectives, involved the collection of both quantitative and qualitative data. Previous studies (Handa et al., 2013; Mutambara, 2011) on related topics employed this approach.

The research was mainly non-experimental research designs. This was specifically an “after” only design which is best in programme evaluation. The choice of this approach was because of lack of comparable baseline data. The scholar is aware of a population’s exposure to a policy intervention and desires to study its effect on the beneficiary group (Kumar, 2011). Therefore, pre-test data is from recall of respondents or from existing record. According to Bhattacharjee (2012), the before

data is obtained after the implementation of the intervention. The after only design was right for this study because there is no baseline data. Therefore, the design seeks to provide information/data about what, when, how and where of the research question. To obtain data/information, the researcher employs techniques such as surveys, and observations among others (Hawkins *et al.*, 2007).

### **3.4 Population of the Study**

The study targeted the households listed by Kenya Integrated Household Budget (KIHBS) which indicated the residence of households' owners and it was more convenient and practical to follow up with those in Nairobi County and the metropolitan as opposed to outside Nairobi County. The choice of Nairobi County was guided by the fact that Nairobi is a cosmopolitan and metropolitan area and therefore houses a diversity of households with heterogeneous characteristics that represents the population of Kenya. Nairobi metropolitan has a blend of poor and non-poor households although majorities are known to be poor and live in informal settlements. Further, Nairobi is also the most populous county in Kenya with a population of over 4 million. The total population in Nairobi County is 1,128,693 households (KNBS, 2020). The KIHBS 2015 /2016 was the baseline of sampling frame with 1,128,693 households being targeted.

#### **3.4.1 Sample and Sampling Techniques**

The population under study was greater than 10000 and this guided the choice of Fisher's formula (Fisher, et al., 1993) to select the sample size of respondents as indicated in (3.1).

$$n = \frac{z^2 p(1-p)}{d^2} \dots\dots\dots(3.1)$$



Where;

$n$ = sample size

$z$ = the standard normal deviate value for the level of confidence, for instance 95% level of confidence =1.96.

$d$ = margin of error or level of precision at 0.1 for CI at 95%

$p$ = proportion to be estimated, assumed at  $p=0.5$ .

Substituted as in:

$$n = \frac{(1.96)^2(0.50)(0.50)}{(0.50)^2} \dots\dots\dots(3.2)$$

Therefore:

$n = 384$  respondents (since the population was more than 10000; 1,128,693). This formula is recommended for studies that utilizes the cross-sectional data type and involves testing of hypothesis. The technique is powerful in controlling the type 1 error (false positive). However, the formula assumes that the standard deviation is known and that the scholar used simple random sampling which is not feasible in cross sectional data analysis.

The choice of sampling approaches was guided by the nature of research question/objective and the population under study. In this study both stratified and random sampling were used concurrently. The population was stratified because of the heterogeneity nature of the population under observation. The stratification was to ensure that each beneficiary category such as the elderly poor, COVC and PWD featured in the sampled population. After the stratification, simple random sampling was employed in selecting the right sample for each stratum on a proportional basis.

The selection process of the respondents involved the lottery method which was possible with the aid of the sampling frame obtained from the Kenya National Bureau of statistics (KNBS, 2019).

### **3.5 Pilot Study**

Pilot study was done to test the suitability of the survey instruments. Pilot study is a trial conducted to identify and reduce systematic errors in the survey instruments (Janghorban, 2014). The exercise provides information that can help improve the study design, process and the preparedness for the full-scale survey (Fraser, et al, 2018). A sample of one to ten of the sample size is considered appropriate for the trial test (Fraser, et al, 2018). However, a total of 38 participants for this trial were drawn from Nakuru County through random sampling. This represented about 9.8 percent of the total sample size of 384. The choice of Nakuru County was guided by the fact that it was not part of the area of study. This was done basically to reduce biasness that could affect the reliability and validity of the study. An overview of literature was done to better understand the research problem. The survey instruments were restructured to improve on the quality before it was deployed. The data obtained was processed and analysed using statistical techniques. The results validated the research design.

### **3.6 Theoretical Models Formulation**

#### **3.6.1 Influence of Social Safety Funds on Household Welfare**

Economic theories and empirical studies have established a correlation between cash transfer policies with household consumption behavior. Therefore, the analysis of cash transfer funds and its impact on household welfare in the context of Keynesian

theory of consumption, views cash transfer as part of assets available to Households as source of income that can influence consumption behavior. This theoretical framework provides that household own a set of assets such as physical, human capital, and house hold income among others. The household distributes these assets amongst its various needs with an objective of maximizing its utility. Some of these resources can be deployed in production while others like income will be used to change consumption behavior. This model can be represented in a set of structural equations depicting household economic behaviour under constrained utility maximization and the asset endowment.

Therefore, to model this economic concept, household welfare proxied through poverty was to be treated as a function of per capita expenditure (disposable income), asset endowment and exogenous characteristics of the household can be represented in the following set of structural equations.

$$Y = f(CT, Z) \dots\dots\dots (3.3)$$

Where  $Y$  represents total house income,  $CT$  represents the total cash transfer received by household, and  $Z$  is a set of predictor variables, including moderating factors such as education levels, age and sex of the household head and the household asset endowment such as livestock ownership, labour, land capital. The above concept was used to develop a model based on Keynesian theory of consumption (Keyne 1936) model.

### **3.6.2 Household Participation in Devolved Enterprise funds and Household Welfare**

The association of household welfare and participation in enterprise funding is best

exhibited in the theory of consumer utility maximization. The theory proposes that the main objective of individual is maximize utility subject to a set of constraints (income and prices). Participation in the enterprise funds/empowerment funds may provide a source of income that may influence household production and consumption functions. Devolved enterprise funds can be used to set up production (SME). The investment returns generated from the firm is a source of household income that could be converted into consumption expenditure that could influence household utility functions.

In modeling this household behavior, it is assumed that household participation in devolved enterprise fund is discrete and not easily predictable and random utility maximization model was identified as the most suitable. The model assumes that household may choose to participate in devolved enterprise fund (through borrowing) or may decide otherwise. The impact on household welfare of this decision may be determined by computing the differences between welfare effects due to of household participation in devolved enterprise and non-participation. If the welfare effects due to participation in enterprise funds is greater than the welfare effects due non-participation, the household will choose to participate and otherwise the household will not participate.

In this binary decision problem, let  $V_P$  be the indirect utility (welfare effects) derived from household participation and  $V_N$  be the indirect utility (welfare effects) derived from non-participation and that  $w$  is vector welfare characteristic. In this model, the choice to participate is observable but the point at which the decision is made is non-observable and therefore a latent effect and is denoted as  $(D_i)$  and can be specified

by assuming that the household choice to participate or not is determined by an unobservable threshold utility such that;

$$V^*(w) = V_p(w) - V_N(w) \dots \dots \dots (3.4)$$

Given this threshold level of utility, the latent variable may be defined as

$$D_i = 1 \text{ if } V^*(w) > 0 \text{ and } D_i = 0 \text{ if } V^* \leq 0 \dots \dots \dots (3.5)$$

The binary decision in participation can be estimated using a suitable probability model given the observed covariates and could be given as;

$$D_i = X' \beta + \mu \dots \dots \dots (3.6)$$

Where  $D_i$  is the latent due to decision to participation or not,  $X'$  is a set of predictor variables affecting the choice decision,  $\beta$  is a set of unobservable parameters and  $\mu$  is a random disturbance variable, a probit regression model was used to estimate the binary decision. The decision to use this model was guided by the assumptions that the error term was normally distributed (Verbeek, 2012). The probit model was set as

$$\Pr(D_i = 1) \Phi(X' \beta) \dots \dots \dots (3.7)$$

Where  $X' \beta$  is already defined  $\Phi$  represent the cumulative distribution function of a standard normal random variable, with a mean of zero and a constant variance for the residuals.

A heteroskedastic probit (hetprobit) model proposed by Harvey (1976) was used to reduce the effect heteroscedasticity. The heteroskedastic probit model introduces a

multiplicative term into the probit model and this relaxes the assumptions of homoscedastic. This is done through modification of cumulative distribution function (CDF) to a normal CDF with a variance that is no longer fixed at one (1) but can vary as a function of the independent variables (Harvey, 1976; Alvarez & Brehm, 1995). This is shown below.

$$\Pr(D_i = 1) = \Phi\left(\frac{X'\beta}{\exp(\rho\omega)}\right) \dots\dots\dots(3.8)$$

Where  $X'\beta, \Phi$  are defined above,  $\rho$  is a set of covariates predicted to have heteroskedasticity and  $\omega$  is a set of parameters correlated with variables. Hetprobit is modified to probit If  $\omega = 0$ . The empirical model for determinants of household participation in women fund was set up based on the probit framework.

Treatment effects framework was used to model the influence of household participation in devolved enterprise funds on the welfare of the household. However, the presence of endogeneity and self-selection biasness may cause inconsistent estimates (Placeholder1)). To address this problem, the endogenous switching regime (ESR) model by Lee (1978) was used. The biases may arise from factors affecting the decision choice of participation and non-participation and the impact on the welfare of the household. The observable and unobservable household characteristic determines the choice of voluntary participation. The participant and non-participant equations conditional on participation, are specified under the ESR framework as follows.

$$w_p = Z'B_p + \varepsilon_p \quad \text{if } D_i = 1 \dots\dots\dots(3.9)$$

$$w_N = Z'B_N + \varepsilon_N \quad \text{if } D_i = 0 \dots\dots\dots(3.10)$$

Where  $w_p$  and  $w_N$  represents a vector of indicators of household welfare for both participants and non-participants respectively,  $Z_i'$  is a set of explanatory variables affecting welfare in both regimes,  $B_p$  and  $B_N$  are unknown parameters in both regimes  $\varepsilon_p$  and  $\varepsilon_N$  are error terms in both regimes. The correlated error terms of equations 3.5, 3.6 and 3.7 are assumed to have a trivariate normal distribution with mean zero and non-singular variance-covariance matrix Lee (1978).

### 3.6.3 Influence of changes in Human Capital on Household Welfare

According to Mwabu (1991), the impact of introduction of cost sharing policies on household access to healthcare services, modeled the theory of consumer utility maximization theory which is based on the assumption that individual consumers satisfy their utilities through consumption of goods subject to constraints such as income and prices as described by section 2.1. Households, for instance, aim at maximizing utility of its members. The utility function of the household is as follows:

$$U = f(X_1, X_2) \dots\dots\dots (3.11)$$

Where:

U = Household Utility.

$X_1$  = Consumption (*Food Consumption Score*)

$X_2$  = Human capital (*Education & Health*)

Where;

Human capital comprised of education, health and a vector of household characteristics, which are necessary for increasing welfare by reducing poverty. The

household allocates its income on the consumption of the two goods and seeks to maximize utility so it will choose the combination of  $x_1$  and  $x_2$  that maximize its utility. It is assumed the price of consumer goods is  $P_1$  and for the human capital is  $P_2$  and the income of the household,  $Y$  is fixed. In this case therefore the household is faced with a constrained maximization problem, that is,

$$\text{Maximize. } U = f(X_1, X_2) \dots \dots \dots (3.12)$$

$$\text{Subject to } Y = P_1X_1 + P_2X_2 \dots \dots \dots (3.13)$$

The augmented function is given as

$$L = f(x_1x_2) + \lambda(y - p_1x_1 - p_2x_2) \dots \dots \dots (3.14)$$

Solving the first order condition for  $x_1$  and  $x_2$  will give the demand function of consumer goods and human capital. These are Marshallian demand curves i.e.

$$x_1 = f(p_1, p_2, y) \dots \dots \dots (3.15)$$

$$x_2 = f(p_1, p_2, y) \dots \dots \dots (3.16)$$

The theory of demand states that quantity demanded of a product is inversely related to its own price, holding other factors constant. However, exceptions occur when in some instances for a normal good, more is demanded at higher price or income than otherwise. Goods are complimentary or substitutes if changes in prices for influence the demand for the other. Other factors that may affect demand of a product include tastes, expectations, advertisement among others. In this study, consumer goods and human capital are assumed to be normal and therefore their demand is influenced by changes in income. In the analysis of demand function expectations and Taste s were treated as a dummy variable and measured qualitatively. Tastes for and against were assigned the dummy one and zero respectively.



At this stage, development funds from devolved funding (DF) are introduced in our model. Then the demand for consumer goods is taken, the DF is expected to release more income for consumption. This brings in these equations

$$X_1 = f (P_1, P_2, Y_1, DF) \dots\dots\dots (3.17)$$

$$X_2 = f (P_1, P_2, Y_1, DF). \dots\dots\dots (3.18)$$

Equations 3.24 and 3.25 shows how devolved funding enters into the demand functions for  $X_1$  and  $X_2$  If DF are utilized to finance education and health care, the income that would otherwise have been spend on development of human capital, is released for consumption expenditure. The increased house hold income may lead to increased consumption of product. This will increase household welfare. This led to a reduction of poverty hence increase welfare. In this case, DF was measured as that proportion of the fund that is retained by households that the household would have spent on development of human capital (Education and Health). The DF is then allowed into the demand function of good  $X_2$  so that

$$X_2 = f(P_1, P_2, Y, T, E, DF) \dots\dots\dots (3.19)$$

Where, DF was considered as that part of Devolved Funds that is spend on health care and education and this will increase the likelihood a strong association between Devolved Funds (DF) and human capital. The funding policy will increase access to education and healthcare hence influence household welfare through increased life expectancy and labour productivity.

Suppose Development Funds is increased with other factors constant, the demand for good  $X_2$  will also increase and this will also increase the provision of healthcare and

educational service. This may reduce poverty and increase the levels of household welfare. But it is known that poverty is a function of  $X_2$ , which is demand for health and education.

$$\text{Poverty} = f(X_2) \dots\dots\dots(3.20)$$

But poverty is just not a function of good  $X_2$  but also a vector of other household characteristics such as residence (urban or rural), household size, age, education and household asset holding.

$$P = f(X_2, \text{Age, Residence, Size of household, Level of schooling livestock holding})$$

- Let            A = Age
- R =Residence
- S = Household size
- E = Level of schooling
- L = Assets holding

$$P = f(X_2, A, R, S, E, L) \dots\dots\dots(3.21)$$

Where P is poverty representing head count part.

**3.6.4 Hypothesis Testing**

To test for the four hypotheses, different p-values were set at 0.05 significance levels. The results for the different p-values were interpreted and were used to either reject or fail to reject the alternative hypotheses given the value of the p. These hypotheses were tested from the various regression models where:

$$H_A: \beta_i = 0 \text{ (I = 1, 2, 3,4.....4)} \text{ vs } H_o: \beta_i \neq 0$$

The regression analysis provided the results for t values with corresponding p values. If P value < 0.05 then  $H_{A1}$  was be rejected which signifies that  $Y_1$  has some

significant level of influence on  $\bar{P}$ .

### **3.6.5 Sources and Types of Data**

The main type of data was the primary data (cross sectional pooled data) collected by a well-structured data collection guide (questionnaire survey). A major advantage of cross-sectional data consists of multiple entities or variables which are observed at a point of time. Analyses of cross-sectional data usually consist of comparing the differences amongst the entities (Ukur and Ali, 2013).

### **3.7 Data Collection and processing.**

A well-structured data collection guide (questionnaire survey) was developed. The study used primary data to collect cross sectional pooled data. The collected data was formatted, transformed and translated to give it context and form appropriate interpretation by computers, the results which will be used to generate descriptive and inferential statistics.

### **3.8 Data Analysis and Presentation**

This is the process of cleaning raw data to give it a meaning. It involves identifying trends by employing proven econometric and statistical methodology to derive conclusions (Kothari, 2017). There are three objectives of carrying out data analysis that is, summarize and simplify data, evaluate and improve on the quality and making inference and interpretation for use in decision making (Goldfarb & King, 2016). Systematic analysis of data was done using various analytical procedures which was based on whether data type was quantitative or qualitative. The descriptive statistics was applied using Statistical Package for Social Science to

analyse quantitative data. The results of the analysis were presented in form of frequency distributions, measures of central tendency and variability. This enabled the data to be presentable and comprehensive.

Furthermore, a multivariate regression model was used to evaluate the effects of each of the four variables in question on the households in Kenya. This model is the appropriate statistical approach to analysis of data from a multiple variable. The model is also useful in examining the degree of correlation among all variables (dependent and independent). The correlations could be linear or non-linear (Foss & Saebi, 2017). The regression model was as follows:

$$Y1 = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \dots\dots\dots (3.22)$$

$$Y2 = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \dots\dots\dots (3.23)$$

$$Y3 = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \dots\dots\dots (3.24)$$

$$Y4 = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \dots\dots\dots (3.25)$$

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \dots\dots\dots (3.26)$$

Where:

**Y** = Households Welfare (in Kenya Shillings)

**Y1** = Food Security in Kenya Shillings

**Y2** = Health Status in Kenya Shillings

**Y3** = Education Status in Kenya Shillings

**Y4** = Poverty Status in Kenya Shillings

$\beta_0$  = Constant Term

$\beta_1, \beta_2, \beta_3$  and  $\beta_4$  = Beta coefficients

$X_1$  = Social Safety funds in Kenya Shillings

$X_2$ = Devolved Enterprise Funds in Kenya Shillings

$X_3$ = Devolved Health Financing in Kenya Shillings

$X_4$ = Education Funds in Kenya Shillings

$\varepsilon$  = Error term

### **Moderation**

The study adopted regression to test the model constituting of devolved funding policies, the moderating variable of Household Characteristics and interaction variables between Households Welfare and the moderator. The results of the model generated in the equation given as:

$$Y = \beta_0 + \beta_1 M1 + \beta_2 X + \beta_3 X.M1 + e \dots\dots\dots (3.27)$$

$$Y = \beta_0 + \beta_1 M2 + \beta_2 X + \beta_3 X.M2 + e \dots\dots\dots (3.28)$$

$$Y = \beta_0 + \beta_1 M3 + \beta_2 X + \beta_3 X.M3 + e \dots\dots\dots (3.29)$$

$$Y = \beta_0 + \beta_1 M4 + \beta_2 X + \beta_3 X.M4 + e \dots\dots\dots (3.30)$$

$$Y = \beta_0 + \beta_1 M5 + \beta_2 X + \beta_3 X.M5 + e \dots\dots\dots (3.31)$$

Where;

Y= the dependent variable (Households Welfare)

M1 to M5 = Moderating variables (Head of the family, Family size, Age bracket, Education qualification, Marital Status)

X= variable composite  $\{(X_1+X_2+X_3+X_4)/4\}$

X.M = Interaction term

$\beta_1, \beta_2, \beta_3,$  = Change in Y with respect to a unit change in M.

## CHAPTER FOUR

### DESCRIPTIVE ANALYSIS OF DEVOLVED FUNDING POLICIES

#### 4.1 Chapter Overview

The chapter presented the main outcome of the data analysis collected from the questionnaire. The analysis of data was guided by the research problem and objectives. Descriptive and inferential data analysis was used to analyse the data. The study findings are presented in figures and tabular format for easy interpretations. The chapter is organized as follows: overview of the chapter, descriptive analysis, inferential statistics, hypothesis testing and discussion of the study findings.

#### 4.2 Response Rate

A structured questionnaire was administered to 384 respondents who represent the sample size of the study. Out of 384 questionnaires issued, 305 (79.4 percent) respondents filled the questionnaires properly and returned them as illustrated in Table 4.0.

**Table 4.1: Response Rate**

<b>Response Rate</b>	<b>Frequency</b>	<b>Percent</b>
Questionnaires returned	305	79.4
Questionnaires not returned	79	20.6
<b>Administered Questionnaires</b>	<b>384</b>	<b>100.0</b>

**Source:** Survey Data (2022)

The table above indicates that out of 384 questionnaires issued out, only 305 were returned and were duly filled representing 79.4 percent return rate. From the recommendations of Rindfuss (2015), the rate of response of greater than 70 percent

is considered sufficient enough to allow for analysis of data. Some respondents were either unavailable or very hostile and not willing to divulge any information.

### 4.3 Demographic Statistics

The Table below (table 4.1) presents information about population characteristics of the participants that were under investigation. This was to provide valuable insight into a population's characteristics and the make-up of the communities. The methods of demographic analysis are used to give insight into the characteristics of a population, such as age, gender, race/ethnicity, income, education level, and more. These methods allow researchers to better understand the population and how it is changing over time.

#### 4.3.1 Head of the Family

Household heads are typically the final decision makers and is typically the oldest or the person with the highest income. They make production and consumption decisions in the household and therefore have greater influence on the household welfare. This study sort to analyse and understand the nature of household head and how their decision influenced the absorption of the devolved funds. The results from table 4.1 indicated the responses about the head of the household. The results are presented in both frequencies and percentages

**Table 4.2: Head of the Family**

<b>Head of family</b>	<b>Frequency</b>	<b>Percent</b>
Father	123	40.3
Mother	85	27.9
Guardians	97	31.8
<b>Total</b>	<b>305</b>	<b>100.0</b>

**Source:** Survey Data (2022).

From the Table above 40.3 percent of the households are headed by fathers, 27.9 percent by mothers and 31.8 percent of them are headed by guardians. This implies that majority of the household (40 percent) are headed by males.

#### 4.3.2 Family Size

The family (household) size refers to the number of persons who make a common consumption decision and are more likely to be related either by blood or adoption and typically living under the same roof. The size of the household is directly associated with the allocation or distribution of resources within the unit. This study solicited information on the household size and analysed it to understand its moderating effects on the association of devolved funding and household welfare in Kenya. Table 4.2 indicates the results of the responses on the size of the household. The results are presented in both frequencies and percentages

**Table 4.3: Family Size**

<b>Age groups</b>	<b>Frequency</b>	<b>Percent</b>
0-3	75	24.6
4-6	80	26.2
7-10	150	49.2
<b>Total</b>	<b>305</b>	<b>100.0</b>

**Source:** Survey Data (2022)

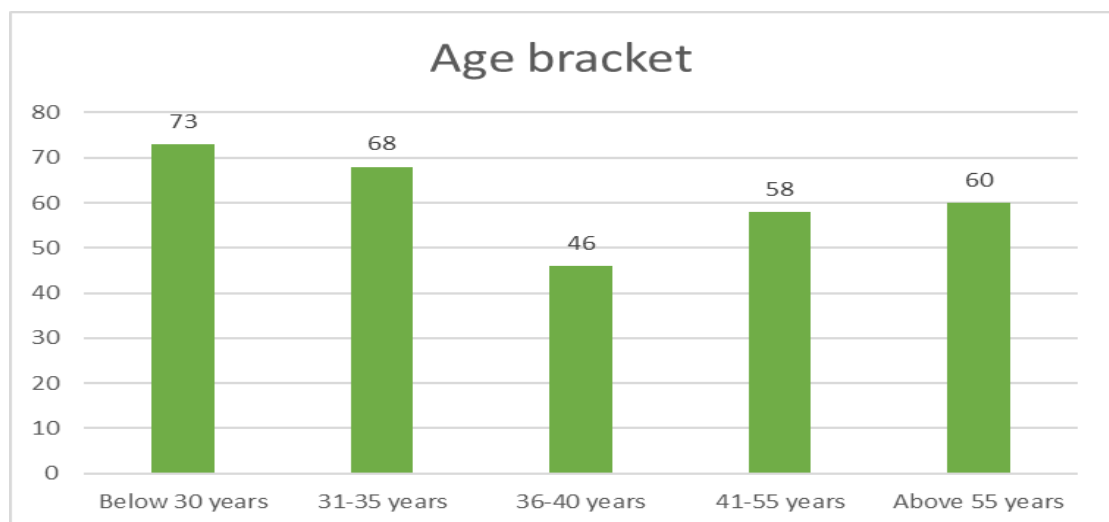
From the table above 24.6 percent of the households have up to 3 family members, 26.2 percent have between 4 and 6 family members and 49.2 percent of them have between 7 and 10 family members.

#### 4.3.3 Age Group

Understanding of the respondent's age group ranges is a very important exercise in a survey such as this. This data enabled the researcher to expand the understanding of



the target audience and allow the analysis of similarities and differences between the different age ranges. This study sort to understand the age group ranges as this was to determine how different age group ranges moderate the effects of devolved funds on household welfare in Kenya Figure 4.1 shows the results of the responses on the age groups of the households. The age groups are presented in the age bracket of between 30 years to above 50 years.



**Figure 4.1: Age Bracket**  
**Source:** Survey Data (2022).

The outcome of the analysis from Figure 4.1 indicated that 19 percent of the household head are of age between 40 and 55 years, 19.7 percent of them are above 55 years, 15.1 percent of them are between 35 and 40 years, 22.3 percent of them are between 30 and 35 years while 23.9 percent of them are below 30 years. The Results from the Table above indicates that majority of the respondents were households aged below 30 years.

#### 4.3.4 Education Qualification

The information on the level of education of the respondent was of great essence in this study. The rate and the quality of responses are directly related to the level of

education of the respondent. The respondent with better education tends to understand better the policy issues initiated by government and more likely to participate in many development programmes. This study sort to understand the education level of the respondents and how these statistics moderated the association of devolved fundings and household welfare in Kenya. In this study, the respondents were asked to indicate the highest education qualification of the household. The results are presented in Table 4.4.

**Table 4.4: Highest Education Qualification**

<b>Education Qualification</b>	<b>Frequency</b>	<b>Percent</b>
Not attended/dropout	62	20.3
Primary education	65	21.3
Secondary	52	17.0
College	55	18.0
Graduate	71	23.3
<b>Total</b>	<b>305</b>	<b>100.0</b>

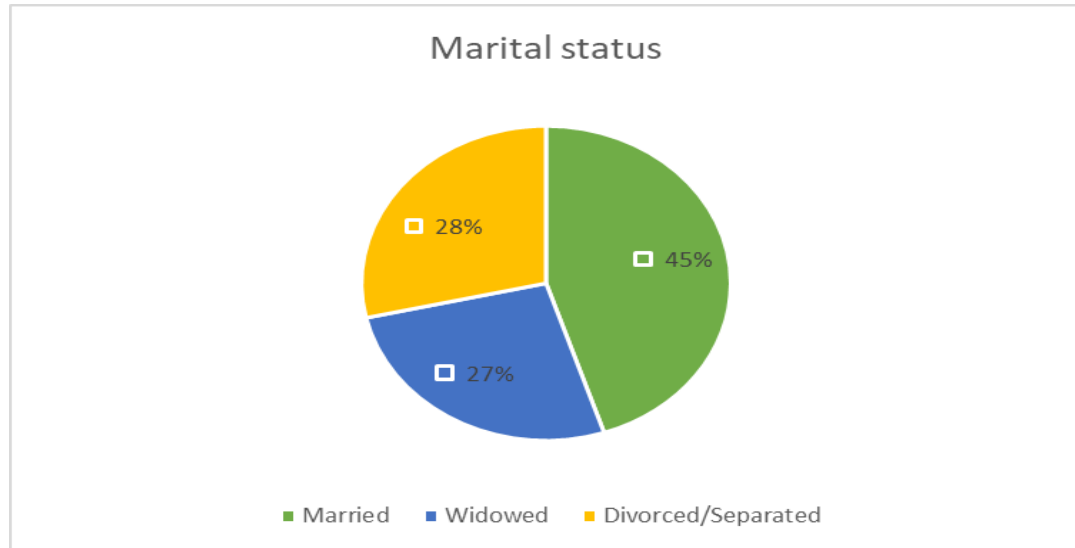
**Source:** Survey Data (2022).

The results in Table 4.3 indicated that 23.3 percent of the household heads are graduates, 18 percent of them have up to college education, 21.3 percent of them have primary education, 20.3 percent of them have not attended school/ are dropouts while 17 percent of them have up to secondary education. The Results from the Table above indicates that majority of the respondents had a college education. This corresponds with the demographic structure associated with urban areas where many educated youths have moved to the urban areas in such of employment.

#### **4.3.5 Marital Status**

The respondent's marital is very important information in a demographic survey. The status influences the participation rate in the programme and this was likely to greatly moderate the association between devolved funding and household welfare in

Kenya. The respondents were asked to indicate the marital status of the household. The results are presented in Figure 4.2.



**Figure 4.2: Marital Status**  
**Source:** Survey Data (2022).

The results in Figure 4.2 indicated that 45 percent of the household heads are married, 27 percent of them are widowed, while 28 percent of them are divorced or separated or unmarried.

#### 4.4. Devolved Social Safety Funds

The study analysed the causal relationship of the devolved social safety funds on household welfare. The quality of data is crucial for all studies and tests for their presence is of great essence. A good and quality data set must be reliable, accurate and sufficient. Data for Social Safety Fund was tested for the presence of these traits and the results are indicated below.

##### 4.4.1 Reliability Analysis for Devolved Social Safety Funds

The Cronbach's Alpha tests were used to test reliability of devolved social safety funds. Lee Cronbach (1951) formulated this coefficient (alpha) to measures the

reliability or internal consistency of the multiple questions on likert scale in the survey. The alpha coefficient indicates how closely related a set of test items are as a group. The reliability concept is expressed as a coefficient between 0.0 and 1.00. Values of Cronbach's Alpha above 0.7 indicate that the variable is reliable.

**Table 4.5: Results for Cronbach's Apha Test for Reliability of Devolved Social Safety Funds**

<b>Cronbach's Alpha</b>	<b>N of Items</b>
.760	6

**Source:** Survey Data (2022)

Table 4.5 shows that the coefficient of Cronbach Alpha was 0.760 indicating the reliability of the test variables.

#### **4.4.2 Measure of Sampling Adequacy for Devolved Social Safety Funds**

To determine the adequacy and sufficient quality of the data collected, the researcher used Kaiser Meyer-Olkin (KMO) and Barlett's Test was used to test for inferential statistics and other statistical tests like multiple regression and factor analysis. According to Field (2000), values of over 0.5 KMO indicate that the data collected was adequate and sufficient for statistical analysis.

**Table 4.6: KMO and Bartlett's Test for Devolved Social Safety Funds**

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</b>		<b>.710</b>
	Approx. Chi-Square	3201.661
Bartlett's Test of Sphericity	df	15
	Sig.	.000

**Source:** Survey Data (2022).

The Table above indicated that the result of KMO tests statistic was 0.710. This value was considered significant since it was greater than the set critical value of

significant of 0.5. Further, the Table also reveal the results of Bartlett's Test at (Chi-Square 3201.661 with 15 degrees of freedom, at  $p < 0.05$ ) as significantly high and therefore, provided a clear justification for the next step of statistical analysis.

#### 4.4.3 Factor Analysis (Communalities and factor Loadings) for Devolved Social Safety Funds

**Table 4.7: Communalities for Devolved Social Safety Funds**

<b>Household is a beneficiary of cash transfers</b>	<b>Initial</b>	<b>Extraction</b>
Hunger Safety Net Program (HSNP) in the past	1.000	.702
Elderly Person cash transfer program	1.000	.667
person with Disabilities cash transfer program	1.000	.662
Orphans and Vulnerable Children (OVC) cash transfer program	1.000	.705
Social safety cash transfer programs regularly	1.000	.746
The social safety cash transfers meet the needs of this household	1.000	.727

**Source:** Survey Data (2022).

Table 4.7 reveals that devolved Social Safety Funds had factor loading value of approximately over 0.6. This value is considered greater than the recommended factor loading value of 0.5 (Kaiser, 1951) and therefore the above findings indicate lower variability among the variables under investigation.

#### 4.4.4 Descriptive Results for Devolved Social Safety Funds

The study aimed at finding out the resultant impact of devolved social safety funds on household welfare. The elements addressed in the study were; money from Hunger Safety Net Program (HSNP), money from Elderly Person cash transfer program, money from person with Disabilities cash transfer program, money from Orphans and Vulnerable Children (OVC) cash transfer program, money from social safety cash transfer programs and social safety cash transfers.

#### **4.4.4.1 Money from Hunger Safety Net Program (HSNP)**

The research assessed the impact of the household being a beneficiary of money from Hunger Safety Net Program on household welfare. From the illustrations in Table 4.7 it was revealed that 40.3 percent of the respondents strongly agreed that their household was a beneficiary of money from Hunger Safety Net Program. 5.7 percent of the moderately agreed that their household was a beneficiary of money from Hunger Safety Net Program while majority of the respondents at 53.7 percent of the respondents did not agree that their household was a beneficiary of money from Hunger Safety Net Program.

The value of mean of the participants whose household were beneficiary of money from Hunger Safety Net Program was 2.773 and the standard deviation was 1.50 indicating that the data collected was accurate and stable with low level variability of data. These results correspond correctly with the outcome of the study done by Song and Imai (2017). In their analysis, they observed impact heterogeneity in sample data. This implied that the ultra-poor households who participated in the study benefited greatly from the program than those poor who did not. This confirms that HSNP program can significantly reduce poverty and vulnerability.

#### **4.4.4.2 Money from Elderly Person Cash Transfer Program**

The study analysed the influence of the household being a beneficiary of money from Elderly Person cash transfer program on household welfare. The analysis from table 4.7 showed that 36.4 percent of those interviewed strongly agreed that their household was a beneficiary of money from Elderly Person cash transfer program. 7.7 percent of the moderately agreed that their household was a beneficiary of

money from Elderly Person cash transfer program while majority of the respondents at 53.6 percent of the respondents did not agree that their household was a beneficiary of money from Elderly Person cash transfer program. The value of mean of the participants whose household were beneficiary of money from Elderly Person Cash Transfer Program was 2.774 and the standard deviation was 1.53 indicating that the data collected was accurate and stable with low level variability of data.

#### **4.4.4.3 Money from Person with Disabilities Cash Transfer Program**

The study analysed the influence of the household being a beneficiary of money from person with Disabilities cash transfer program on household welfare. The analysis from Table 4.7 showed that 37.4 percent of the respondents strongly agreed that their household was a beneficiary of money from person with Disabilities cash transfer program, 6.7 percent of the moderately agreed that their household was a beneficiary of money from person with Disabilities cash transfer program while majority of the respondents at 51.6 percent of the respondents did not agree that their household was a beneficiary of money person with Disabilities cash transfer program. The value of mean of the participants whose household were beneficiary of money from Person with Disabilities Cash Transfer Program was 2.777 and the standard deviation was 1.44 indicating that the data collected was accurate and stable with low level variability of data.

#### **4.4.4.4 Money from Orphans and Vulnerable Children (OVC) Cash Transfer Program**

The study analysed the influence of the household being a beneficiary of money from Orphans and Vulnerable Children (OVC) cash transfer program on household

welfare. The outcome of the analysis in Table 4.7 indicates that 37.4 percent of the respondents strongly agreed that their household was a beneficiary of money from Orphans and Vulnerable Children (OVC) cash transfer program. 4.7 percent of the moderately agreed that their household was a beneficiary of money from Orphans and Vulnerable Children (OVC) cash transfer program while majority of the respondents at 55.6 percent of the respondents did not agree that their household was a beneficiary of money from Orphans and Vulnerable Children (OVC) cash transfer program.

The value of mean of the participants whose household were beneficiary of money from Orphan and Vulnerable Children (OVC) Cash Transfer Program was 2.754 and the standard deviation was 1.54 indicating that the data collected was accurate and stable with low level variability of data. This analysis corresponds exactly with the study done by, Andrews, Hsiao & Ralston (2016) reported that household consumption rose by 60 percentage of the value of the transfer on Kenya's Orphans and Vulnerable Children (OVC) program regarding the impacts of total consumption.

#### **4.4.4.5 Money from Social Safety Cash Transfer Programs**

The study analysed the influence of the household being a beneficiary of money social safety cash transfer programs on household welfare. The outcome of analysis in Table 4.7 indicates that 40.3 percent of the respondents strongly agreed that their household was a beneficiary of money from social safety cash transfer programs. 4.7 percent of the moderately agreed that their household was a beneficiary of money from social safety cash transfer programs while majority of the respondents at 54.6



percent of the respondents did not agree that their household was a beneficiary of money from social safety cash transfer programs.

The value of mean of the participants whose household were beneficiary of money from Social Safety Cash Transfer Program was 2.774 and the standard deviation was 1.53 indicating that the data collected was accurate and stable with low level variability of data. This analysis corresponds well with the study done by Haushofer & Shapiro, 2016; Pellerano et al., 2014; Rosas & Sabarwal, 2016. Their findings revealed that Kenyans households who benefited from Give Directly Programme had diverted their extra income into purchase of durable product such plastic sheeting for roofs and walls or metals hence improving their homes. Similar observation was made in Sierra Leone's CfW Programme and the Lesotho Child Grants Program.

#### **4.4.4.6 Social Safety Cash Transfers**

The study analysed the influence of the social safety cash transfers meeting the needs of the households on household welfare. The outcome of analysis in Table 4.7 indicates that 37.7 percent of the respondents strongly agreed that social safety cash transfers met the needs of their households. 6.2 percent of the moderately agreed that social safety cash transfers met the needs of their households while majority of the respondents at 52.2 percent of the respondents did not agree that social safety cash transfers met the needs of their households.

The value of mean of the participants who agree that social safety funds met the need of their household was 2.607 and the standard deviation was 1.51 indicating that the data collected was accurate and stable with low level variability of data. The results

is similar to the findings by Haushofer & Shapiro, 2016; Pellerano et al., 2014; Rosas & Sabarwal, 2016 Their findings revealed that Kenyans households who benefited from Give Directly Programme had diverted their extra income into purchase of durable product such plastic sheeting for roofs and walls or metals hence improving their homes. Similar observation was made in Sierra Leone's CfW Programme and the Lesotho Child Grants Program.

**Table 4.8: Descriptive Results for Devolved Social Safety Funds**

Household Beneficiary of Social safety funds	Percentage Distribution						Total Score	Mean	Standard Deviation
	Strongly Disagree	Disagree	Moderately Agree	Agree	Strongly Agree	Strongly Disagree			
Hunger Safety Net Program (HSNP) in the past	26.2	27.5	5.7	21.3	17.0	852	2.773	1.50	
Elderly Person cash transfer program	27.7	25.7	7.7	17.7	20.7	846	2.774	1.53	
Person with Disabilities cash transfer program	23.7	27.7	6.7	23.3	16.1	853	2.777	1.44	
Orphans and Vulnerable Children (OVC) cash transfer program	26.7	26.7	4.7	16.7	20.7	840	2.754	1.54	
Social safety cash transfer programs regularly	26.2	26.6	4.7	20.3	20.0	846	2.774	1.53	
The social safety cash transfers	26.6	25.6	6.2	20.0	17.7	856	2.607	1.51	

**Source:** Survey Data (2022).

#### 4.4.5 Amount of Devolved Social Safety Funds received in the last 5 Years

The study also investigated the amount of Devolved Social Safety funds received in the last 5 years and the results were presented in Table 4.12.

**Table 4.9: Amount of Funds Received in the last 5 Years**

Beneficiaries of cash transfers (Ksh)	0 to 10,000	10,001 to 20,000	20,001 to 30,000	30,001 to 40,000	Above 40,000	Total
Hunger Safety Net Program (HSNP) (Percent)	13.6	23.7	7.6	23.0	27.5	95.4
Elderly funds (Percent)	20.3	17.4	7.6	17.7	32.6	95.6
Persons with disabilities (Percent)	6.6	31.1	7.6	26.2	26.2	97.7
Orphans and Vulnerable Children (OVC) (Percent)	6.6	31.1	7.6	26.2	26.2	97.7

**Source:** Survey Data (2022).

Majority of the respondents at 27.5 per cent received above Ksh 40,000 from Hunger Safety Net Program (HSNP) funds whereas the least at 7.6 per cent received (Ksh 20000-30,000). Majority of the respondents at 32.6 per cent received above Ksh 40,000 Elderly funds whereas the least at 7.6 per cent received (Ksh 20000-30,000). Majority of the respondents at 31.1 per cent received (Ksh 10000-20000) Persons with disabilities funds whereas the least at 6.6 percent received (Ksh 0-10000). Majority of the respondents at 31.1 per cent received (Ksh 10000-20000) Orphans and Vulnerable Children (OVC) funds whereas the least at 6.6 per cent received (Ksh 0-10000).

#### **4.5 Devolved Enterprise Funds**

The study analysed the causal relationship of the devolved enterprise funds on household welfare. The quality of data is crucial for all studies and tests for their presence are of great essence. A good and quality data set must be reliable, accurate and sufficient. Data for devolved enterprise funds was tested for the presence of these traits and the results are indicated below.

##### **4.5.1 Reliability Analysis for Devolved Enterprise Funds**

The Cronbach's Alpha tests were used to test reliability of devolved Enterprise Funds. Lee Cronbach (1951) formulated this coefficient (alpha) to measures the reliability or internal consistency of the multiple questions on likert scale in the survey. The alpha coefficient indicates how closely related a set of test items are as a group. The reliability concept is expressed as a coefficient between 0.0 and 1.00. Values of Cronbach's Alpha above 0.7 indicate that the variable is reliable.

**Table 4.10: Reliability Analysis for Devolved Enterprise Funds**

<b>Cronbach's Alpha</b>	<b>N of Items</b>
.760	6

**Source:** Survey Data (2021)

The value of Cronbach Alpha was 0.760 indicating that the variable constructs were reliable

#### **4.5.2 Validity (KMO and Bartlett Test) for Devolved Enterprise Funds**

To determine the adequacy and sufficient quality of the data collected, the researcher used Kaiser Meyer-Olkin (KMO) and Barlett's Test was used to test for inferential statistics and other statistical tests like multiple regression and factor analysis. According to Field (2000), values of over 0.5 KMO indicate that the data collected was adequate and sufficient for statistical analysis.

**Table 4.11: KMO and Bartlett's Test for Devolved Enterprise Funds**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.736
	Approx. Chi-Square	2724.656
Bartlett's Test of Sphericity	df	15
	Sig.	.000

**Source:** Survey Data (2022).

Table 4.11 indicated that the result of KMO tests statistic was 0.736. This value was considered significant since it was greater than the set critical value of significant of 0.5. Further, the table also reveal the results of Bartlett's Test at (Chi-Square 2724.656 with 15 degrees of freedom, at  $p < 0.05$ ) as significantly high and therefore, provided a clear justification for the next step of statistical analysis.

### 4.5.3 Factor Analysis (Communalities and factor loadings) for Devolved

#### Enterprise Funds

**Table 4.12: Communalities for Devolved Enterprise Funds**

<b>Beneficiary Household</b>	<b>Initial</b>	<b>Extraction</b>
Women Enterprise Fund	1.000	.707
Youth enterprise Fund program	1.000	.706
Uwezo funds program	1.000	.705
Assorted enterprise empowerment funds program	1.000	.703
Enterprise empowerment funds programs regularly	1.000	.734
The cash transfers from enterprise empowerment meets the needs of this household	1.000	.705

**Source:** Survey Data (2022).

The Table above reveals that devolved Enterprise Funds had factor loading value of approximately over 0.6. This value is considered greater than the recommended factor loading value of 0.5 (Kaiser, 1951) and therefore the above findings indicate lower variability among the variables under investigation.

### 4.5.4 Descriptive Results for Devolved Enterprise Funds

The study aimed at finding out the resultant impact of devolved Enterprise Funds on household welfare. The elements addressed in the study were; money from Women Enterprise Fund, money from Youth enterprise Fund program, money from Uwezo funds program, money from other assorted enterprise empowerment funds program, money from enterprise empowerment funds programs and cash transfers from enterprise empowerment.

#### 4.5.4.1 Money from Women Enterprise Fund

The research assessed the impact of the household being a beneficiary of money from Women Enterprise Fund on household welfare. The outcome of the analysis in Table 4.12 indicated that 36.4 percent of those interviewed strongly agreed that their

household was a beneficiary of money from Women Enterprise Fund. 6.2 percent of the moderately agreed that their household was a beneficiary of money from Women Enterprise Fund while majority of the respondents at 54.4 percent of the respondents did not agree that their household was a beneficiary of money from Women Enterprise Fund.

The value of mean of the participants who are beneficiary of money from women Enterprise Funds was 2.607 and the standard deviation was 1.51 indicating that the data collected was accurate and stable with low level variability of data. These results positively corresponding to a study by Opil (2019) who analyzed the influence of women enterprise fund on the welfare of most women. Most women who participated in these funds through training, access to credit and information were able to increase their income by engaging in business venture of all kinds. High income enables women to confidently participate in social political activities hence increase their voice at the grass effectively reducing gender prejudice.

#### **4.5.4.2 Money from Youth Enterprise Fund Program**

The research assessed the impact of the household being a beneficiary of money from Youth enterprise Fund program on household welfare. The outcome of the analysis in table 4.12 indicated that 37.0 percent of the respondents strongly agreed that their household was a beneficiary of money from Youth enterprise Fund program. 7.2 percent of the moderately agreed that their household was a beneficiary of money from Youth enterprise Fund program while majority of the respondents at 53.7 percent of the respondents did not agree that their household was a beneficiary of money from Youth enterprise Fund program.

The value of mean of the participants who are beneficiary of money from Youth Enterprise Fund was 2.767 and the standard deviation was 1.53 indicating that the data collected was accurate and stable with low level variability of data. These results correspond to a similar study by, Mohamud and Ndede (2017) who analysed the link between devolved Youth Funds and the welfare of the youth in Kisii County. The study revealed that youth who participated in business training observed improved business performance hence their welfare in the County.

#### **4.5.4.3 Money from Uwezo Funds Program**

The research assessed the impact of the household being a beneficiary of money from Uwezo funds program on household welfare. The outcome of the analysis in Table 4.12 indicated that 36.3 percent of the respondents strongly agreed that their household was a beneficiary of money from Uwezo funds program. 7.2 percent of the moderately agreed that their household was a beneficiary of money from Uwezo funds program while majority of the respondents at 52.4 percent of the respondents did not agree that their household was a beneficiary of money from Uwezo funds program. The value of mean of the participants who are beneficiary of money from Uwezo Fund was 2.767 and the standard deviation was 1.47 indicating that the data collected was accurate and stable with low level variability of data.

#### **4.5.4.4 Money from other Assorted Enterprise Empowerment Funds Program**

The research assessed the impact of the household being a beneficiary of money from other assorted enterprise empowerment funds program on household welfare. The outcome of the analysis in Table 4.12 indicated that 37.0 percent of the respondents strongly agreed that their household was a beneficiary of money from

other assorted enterprise empowerment funds program. 5.7 percent of the moderately agreed that their household was a beneficiary of money from other assorted enterprise empowerment funds program while majority of the respondents at 55.1 percent of the respondents did not agree that their household was a beneficiary of money from other assorted enterprise empowerment funds program.

The value of mean of the participants who are beneficiary of money from other assorted enterprise empowerment funds program was 2.774 and the standard deviation was 1.51 indicating that the data collected was accurate and stable with low level variability of data. On a similar note, Kamau (2014) provided a confirmation that enterprise empowerment funds are instrumental improving the welfare of the economy.

#### **4.5.4.5 Money from Enterprise Empowerment Funds Programs**

The research assessed the impact of the household receiving money from enterprise empowerment funds programs on household welfare. The outcome of the analysis in Table 4.12 indicated that 41.3 percent of the respondents strongly agreed that their household received money from enterprise empowerment funds programs regularly. 4.3 percent of the moderately agreed that their household received money from enterprise empowerment funds programs regularly while majority of the respondents at 54.4 percent of the respondents did not agree that their household received money from enterprise empowerment funds programs regularly. The value of mean of the participants who are received money from Youth Enterprise Fund was 2.616 and the standard deviation was 1.53 indicating that the data collected was accurate and stable with low level variability of data.



#### 4.5.4.6 Cash Transfers from Enterprise Empowerment

The research assessed the impact of cash transfers from enterprise empowerment meeting the needs of their household welfare. The outcome of analysis in table 4.12 indicated that 40.3 percent of the respondents strongly agreed that cash transfers from enterprise empowerment fund met the needs of their household. 6.5 percent of the moderately agreed that cash transfers from enterprise empowerment met the needs of their household while majority of the respondents at 51.2 percent of the respondents did not agree that cash transfers from enterprise empowerment met the needs of their household.

The value of mean of the participants who agree that enterprise empowerment fund met the needs of their household was 2.662 and the standard deviation was 1.51 indicating that the data collected was accurate and stable with low level variability of data. On a similar note, Kamau (2014) provided a confirmation that enterprise empowerment funds are instrumental in alleviating the welfare of the economy.

**Table 4.13: Descriptive results for Devolved Enterprise Funds**

Household beneficiary of	Percentage Distribution					Total Score	Mean	Standard Deviation
	Strongly Disagree	Disagree	Moderately Agree	Agree	Strongly Agree			
Women Enterprise Fund	25.2	27.2	6.2	16.4	21.0	856	2.607	1.51
Youth enterprise Fund program	27.5	26.2	7.2	16.0	21.0	850	2.767	1.53
Uwezo funds program	25.2	27.2	7.2	20.3	16.0	850	2.767	1.47
Other assorted enterprise empowerment funds program	26.2	26.7	5.7	17.3	17.7	846	2.774	1.51
Enterprise empowerment funds programs regularly	26.2	26.2	4.3	20.3	21.0	859	2.616	1.53
Enterprise empowerment meets the needs of this household	23.3	27.7	6.5	16.0	22.3	879	2.662	1.51

**Source:** Survey Data (2022).

#### 4.5.5 Amount of Devolved Enterprise Funds Received in the Last 5 Years

The study also investigated the amount of Devolved Enterprise funds received in the last 5 years and the results were presented in Table 4.14.

**Table 4.14: Amount of Funds received in the Last 5 Years**

Empowerment Fund(ksh)	0 – 10,000	10,001 – 20,000	20,001 - 30,000	30,001 - Above 40,000	40,000
Women Enterprise Fund (Percent)	45.6	41.6	2.6	5.7	4.3
Youth Enterprise Fund (Percent)	41.3	44.6	3.7	4.6	5.6
Uwezo Funds (Percent)	42.3	37.4	11.6	4.6	3.7

**Source:** Survey Data (2022).

Majority of the respondents at 45.6 per cent received (Ksh 0-1000) Women Enterprise funds whereas the least at 2.6 per cent received (Ksh 20000-30,000). Majority of the respondents at 44.6 per cent received (Ksh 10000-20000) Youth Enterprise funds whereas the least at 3.7 per cent received (Ksh 20000-30,000). Majority of the respondents at 42.3percent received (Ksh 0-1000) Uwezo funds whereas the least at 3.7 per cent received above Ksh 40000.

#### 4.6 Devolved Health Financing

The study analysed the causal relationship of the devolved health financing on household welfare. The quality of data is crucial for all studies and tests for their presence is of great essence. A good and quality data set must be reliable, accurate and sufficient. Data for devolved health financing was tested for the presence of these traits and the results is indicated below.

##### 4.6.1 Reliability Analysis for Devolved Health Financing

The Cronbach's Alpha tests were used to test reliability of devolved Enterprise Funds. Lee Cronbach's (1951) formulated this coefficient (alpha) to measures the

reliability or internal consistency of the multiple questions on likert scale in the survey. The alpha coefficient indicates how closely related a set of test items are as a group. The reliability concept is expressed as a coefficient between 0.0 and 1.00. Values of Cronbach's Alpha above 0.7 indicate that variables are reliable.

**Table 4.15: Reliability Analysis for Devolved Health Financing**

Cronbach's Alpha	N of Items
0.777	6

**Source:** Survey Data (2022).

The value of Cronbach Alpha was 0.777 indicating that the variable constructs were reliable.

#### 4.6.2 Validity (KMO and Bartlett Test) for Devolved Health Financing

To determine the adequacy and sufficient quality of the data collected, the researcher used Kaiser Meyer-Olkin (KMO) and Bartlett's Test was used to test for inferential statistics and other statistical tests like multiple regression and factor analysis. According to Field (2000), values of over 0.5 KMO indicate that the data collected was adequate and sufficient for statistical analysis.

**Table 4.16: KMO and Bartlett's Test for Devolved Health Financing**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.710
	Approx. Chi-Square	3047.226
Bartlett's Test of Sphericity	Df	15
	Sig.	.000

**Source:** Survey Data (2022)

The Table above indicated that the result of KMO tests statistic was 0.710. This value was considered significant since it was greater than the set critical value of

significant of 0.5. Further, the Table also reveal the results of Bartlett’s Test at (Chi-Square 3047.226 with 15 degrees of freedom, at  $p < 0.05$ ) as significantly high and therefore, provided a clear justification for the next step of statistical analysis.

#### **4.6.3 Factor Analysis (Communalities and factor loadings) for Devolved Health Financing**

Table 4.17 reveals that devolved health financing had factor loading value of approximately over 0.6. This value is considered greater than the recommended factor loading value of 0.5 (Kaiser, 1951) and therefore the above findings indicate lower variability among the variables under investigation.

**Table 4.17: Communalities for Devolved Health Financing**

<b>Household is a beneficiary of health funds</b>	<b>Initial</b>	<b>Extraction</b>
Devolved National Hospital Insurance Fund (NHIF)	1.000	.705
Devolved County Health Fund program	1.000	.676
Devolved Linda Mama free health program	1.000	.675
Devolved universal health care (UHC) program	1.000	.664
This household receives health care financing from devolved sources regularly	1.000	.740
The health care financing from devolved sources meets the needs of this household	1.000	.707

**Source:** Survey Data (2022).

#### **4.6.4 Descriptive Results for Devolved Health Financing**

The main purpose of this study was to examine the link between devolved healths’ financing on household welfare. The elements addressed in the study were; devolved National Hospital Insurance Fund (NHIF), devolved County Health Fund program, devolved Linda Mama free health program, devolved universal health care (UHC) program, devolved sources and devolved sources meeting the needs of the household.

#### **4.6.4.1 Devolved National Hospital Insurance Fund**

The research assessed the impact of the household being a beneficiary of devolved National Hospital Insurance Fund (NHIF) on household welfare. The outcome of the analysis in the Table 4.17 indicated that 40.3 percent of the respondents strongly agreed that their household was a beneficiary of devolved National Hospital Insurance Fund (NHIF). 5.7 percent of the moderately agreed that their household was a beneficiary of devolved National Hospital Insurance Fund (NHIF) while majority of the respondents at 53.6 percent of the respondents did not agree that their household was a beneficiary of devolved National Hospital Insurance Fund (NHIF).

The value of mean of the participants whose household is a beneficiary of devolved National Hospital Insurance Fund was 2.764 and the standard deviation was 1.46 indicating that the data collected was accurate and stable with low level variability of data. The results is similar to the findings by Kabajulizi, et al., (2017) who recommended that the government should expand health care facilities, increase its budgetary allocation to the health care service. This will improve the health of population and allow them to participate in economic activities hence reducing poverty.

#### **4.6.4.2 Devolved County Health Fund Program**

The research assessed the impact of the household being a beneficiary of devolved County Health Fund program on household welfare. The outcome of the analysis in table 4.17 indicated that 36.4 percent of the respondents strongly agreed that their household was a beneficiary of devolved County Health Fund program. 7.7 percent

of the moderately agreed that their household was a beneficiary of devolved County Health Fund program while majority of the respondents at 53.6 percent of the respondents did not agree that their household was a beneficiary of devolved County Health Fund program. The value of mean of the participants whose household is a beneficiary of devolved National Hospital Insurance Fund was 2.777 and the standard deviation was 1.47 indicating that the data collected was accurate and stable with low level variability of data.

#### **4.6.4.3 Devolved Linda Mama free Health Program**

The research assessed the impact of the household being a beneficiary of devolved Linda Mama free health program on household welfare. The outcome of the analysis in table 4.17 indicated that 37.4 percent of the respondents strongly agreed that their household was a beneficiary of devolved Linda Mama free health program. 10.6 percent of the moderately agreed that their household was a beneficiary of devolved Linda Mama free health program while majority of the respondents at 51.6 percent of the respondents did not agree that their household was a beneficiary of devolved Linda Mama free health program.

The value of mean of the participants whose household is a beneficiary of devolved Linda Mama free health program was 2.761 and the standard deviation was 1.46 indicating that the data collected was accurate and stable with low level variability of data. On a similar note, Bokhari, et al., (2007) provided a confirmation that increasing/availing devolved health financing to the people helps them in accessing health care services which is a positive replica of good and healthy working capital.

#### **4.6.4.4 Devolved Universal Health Care Program**

The research assessed the impact of the household being a beneficiary of devolved universal health care (UHC) program on household welfare. The outcome of the analysis in table 4.17 indicated that 40.3 percent of the respondents strongly agreed that their household was a beneficiary of devolved universal health care (UHC) program. 3.7 percent of the moderately agreed that their household was a beneficiary of devolved universal health care (UHC) program while majority of the respondents at 55.7 percent of the respondents did not agree that their household was a beneficiary of devolved universal health care (UHC) program.

The value of mean of the participants whose household is a beneficiary of devolved Universal Health Care (UHC) was 2.620 and the standard deviation was 1.54 indicating that the data collected was accurate and stable with low level variability of data. The results is similar to the findings by Kabajulizi et al., (2017) who recommended that the government should increase health budget share, expand healthcare facilities to improve the health of translating to improved welfare and reduction of poverty.

#### **4.6.4.5 Devolved Sources**

The research assessed the impact of the household being a beneficiary of devolved sources on household welfare. The outcome of the analysis in table 4.17 indicated that 37.4 percent of the respondents strongly agreed that their household received health care financing from devolved sources regularly. 7.7 percent of the moderately agreed that their household received health care financing from devolved sources regularly while majority of the respondents at 54.7 percent of the respondents did not

agree that their household receive health care financing from devolved sources regularly. The value of mean of the participants whose household received health care financing from devolved source regularly was 2.736 and the standard deviation was 1.50 indicating that the data collected was accurate and stable with low level variability of data.

#### **4.6.4.6 Devolved Sources Meeting the Needs of the Household**

The research assessed the impact of the household being a beneficiary of devolved sources and meeting the needs of the household-on-household welfare. The outcome of the analysis in table 4.17 indicated that 35.4 percent of the respondents strongly agreed that their household was a beneficiary of devolved sources and met the needs of their household. 11.6 percent of the moderately agreed that their household was a beneficiary of devolved sources and met the needs of their household while majority of the respondents at 52.6 percent of the respondents did not agree that their household was a beneficiary of devolved sources and met the needs of their household.

The value of mean of the participants whose household is a beneficiary of devolved sources and met the needs of the household was 2.774 and the standard deviation was 1.46 indicating that the data collected was accurate and stable with low level variability of data. On a similar note, Bokhari et al., (2007) provided a confirmation that increasing/availing devolved health financing to the people helps them in accessing health care services which is a positive replica of good and healthy working capital.



**Table 4.18: Descriptive Results for Devolved Health Financing**

Percentage Distribution								
Household is a beneficiary of enterprise funds	Strongly Disagree	Disagree	Moderately Agree	Agree	Strongly Agree	Total Score	Mean	Standard Deviation
Women Enterprise Fund	25.2	27.2	6.2	16.4	21.0	856	2.607	1.51
Youth enterprise Fund program	27.5	26.2	7.2	16.0	21.0	850	2.767	1.53
Uwezo funds program	25.2	27.2	7.2	20.3	16.0	850	2.767	1.47
Other assorted enterprise empowerment funds program	26.2	26.7	5.7	17.3	17.7	846	2.774	1.51
Enterprise empowerment funds programs regularly	26.2	26.2	4.3	20.3	21.0	859	2.616	1.53
The cash transfers from enterprise empowerment meets the needs of this household	23.3	27.7	6.5	16.0	22.3	879	2.662	1.51

**Source:** Survey Data (2022).

#### 4.6.5 Amount of Devolved Health Financing Funds received in the last 5 Years

The study also investigated the amount of Devolved Health Financing funds received in the last 5 years and the results were presented in Table 4.18.

**Table 4.19: Amount of Funds Received in the last 5 Years**

Health financing funds (%)	Ksh 0 – 10,000	Ksh 10,001 – 20,000	Ksh 20,001 – 30,000	Ksh 30,001 – 40,000	Above Ksh 40,000
Devolved National Hospital Insurance Fund (NHIF)	40.3	54.1	3.0	1.3	1.3
Devolved County Health Fund program	46.5	42.3	6.6	1.3	1.3
Devolved Linda Mama Free healthcare program	42.0	43.0	13.6	1.3	0.0

**Source:** Survey Data (2022)

Majority of the respondents at 54.1 percent received (Ksh 10000-20000) Devolved National Hospital Insurance Fund (NHIF) whereas the least at 1.3 percent received (Ksh 30000-40,000) and above Ksh 40,000. Majority of the respondents at 46.5 percent received (Ksh 0-10000) Devolved County Health Fund program whereas the least at 1.3 percent received (Ksh 30000-40,000) and above Ksh 40,000. Majority of the respondents at 43.0 percent received (Ksh 10000-20000) Devolved Linda Mama

Free healthcare program funds whereas the least at 0.0 percent received above Ksh 40000.

#### **4.7 Devolved Education Funds**

The study analysed the causal relationship of the devolved education financing on household welfare. The quality of data is crucial for all studies and tests for their presence are of great essence. A good and quality data set must be reliable, accurate and sufficient. Data for devolved education financing was tested for the presence of these traits and the results are indicated below.

##### **4.7.1 Reliability Analysis for Devolved Education Funds**

The main objective of this study was to analyse the influence of devolved education funding policies on household welfare.5.1.1 Reliability Analysis for Household welfare.The Cronbach's Alpha tests were used to test reliability of devolved education funding on household welfare. Lee Cronbach (1951) formulated this coefficient (alpha) to measures the reliability or internal consistency of the multiple questions on likert scale in the survey. The alpha coefficient indicates how closely related a set of test items are as a group. The reliability concept is expressed as a coefficient between 0.0 and 1.00. Values of Cronbach's Alpha above 0.7 indicate that the variable is reliable.

**Table 4.20: Reliability Analysis for Devolved Education Funds**

<b>Cronbach's Alpha</b>	<b>N of Items</b>
.777	6

**Source:** Survey Data (2022).

The value of Cronbach Alpha was 0.777 indicating that the variable constructs were reliable.

#### 4.7.2 Validity (KMO and Bartlett Test) for Devolved Education Funds

##### Measure of Sampling Adequacy for Devolved Education Funds

To determine the adequacy and sufficient quality of the data collected, the researcher used Kaiser Meyer-Olkin (KMO) and Bartlett's Test was used to test for inferential statistics and other statistical tests like multiple regression and factor analysis. According to Field (2000), values of over 0.5 KMO indicate that the data collected was adequate and sufficient for statistical analysis.

**Table 4.21: KMO and Bartlett's Test for Devolved Health Financing**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.712
	Approx. Chi-Square	2741.047
Bartlett's Test of Sphericity	Df	15
	Sig.	.000

**Source:** Survey Data (2022).

The Table above indicated that the result of KMO tests statistic was 0.712. This value was considered significant since it was greater than the set critical value of significant of 0.5. Further, the Table also reveal the results of Bartlett's Test at (Chi-Square 2741.047 with 15 degrees of freedom, at  $p < 0.05$ ) as significantly high and therefore, provided a clear justification for the next step of statistical analysis.

#### 4.7.3 Factor Analysis (Communalities and factor loadings) for Devolved Education Funds

**Table 4.22: Communalities for Devolved Education Funds**

Household beneficiaries of education funds	Initial	Extraction
Constituency Development Funds (CDF)	1.000	.673
Higher Education Loans Board (HELB)	1.000	.676
County Government	1.000	.677
Other assorted devolved bursary programs	1.000	.657
Bursary money from devolved sources regularly	1.000	.736
The bursary money from enterprise empowerment meets the needs of this household	1.000	.717

**Source:** Survey Data (2022).

Table 4.22 reveals that household welfare had factor loading value of approximately over 0.66. This value is considered greater than the recommended factor loading value of 0.5 (Kaiser, 1951) and therefore the above findings indicate lower variability among the variables under investigation.

#### **4.7.4 Descriptive Results for Devolved Education Funds**

The study aimed at investigating the influence of devolved education funding on household welfare and poverty reduction. The elements addressed in the study were; bursary money from Constituency Development Funds (CDF), bursary money from Higher Education Loans Board (HELB), bursary money from County Government, other assorted devolved bursary programs, money from devolved sources and bursary money from enterprise empowerment meeting the needs of the household.

##### **4.7.4.1 Bursary Money from Constituency Development Funds (CDF)**

The research assessed the impact of the household being a beneficiary of bursary money from Constituency Development Funds (CDF) on household welfare. The outcome of the analysis in table 4.22 indicates that 37.3 percent of the respondents strongly agreed that their household was a beneficiary of bursary money from Constituency Development Funds (CDF). 6.7 percent of the moderately agreed that their household was a beneficiary of bursary money from Constituency Development Funds (CDF) while majority of the respondents at 53.6 percent of the respondents did not agree that their household was a beneficiary of bursary money from Constituency Development Funds (CDF). The value of mean of the participants whose household is a beneficiary of bursary fund from Constituency Development Funds CDF) was 2.600 and the standard deviation was 1.51 indicating that the data

collected was accurate and stable with low level variability of data. These results correspond positively to the findings by, Adan and Orodho (2014) who observed that CDF policy was an important policy instrument that can be applied to empower citizen at grass root by expanding the fund flow to support projects such as building schools, which could have direct and indirect impact on the welfare of the people.

#### **4.7.4.2 Bursary Money from Higher Education Loans Board (HELB)**

The research assessed the impact of the household being a beneficiary of bursary money from Higher Education Loans Board (HELB) on household welfare. The outcome of analysis in table 4.22 indicates that 37.4 percent of the respondents strongly agreed that their household was a beneficiary of bursary money from Higher Education Loans Board (HELB). 6.7 percent of the moderately agreed that their household was a beneficiary of bursary money from Higher Education Loans Board (HELB) while majority of the respondents at 53.6 percent of the respondents did not agree that their household was a beneficiary of bursary money from Higher Education Loans Board (HELB). The value of mean of the participants whose household is a beneficiary of bursary funds from Higher Education Loan Board (HELB) was 2.760 and the standard deviation was 1.52 indicating that the data collected was accurate and stable with low level variability of data.

#### **4.7.4.3 Bursary Money from County Government**

The research assessed the impact of the household being a beneficiary of bursary money from County Government on household welfare. The outcome of analysis in table 4.22 indicates that 36.4 percent of the sample strongly agreed that their household was a beneficiary of bursary money from County Government. 7.6

percent of the moderately agreed that their household was a beneficiary of bursary money from County Government while majority of the respondents at 51.6 percent of the respondents did not agree that their household was a beneficiary of bursary money from County Government. The value of mean of the participants whose household is a beneficiary of bursary money from County Government was 2.600 and the standard deviation was 1.50 indicating that the data collected was accurate and stable with low level variability of data. On a similar note, Okeyo (2015) noted that education funds enable the citizens' access education which in turn confirms the strengthening of the human capital.

#### **4.7.4.4 Other Assorted Devolved Bursary Programs**

The research assessed the impact of the household being a beneficiary of other assorted devolved bursary programs on household welfare. The outcome of analysis in table 4.22 indicates that 36.4 percent of the sample of the respondents strongly agreed that their household was a beneficiary of other assorted devolved bursary programs. 7.7 percent of the moderately agreed that their household was a beneficiary of other assorted devolved bursary programs while majority of the respondents at 55.7 percent of the respondents failed to agree that their household was a beneficiary of other assorted devolved bursary programs.

The value of mean of the participants whose household is a beneficiary of other assorted devolved bursary programs was 2.706 and the standard deviation was 1.46 indicating that the data collected was accurate and stable with low level variability of data. The results correspond to the findings by Muyanga, Olwande, Mueni and Wambugu (2010) as well as Owuor (2016) who observed a rise in the rate of

retention and enrolment of children especially from poor households due to increase in free primary education funds and this went on to improve educational outcomes in Kenya.

#### **4.7.4.5 Money from Devolved Sources**

The research assessed the impact of the household receiving money from devolved sources on household welfare. The outcome of the analysis in table 4.22 indicates that 41.3 percent of the sample of the respondents strongly agreed that their household received bursary money from devolved sources regularly. 3.7 percent of the moderately agreed that their household received bursary money from devolved sources regularly while majority of the respondents at 54.7 percent of the respondents did not agree that their household received bursary money from devolved sources regularly. The value of mean of the participants whose household received bursary money from devolved sources regularly was 2.636 and the standard deviation was 1.54 indicating that the data collected was accurate and stable with low level variability of data.

#### **4.7.4.6 Bursary Money from Enterprise Empowerment Meeting the Needs of the Household**

The research assessed the impact of the household receiving bursary money from enterprise empowerment and meeting the needs of the household welfare. The outcome of analysis in table 4.22 indicates that 37.6 percent of the sample agreed strongly that their household received bursary money from enterprise empowerment which met the needs of their household. 6.7 percent of the moderately agreed that their household received bursary money from enterprise empowerment which met

the needs of their household while 51.5 percent of the respondents failed to agree that members of their household received bursary money from enterprise empowerment which met the needs of their household.

**Table 4.23: Descriptive Results for Devolved Education Funds**

Education Funds	Percentage		Distribution			Total Score	Mean	Std Dev
	Strongly Disagree	Disagree	Moderately Agree	Agree	Strongly Agree			
This household is a beneficiary of bursary money from Constituency Development Funds (CDF)	25.6	26.2	6.7	17.3	20.0	854	2.600	1.51
This household is a beneficiary of bursary money from Higher Education Loans Board (HELB)	27.2	26.6	6.7	17.7	17.7	848	2.760	1.52
This household is a beneficiary of bursary money from County Government	26.2	25.6	7.6	16.7	17.7	854	2.600	1.50
This household is a beneficiary of other assorted devolved bursary programs	27.5	26.2	7.7	16.7	17.7	826	2.706	1.46
This household receives bursary money from devolved sources regularly	25.2	27.5	3.7	17.0	22.3	865	2.636	1.54
The bursary money from enterprise empowerment meets the needs of this household	23.6	27.7	6.7	16.0	21.6	873	2.662	1.50

**Source:** Survey Data (2022)

The value of mean of the participants whose household received bursary money from enterprise empowerment fund which met the needs of their household was 2.622 and the standard deviation was 1.50 indicating that the data collected was accurate and stable with low level variability of data. On a similar note, Okeyo (2015) noted that education funds enable the citizens' access education which in turn confirms the strengthening of the human capital. Amount of Devolved Education funds received in the last 5 years.



Table 4.24 indicate the results of the study that investigated the influence of the amount of devolved fund received on the household welfare in the last 5 years.

**Table 4.24: Amount of Funds Received in the last 5 Years**

<b>Education financing (%)</b>	<b>Ksh 0–10,000</b>	<b>Ksh10,001 – 20,000</b>	<b>Ksh20,001 - 30,000</b>	<b>Ksh 30,001 - 40,000</b>	<b>Above Ksh 40,000</b>
Bursary Money from Constituency Development Fund (CDF) (Percent)	66.2	26.7	4.7	0.0	0.0
Bursary Money from Higher Education Loans Board (HELB) (Percent)	43.6	50.2	6.2	0.0	0.0
Bursary Money from County Government (Percent)	37.4	50.2	12.5	0.0	0.0

**Source:** Survey Data (2022).

Majority of the respondents at 66.2 per cent received (Ksh 0-1000) Bursary Money from Constituency Development Fund (CDF) whereas the least at 0.0 per cent received (Ksh 30000-40,000) and above Ksh 40,000. Majority of the respondents at 50.2 per cent received (Ksh 10000-20000) Bursary Money from Higher Education Loans Board (HELB) whereas the least at 0.0 per cent received (Ksh 30000-40,000) and above Ksh 40,000. Majority of the respondents at 50.2 per cent received (Ksh 0-1000) Bursary Money from County Government whereas the least at 0.0 per cent received (Ksh 30000-40,000) and above Ksh 40,000.

## **CHAPTER FIVE**

### **INFLUENCE OF DEVOLVED FUNDING POLICIES ON HOUSEHOLD WELFARE**

#### **5.1 Chapter Overview**

This chapter covers the summary of findings on the influence of Devolved funding policies on the household welfare. The focus was on the analysis of household welfare and how it responds to application of various devolved policies. The analysis focused on the influence of Social Safety net Funds, Enterprise empowerment funds, and Education and Health Financing and their influence on household consumption expenditure, food security and education and health outcomes.

Correlation and regression analysis were carried to determine the degree of relationships and dependency. Diagnostic test were done to determine the reliability and sufficiency of the data. In addition, analysis was done to determine the degree of moderation of household characteristic on the relationship between devolved funding and household welfare. Hypothesis tests were conducted to determine the significance of the relationships between the devolved funding policies and household welfare. The findings provided the basis for making conclusions and policy recommendation

#### **5.2 Household Welfare**

The study analysed the effects of the devolved funding policies on household welfare. The quality of data is crucial for all studies and tests for their presence is of great essence. A good and quality data set must be reliable, accurate and sufficient. Data for household welfare was tested for the presence of these traits and the results

is indicated below.

### 5.2.1 Reliability Analysis for Household welfare

To evaluate the quality/reliability of household welfare items, the study used Cronbach's Alpha tests. This instrument test all items on likert scale in a survey to ensure they are reliable and consistently and measure the same construct. The tool was introduced by Lee Cronbach (1951) who recommended a coefficient (alpha) of 0.7 and above as the best measure of reliability. The reliability concept is expressed as a coefficient of between 0.0 and 1.00.

**Table 5.1: Reliability Analysis for Household Welfare**

<b>Cronbach's Alpha</b>	<b>N of Items</b>
.771	20

**Source:** Survey Data (2022)

The value of Cronbach Alpha was 0.771 indicating that the variable constructs were reliable

### 5.2.2 Measure of Sampling Adequacy for Household Welfare

**Table 5.2: KMO and Bartlett's Test for Household Welfare**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.775
	Approx. Chi-Square	11627.417
Bartlett's Test of Sphericity	Df	170
	Sig.	.000

**Source:** Survey Data (2022)

To determine the adequacy and sufficient quality of the data collected, the researcher used Kaiser Meyer-Olkin (KMO) and Barlett's Test was used to test for inferential statistics and other statistical tests like multiple regression and factor analysis.

According to Field (2000), values of over 0.5 KMO indicate that the data collected was adequate and sufficient for statistical analysis. Table 5.2 indicated that the result of KMO tests statistic was 0.775. This value was considered significant since it was greater than the set critical value of significant of 0.5. Further, the table also reveal the results of Bartlett's Test at (Chi-Square 11627.417 with 170 degrees of freedom, at  $p < 0.05$ ) as significantly high and therefore, provided a clear justification for the next step of statistical analysis.

**Table 5.3: Communalities for Household Welfare**

<b>Food Security</b>	<b>Initial</b>	<b>Extraction</b>
This household takes 3 or more meals in a day	1.000	.661
This household consumes food which is safe, nutritious and balance diet	1.000	.653
This household has physical access to food	1.000	.636
This household has access to affordable food	1.000	.661
This household access to food is not limited by social challenges	1.000	.663
This household has physical access to health care	1.000	.654
This household has access to affordable health care	1.000	.661
This household has access to quality health care	1.000	.626
This household has access to health care is not limited by social and religious norms	1.000	.634
This household regularly seeks health when need arises	1.000	.670
This household has physical access to education	1.000	.665
This household has access to affordable education	1.000	.662
This household has access to quality education	1.000	.634
This household has access to education is not limited by social and religious norms	1.000	.634
Majority of household members have attained basic education	1.000	.662
This household has a daily expenditure of more than 1.7 dollars	1.000	.664
This household is able to cater for its basic and non-basic needs.	1.000	.654
This household has ability to cope with current cost of living	1.000	.632
This household has assets that can cushion it against harsh economic times	1.000	.656
Majority of household members can afford basic needs	1.000	.664

Extraction Method: Principal Component Analysis.

**Source:** Survey Data (2022).

The Table above reveals that household welfare had factor loading value of approximately over 0.63. This value is considered greater than the recommended factor loading value of 0.5 (Kaiser, 1951) and therefore the above findings indicate lower variability among the variables under investigation.

### 5.1.3 Descriptive Results for Household Welfare

The research evaluated how household welfare was achieved. The factors addressed included; food security, health status, education status and poverty status. The rates of the measurement were analysed on the basis of standard practice of measurements.

**Table 5.4: Descriptive Results for Food Security**

Response rate (%)	Percentage Distrib					Mean	Standard Deviation
	Strongly Disagree	Disagree	Moderately Agree	Agree	Strongly Agree		
This household takes 3 or more meals in a day	26.2	27.5	5.7	21.3	17.0	2.773	1.50
This household consumes food which is safe, nutritious and balance diet	27.7	25.7	7.7	17.7	20.7	2.774	1.53
This household has physical access to food	23.7	27.7	6.7	23.3	16.1	2.777	1.44
This household has access to affordable food	26.7	26.7	4.7	16.7	20.7	2.754	1.54
This household access to food is not limited by social challenges	26.2	26.6	4.7	20.3	20.0	2.774	1.53

**Source:** Survey Data (2022).

While evaluating achievement of household welfare in food security, majority of the respondents at 53.7 percent strongly disagreed that their household took 3 or more meals in a day. 40.3 percent agreed to the statement. The value of mean of the participants who took 3 or more meals in a day was 2.773 and the standard deviation

was 1.50 indicating that the data collected was accurate and stable with low level variability. 53.6 percent of the respondents strongly disagreed that their household consumes food which is safe, nutritious and balance diet. 36.4 percent agreed to the statement. The value of mean of the participants who consumes food which is safe, nutritious and balance was 2.774 and the standard deviation was 1.53 indicating that the data collected was accurate and stable with low level variability of data.

Majority of the respondents at 51.6 percent strongly disagreed that their household has physical access to food. 37.4 percent agreed to the statement. The value of mean of the participants who has physical access to food was 2.777 and the standard deviation was 1.44 indicating that the data collected was accurate and stable with low level variability of data. 55.6 percent of the respondents strongly disagreed that their household has access to affordable food. 37.4 percent agreed to the statement. The value of mean of the participants who have access to affordable food was 2.754 and the standard deviation was 1.54 indicating that the data collected was accurate and stable with low level variability of data.

Majority of the respondents at 54.6 percent strongly disagreed that their household access to food is not limited by social challenges. 40.3 percent agreed to the statement. The value of mean of the participants who have access to food is not limited by social challenges was 2.774 and the standard deviation was 1.53 indicating that the data collected was accurate and stable with low level variability of data. On a similar note, Makori et al., (2013) who concluded that devolved funds are intended to give the citizens at grass root levels the opportunity to settle on educated consumption choices that are equipped to augmenting their welfare.

**Table 5.5: Descriptive Results for Health Status**

Response rate (%)	Percentage Distribution						Mean	Standard Deviation
	Strongly Disagree	Disagree	Moderately Agree	Agree	Strongly Agree			
This household has physical access to health care	26.6	27.2	7.7	17.7	16.7	2.767	1.47	
This household has access to affordable health care	31.1	22.6	6.7	16.0	17.3	2.716	1.53	
This household has access to quality health care	25.7	25.7	10.6	20.0	17.4	2.770	1.46	
This household has access to health care and is not limited by social and religious norms	25.2	30.5	6.7	17.0	16.4	2.746	1.46	
This household regularly seeks health when need arises	26.6	26.2	3.7	16.0	23.3	2.633	1.56	

**Source:** Survey Data (2022)

While evaluating achievement of household welfare in health status, majority of the respondents at 53.6 percent strongly disagreed that their household has physical access to health care. 36.4 percent agreed to the statement. The value of mean of the participants who have access to health care was 2.767 and the standard deviation was 1.47 indicating that the data collected was accurate and stable with low level variability of data. 53.7 percent of the respondents strongly disagreed that their household has access to affordable health care. 37.3 percent agreed to the statement. The value mean of the responses was 2.716 indicating that the data collected was accurate and stable. The standard deviation was 1.53 indicating a low level of variability of data hence accurate and stable.

Majority of the respondents at 51.6 percent strongly disagreed that their household has access to quality health care. 37.4 percent agreed to the statement. The value of mean of the participants who have access to quality health care was 2.770 and the standard deviation was 1.46 indicating that the data collected was accurate and stable

with low level variability of data. 55.7 percent of the respondents strongly disagreed that their household has access to health care and is not limited by social and religious norms. 37.4 percent agreed to the statement. The value of mean of the participants who have access to health care and are not limited by social and religious norms was 2.746.

**Table 5.6: Descriptive Results for Education Status**

Response rate(%)	Percentage					Mean	Standard Deviation
	Strongly Disagree	Disagree	Moderately Agree	Agree	Strongly Agree		
This household has physical access to education	25.6	26.2	6.7	17.3	20.0	2.600	1.51
This household has access to affordable education	27.2	26.6	6.7	17.7	17.7	2.760	1.52
This household has access to quality education	26.2	25.6	7.6	16.7	17.7	2.600	1.50
This household has access to education and is not limited by social and religious norms	27.5	26.2	7.7	16.7	17.7	2.706	1.46
Majority of household members have attained basic education	25.2	27.5	3.7	17.0	22.3	2.636	1.54

**Source:** Survey Data (2022)

The standard deviation was 1.46 indicating that the data collected was accurate and stable with low level variability of data. Majority of the respondents at 54.6 percent strongly disagreed that their household regularly seeks health when need arises. 41.3 percent agreed to the statement. The value of mean of the participants who regularly seeks health care when need arises was 2.633 and the standard deviation was 1.56 indicating that the data collected was accurate and stable with low level variability of data. On a similar note, Li, et al., (2015) noted that lower income households visit



the strained public health facilities and are unable to access the high-cost private healthcare system hence poor welfare.

While evaluating achievement of household welfare in education status, majority of the respondents at 53.6 percent strongly disagreed that their household has physical access to education. 37.3 agreed to the statement. The value of mean of the participants who have physical access to basic education was 2.600 and the standard deviation was 1.5 indicating that the data collected was accurate and stable with low level variability of data. 53.6 percent of the respondents strongly disagreed that their household has access to affordable education. 37.4 percent agreed to the statement. The value of mean of the participants who have access to affordable education was 2.7600 and the standard deviation was 1.51 indicating that the data collected was accurate and stable with low level variability of data. Majority of the respondents at 51.6 percent strongly disagreed that their household has access to quality education. 36.4 percent agreed to the statement.

The value of mean of the participants who have access to quality education was 2.600 and the standard deviation was 1.5 indicating that the data collected was accurate and stable with low level variability of data. 55.7 percent of the respondents strongly disagreed that their household has access to education and is not limited by social and religious norms. 36.4 percent agreed to the statement. The value of mean of the participants who have access to education and is not limited by social and religious norms was 2.706 and the standard deviation was 1.46 indicating that the data collected was accurate and stable with low level variability of data.

Majority of the respondents at 54.7 percent strongly disagreed that majority of household members have attained basic education. 41.3 percent agreed to the statement. The value of mean of the participants who have attained basic education was 2.636 and the standard deviation was 1.54 indicating that the data collected was accurate and stable with low level variability of data. On a similar note, Makori et al., (2013) indicated that devolved funds are intended to give the citizens at grass root levels the opportunity to settle on educated consumption choices that are equipped to augmenting their welfare.

**Table 5.7: Descriptive Results for Poverty Status**

Response rate (%)	Percentage Distr					Mean	Standard Deviation
	Strongly Disagree	Disagree	Moderately Agree	Agree	Strongly Agree		
This household has a daily expenditure of more than 1.7 dollars	26.6	27.2	5.7	23.7	16.4	2.764	1.46
This household is able to cater for its basic and non-basic needs	25.6	26.2	7.7	17.7	16.7	2.777	1.47
This household has ability to cope with current cost of living	26.2	25.6	10.6	20.7	16.7	2.761	1.46
This household has assets that can cushion it against harsh economic times	25.2	30.5	3.7	17.7	22.6	2.620	1.54
Majority of household members can afford basic needs	27.5	27.2	7.7	16.7	16.7	2.736	1.50

**Source:** Survey Data (2022).

While evaluating achievement of household welfare in poverty status, majority of the respondents at 53.6 percent strongly disagreed that their household has a daily expenditure of more than 1.7 dollars. 40.3 percent agreed to the statement. The value of mean of the participants who have a daily expenditure of more than 1,7 dollars was 2.764 and the standard deviation was 1.46 indicating that the data collected was accurate and stable with low level variability of data. 53.6 percent of the

respondents strongly disagreed that their household is able to cater for its basic and non-basic needs. 36.4 percent agreed to the statement. The value of mean of the participants who is able to cater for its basic and non-basic needs was 2.777 and the standard deviation was 1.47 indicating that the data collected was accurate and stable with low level variability of data. Majority of the respondents at 51.6 percent strongly disagreed that their household has ability to cope with current cost of living. 37.4 percent agreed to the statement.

The value of mean of the participants who has ability to cope with current cost of living was 2.761 and the standard deviation was 1.46 indicating that the data collected was accurate and stable with low level variability of data. 55.7% of the respondents strongly disagreed that their household has assets that can cushion it against harsh economic times. 40.3 percent agreed to the statement. The value of mean of the participants who has assets that can cushion it against harsh economic times was 2.620 and the standard deviation was 1.54 indicating that the data collected was accurate and stable with low level variability of data.

Majority of the respondents at 54.7 percent strongly disagreed that majority of household members can afford basic needs. 37.4 percent agreed to the statement. The value of mean of the participants who can afford basic needs was 2.736 and the standard deviation was 1.50 indicating that the data collected was accurate and stable with low level variability of data. On a similar note, Sepulveda & Martinez-Vazquez, (2010) observed that devolved funding policies had a positive influence on poverty reduction as it empowers the poor and enable them to participate in decision making at the grass root level, hence increasing the likely hood of accessing quality public

good and this would improve their welfare and reduce vulnerability.

## 5.2 Correlation Analysis

The study carried out a correlation tests to determine the strength of association between dependent and predictor variables (household welfare and devolved funding respectively) and the results are shown in Table 4.35. The overall response on social safety net funds, enterprise empowerment funds, and education funds, devolved health financing and household welfare was determined by averaging outcome of each item for all categories of devolved funding.

**Table 5.8: Correlation Results for Devolved Safety Funds**

	Food Security	Health Status	Education Status	Poverty Status	Welfare	Social Safety Net Funds
Food Security	1					0.890*** (0.000)
Health Status	0.984*** (0.000)	1				0.890*** (0.000)
Education Status	0.985*** (0.000)	0.983*** (0.000)	1			0.894** (0.000)
Poverty Status	0.984*** (0.000)	0.983*** (0.000)	0.985*** (0.000)	1		0.890*** (0.000)
Welfare	0.994*** (0.000)	0.993*** (0.000)	0.985*** (0.000)	0.994*** (0.000)	1	0.900*** (0.000)
Social Safety Net Funds	0.902*** (0.000)	0.890*** (0.000)	0.894*** (0.000)	0.890*** (0.000)	0.900*** (0.000)	1

The correlation coefficients were positive and their respective p-values were less than 0.01 as showed in Table 5.8. The results revealed that the correlation devolved safety funds and food security index was 0.902 which implies a strong and positive relationship between devolved safety funds and food security index. The results found out that the correlation devolved safety funds and health security index was 0.890 which implies a strong and positive relationship between devolved safety funds and health security index.

The results showed that the correlation devolved safety funds and education index was 0.894 which implies a strong and positive relationship between devolved safety funds and education index. The results revealed that the correlation devolved safety funds and poverty index was 0.890 which implies a strong and positive relationship between devolved safety funds and poverty index. The results also found out that the correlation devolved safety funds and welfare index was 0.900 which implies a strong and positive relationship between devolved safety funds and welfare index.

**Table 5.9: Correlation Results for Devolved Enterprise Funds**

	Food Security	Health Status	Education Status	Poverty Status	Welfare	Enterprise Empowerment Funds
Food Security	1					0.391*** (0.000)
Health Status	0.984*** (0.000)	1				0.378*** (0.000)
Education Status	0.985*** (0.000)	0.983*** (0.000)	1			0.379*** (0.000)
Poverty Status	0.984*** (0.000)	0.983*** (0.000)	.985*** (0.000)	1		0.376*** (0.000)
Welfare	0.994*** (0.000)	0.993*** (0.000)	0.994*** (0.000)	0.994*** (0.000)	1	0.383*** (0.000)
Enterprise Empowerment Funds	0.391*** (0.000)	0.378*** (0.000)	0.379*** (0.000)	0.376*** (0.000)	0.383*** (0.000)	1

**Source:** Survey Data (2022).

The correlation coefficients were positive and their respective p-values were less than 0.05 as revealed in Table 5.9. The results revealed that the correlation between devolved enterprise funds and food security index was 0.391 which implies a positive relationship between devolved enterprise funds and food security index. The results also showed that the correlation between devolved enterprise funds and health security index was 0.378 which implies a positive relationship between devolved enterprise funds and health security index. The results also revealed that the

correlation between devolved enterprise funds and education index was 0.379 which implies a positive relationship between devolved enterprise funds and education index.

The results also found out that the correlation between devolved enterprise funds and poverty index was 0.376 which implies a positive relationship between devolved enterprise funds and poverty index. The results also showed that the correlation between devolved enterprise funds and welfare index was 0.383 which implies a positive relationship between devolved enterprise funds and welfare index

**Table 5.10: Correlation Results for Devolved Education Funds**

	Food Security	Health Status	Education Status	Poverty Status	Welfare	Enterprise Empowerment Funds
Food Security	1					0.455*** (0.000)
Health Status	0.984*** (0.000)	1				0.459*** (0.000)
Education Status	0.985*** (0.000)	0.983*** (0.000)	1			0.468*** (0.000)
Poverty Status	0.984*** (0.000)	0.983*** (0.000)	.985*** (0.000)	1		0.456*** (0.000)
Welfare	0.994*** (0.000)	0.993*** (0.000)	0.994*** (0.000)	0.994*** (0.000)	1	0.462*** (0.000)
Devolved Education Funds	0.455*** (0.000)	0.459*** (0.000)	0.468*** (0.000)	0.456*** (0.000)	0.462*** (0.000)	1

**Source:** Survey Data (2022).

The correlation coefficients were positive and their respective p-values were less than 0.05 as revealed in Table 5.10. The results revealed that the correlation between devolved education funds and food security index was 0.455 which implies a positive relationship between devolved education funds and food security index. The results also showed that the correlation between devolved education funds and health security index was 0.459 which implies a positive relationship between devolved education funds and health security index.

The results also revealed that the correlation between devolved education funds and education index was 0.468 which implies a positive relationship between devolved education funds and education index. The results also found out that the correlation between devolved education funds and poverty index was 0.456 which implies a positive relationship between devolved enterprise funds and poverty index. The results also showed that the correlation between devolved education funds and welfare index was 0.462 which implies a positive relationship between devolved education funds and welfare index.

The correlation coefficients were positive and their respective p-values were less than 0.05 as revealed in Table 5.11. The results revealed that the correlation between devolved health funds and food security index was 0.352 which implies a positive relationship between devolved health funds and food security index. The results also showed that the correlation between devolved health funds and health security index was 0.360 which implies a positive relationship between devolved health funds and health security index.

**Table 5.11: Correlation Results for Devolved Health Funds**

	<b>Food Security</b>	<b>Health Status</b>	<b>Education Status</b>	<b>Poverty Status</b>	<b>Welfare</b>	<b>Enterprise Empowerment Funds</b>
Food Security	1					0.352*** (0.000)
Health Status	0.984*** (0.000)	1				0.360*** (0.000)
Education Status	0.985*** (0.000)	0.983*** (0.000)	1			0.353*** (0.000)
Poverty Status	0.984*** (0.000)	0.983*** (0.000)	.985*** (0.000)	1		0.367*** (0.000)
Welfare	0.994*** (0.000)	0.993*** (0.000)	0.994*** (0.000)	0.994*** (0.000)	1	0.360*** (0.000)
Devolved Health Financing	0.352*** (0.000)	0.360*** (0.000)	0.353*** (0.000)	0.367*** (0.000)	0.360*** (0.000)	1

**Source:** Survey Data (2022).

The results also revealed that the correlation between devolved health funds and education index was 0.353 which implies a positive relationship between devolved health funds and education index. The results also found out that the correlation between devolved health funds and poverty index was 0.367 which implies a positive relationship between devolved health funds and poverty index. The results also showed that the correlation between devolved health funds and welfare index was 0.360 which implies a positive relationship between devolved health funds and welfare index.

### **5.3 Diagnostic Tests for the Overall Regression**

In any study, it is critical to use data that is adequate and reliable. This data must also meet that standard required for analysis and therefore data must undergo a process of determining the suitability and appropriateness that may influence the outcome and policy recommendation. Diagnostic tests are usually employed to detect any unusual characteristics of data which may affect the results. These characteristics include normality, multicollinearity, heteroscedasticity, among others. Some of the diagnostic tests used to detect unusual characteristics of data include Goldfeld-Quandt test, Breusch-Pagan test, Park test, White tests among others.

In this study, data was assessed to determine whether it met the standard requirements for inferential analysis criteria. In hypothesis testing, serious distortions and spurious results may pop up if diagnostic tests are not conducted Kothari (2014). The process involves selection of the main study indicator and computes a standard score per factor. This was followed by tests of adequacy and reliability on factor score generated to ensure it met the standard requirements for



inferential analysis. Below are some of the diagnostic tests conducted on the data in this research.

### 5.3.1 Tests of Normality

An examination of data to determine the Normality is important prerequisite condition in parametric testing (Gel, Miao & Gastwirth 2007). There are two major approaches used for testing Normality; the graphical and numerical approaches. Graphical approach interpretation has an advantage over numerical approach as it is more sensitive to small sample size. However, the use of this approach requires more experience. This study employed numerical approach as it is appropriate for a sample of more than 100. There are several numerical tests but this study identified on two tests; Kolmogorov-smairnov test and Shapiro-wilk-test. In both cases, normality of data is determined through the nature of distribution of data. The test for hypothesis revealed a  $p > 0.05$  and null hypothesis was accepted. This result revealed that the data had a normal distribution and hence considered reliable and therefore fit for analysis (Lind, Marchal & Wathen, 2012).

**Table 5.12: Tests of Normality**

Devolved Funds	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Social Safety Net Funds	.241	305	.051	.640	305	.057
Enterprise Empowerment Funds	.244	305	.232	.640	305	.177
Education Funds	.246	305	.101	.633	305	.067
Devolved Health Financing	.234	305	.112	.652	305	.104
Welfare	.262	305	.221	.764	305	.241

**Source:** Survey Data (2022).

The results in Table 5.12 showed that the significant values of all the variables were greater than 0.05 which imply that the data is normally distributed.

### 5.3.2 Multicollinearity

The presence of multicollinearity in a data set can result into complications in model specifications and interpretations (William et al, 2013). When the condition is present, it implies that any change in one of the predictor variable causes changes in other predictor variables making it difficult to estimate the coefficient and reduces the statistical power of the regression model (Field, 2015 Belsley, Kuh & Welsch, 2014). The Variance Inflation Factor (VIF) is used to for the presence of multicollinearity. This test determines the degree of correlation that exists between predictor variables. The value  $VIF > 5$  indicates a high level of Multicollinearity.

From Table 5.13, the results of VIF tests conducted on all predictor variables do not indicate a serious multicollinearity. All variables exhibit VIF values of less than 10 which according to Lind, Marchal & Wathen, (2012) assertion is not considered a serious multicollinearity. This basically implies that all variables under study are not seriously correlated and therefore does not present serious challenge in estimating the regression coefficients.

**Table 5.13: Multicollinearity**

Devolved Funding	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Social Safety Net Funds	.562	1.776
Enterprise Empowerment Funds	.713	1.402
Education Funds	.671	1.471
Devolved Health Financing	.670	1.450

**Source:** Survey Data (2022)

### 5.3.3 Breusch-Pagan Test for Heteroscedasticity

Classical linear regression assumes a condition constant variance in residuals and any violation of the assumption would lead to Heteroscedasticity. Heteroscedasticity

exist where the data set contain some degree of outliers or omission of a critical variable from the model (Fletcher, et al., 2012). Heteroscedasticity is a major problem with cross-sectional data type. The existence of heteroscedasticity may cause inaccuracy in most statistical tests. This study employed Breusch-pagan and white tool to test for the presence of heteroscedasticity. (Behm, Edmonds, Harmon & Ives 2013). This test utilizes the degree of p-value to determine the degree of heteroscedasticity. A p-value of less than 0.005 ( $p < 0.005$ ) indicate that the data has a significantly heteroscedastic (Long & Ervin, 2000).

**Table 5.14: Breusch-Pagan Test for Heteroscedasticity**

Breusch-Pagan Chi2	Prob > Chi2
1.17	0.2232 > 0.05

**Source:** Survey Data (2022).

Since the p-value is 0.2232 and is greater than 0.05 we fail to reject the null hypothesis and reject the alternative hypothesis. Hence, there was no heteroscedasticity.

#### **5.4 Regression Analysis for the relationship between devolved Funds and Welfare**

Regression analysis was done to determine the influence of devolved funds on household welfare. Results were presented in the tables below.

##### **5.4.1 Relationship between devolved Social Safety Funds and Household Welfare**

**Table 5.15: Regression results for Devolved Safety Funds**

Variable	Food Security index	Health Security Index	Education Index	Poverty Index	Welfare Index
Hunger Safety Net Program (HSNP) (X <sub>1</sub> )	0.543*** (17.184)	0.556*** (15.837)	0.534*** (15.024)	0.519*** (14.989)	0.538*** (16.406)
Receipt of Elderly persons (X <sub>2</sub> )	0.184*** (4.813)	0.184*** (4.326)	0.172*** (3.986)	0.192*** (4.566)	0.183*** (4.603)
Receipt of Persons with disabilities (X <sub>3</sub> )	0.116*** (2.777)	0.128*** (2.774)	0.131 (2.794)	0.111*** (2.431)	0.121*** (2.810)
Receipt of Orphans and Vulnerable Children (X <sub>4</sub> )	0.091*** (2.028)	0.045*** (0.897)	0.078*** (1.554)	0.084*** (1.720)	0.075*** (1.604)
Constant	0.221*** (3.554)	0.267*** (3.861)	0.280*** (3.997)	0.292*** (4.283)	0.265*** (4.103)
R-Squared	0.881	0.852	0.849	0.853	0.869
Adjusted R Squared	0.880	0.850	0.847	0.851	0.857
ANOVA (F Statistic)	556.527	432.402	421.121	436.080	498.179

**Source:** Survey Data (2022).

Hunger safety net program receipts, receipt of elderly, receipt of person with a disability, receipt of orphans and vulnerable children were all statistically related to food security index. An increase in receipts leads to a significant increase in food security. Hunger safety net program receipts, receipt of elderly, receipt of person with a disability, receipt of orphans and vulnerable children were all statistically related to health security index. An increase in receipts leads to a significant increase in health security. Hunger safety net program receipts, receipt of elderly, receipt of person with a disability, receipt of orphans and vulnerable children were all statistically related to education index.

An increase in receipts leads to a significant increase in education security. Hunger safety net program receipts, receipt of elderly, receipt of person with a disability, receipt of orphans and vulnerable children were all statistically related to poverty index. An increase in receipts leads to a significant increase in poverty security. In summary, an increase in devolved social safety funds (Hunger Safety Net Program, Receipt of Elderly persons, Receipt of Persons with disabilities and Receipt of

Orphans and Vulnerable Children) lead to a significant increase in welfare index.

#### 5.4.2 Hypothesis testing for the Relationship between Social Safety Funds and Household Welfare

The above hypothesis test revealed that the p-value is less than 0.05 ( $p < 0.05$ ) and therefore null hypothesis ( $H_0$ ) was rejected and therefore alternate hypothesis ( $H_{01}$ ) failed to be rejected. This indicated that the influence of devolved social safety funds on household welfare in Kenya was statistically significant. This implies that social safety fund significantly and positively influences the household welfare. A unit change in social safety net fund would lead to 85.7 percent change in household welfare.

**Table 5.16: Regression Results for Devolved Enterprise Funds**

Variable	Food Security index	Health Security Index	Education Index	Poverty Index	Welfare Index
Receipt of Women Enterprise Fund ( $X_1$ )	0.282*** (10.837)	0.280*** (2.367)	0.250*** (2.105)	0.282*** (2.595)	0.290*** (2.550)
Receipt of Youth Enterprise Fund ( $X_2$ )	0.141*** (1.978)	0.172*** (1.99)	0.170*** (2.304)	0.086*** (2.313)	0.079*** (2.373)
Receipt of Uwezo Funds ( $X_3$ )	0.051 (0.0433)	0.096 (0.812)	0.060 (0.505)	0.012 (0.108)	0.005 (0.041)
Constant	1.752*** (10.837)	1.786*** (11.053)	1.790*** (11.048)	1.736*** (10.512)	1.716*** (10.398)
R Square	0.157	0.149	0.148	0.148	0.154
Adjusted R Square	0.149	0.141	0.140	0.140	0.145
ANOVA (F Statistic)	18.751	17.565	17.432	17.445	18.201

**Source:** Survey Data (2022)

#### Fund

Receipt of women enterprise fund and receipt of youth enterprise fund were statistically related to food security index. An increase in receipts leads to a

significant increase in food security. Receipt of women enterprise fund and receipt of youth enterprise fund were statistically related to health security index. An increase in receipts leads to a significant increase in health security. Receipt of women enterprise fund and receipt of youth enterprise fund were statistically related to education index. An increase in receipts leads to a significant increase in education security. Receipt of women enterprise fund and receipt of youth enterprise fund were all statistically related to poverty index. An increase in receipts leads to a significant increase in poverty security.

In summary, an increase in devolved enterprise funds (Receipt of women enterprise fund and receipt of youth enterprise fund) lead to a significant increase in the welfare index. Receipt of Uwezo Funds was not statistically related to food security index. Receipt of Uwezo Funds was not statistically related to health security index. Receipt of Uwezo Funds was also not statistically related to education security index. Receipt of Uwezo Funds was not statistically related to poverty index. This is because the tabulated t statistic is less than the critical t statistic that is 1.96.

#### **5.4.4 Hypothesis Testing for the Relationship between devolved Enterprise Funds and Welfare**

The above hypothesis test revealed that the p-value is less than 0.05 ( $p < 0.05$ ) and therefore null hypothesis ( $H_0$ ) was rejected and therefore alternate hypothesis ( $H_{01}$ ) failed to be rejected. This indicated that the influence of devolved enterprise funds on household welfare in Kenya was statistically significant. Bursary money from constituency development fund, bursary money from Higher Education Loans Board and bursary money from County Government were all statistically related to food

security index.

An increase in receipts lead to a significant increase in food security. Bursary money from constituency development fund, bursary money from Higher Education Loans Board and bursary money from County Government were all statistically related to health security index. An increase in receipts lead to a significant increase in health security. Bursary money from constituency development fund, bursary money from Higher Education Loans Board and bursary money from County Government were all statistically related to education index.

**Table 5.17: Regression Results for Devolved Education Funds**

Variable	Food Security index	Health Security Index	Education Index	Poverty Index	Welfare Index
Bursary Money from Constituency Development Fund (CDF) ( $X_1$ )	0.329*** (5.643)	0.313*** (5.152)	0.268*** (4.459)	0.294*** (4.852)	0.301*** (5.167)
Bursary Money from Higher Education Loans Board (HELB) ( $X_2$ )	0.202*** (3.623)	0.216*** (3.721)	0.200*** (3.470)	0.224*** (3.862)	0.211*** (3.776)
Bursary Money from County Government ( $X_3$ )	0.339*** (5.685)	0.326*** (5.245)	0.391*** (6.349)	0.329*** (5.310)	0.346*** (5.808)
Constant	0.346*** (4.389)	0.375*** (4.565)	0.386*** (4.750)	0.405*** (4.944)	0.378*** (4.799)
R Square	0.802	0.783	0.788	0.780	0.798
Adjusted R Square	0.800	0.780	0.786	0.778	0.796
ANOVA (F Statistic)	406.261	361.151	372.929	355.904	395.366

**Source:** Survey Data (2022)

An increase in receipts lead to a significant increase in education security. Bursary money from constituency development fund, bursary money from Higher Education Loans Board and bursary money from County Government children were all statistically related to poverty index. An increase in receipts lead to a significant increase in poverty security. In summary, an increase in devolved education funds (Bursary money from constituency development fund, bursary money from Higher

Education Loans Board and bursary money from County Government) lead to a significant increase in welfare index.

**Table 5.18: Regression Results for Devolved Health Financing**

Variable	Food Security index	Health Security Index	Education Index	Poverty Index	Welfare Index
Devolved National Hospital Insurance Fund (NHIF) ( $X_1$ )	0.318*** (5.393)	0.269*** (4.341)	0.251*** (4.131)	0.262*** (4.267)	0.275*** (4.653)
Devolved County Health Fund program ( $X_2$ )	0.199*** (3.508)	0.227*** (3.811)	0.200*** (3.423)	0.230*** (3.883)	0.214*** (3.762)
Devolved Linda Mama Free healthcare program ( $X_3$ )	0.351*** (5.912)	0.356*** (5.700)	0.405*** (6.602)	0.351*** (5.671)	0.366*** (6.138)
Constant	0.373*** (4.735)	0.404*** (4.883)	0.409*** (5.033)	0.431*** (5.247)	0.404*** (5.118)
R Square	0.800	0.777	0.786	0.776	0.794
Adjusted R Square	0.798	0.775	0.784	0.774	0.792
ANOVA (F Statistic)	402.416	350.305	368.784	348.401	387.736

**Source:** Survey Data (2022).

Devolved National Hospital Insurance fund, devolved County Health Fund program and devolved Linda Mama Free healthcare program were all statistically related to food security index. An increase in receipts lead to a significant increase in food security. Devolved National Hospital Insurance fund, devolved County Health Fund program and devolved Linda Mama Free healthcare program were all statistically related to health security index. An increase in receipts lead to a significant increase in health security.

Devolved National Hospital Insurance fund, devolved County Health Fund program and devolved Linda Mama Free healthcare program were all statistically related to education index. An increase in receipts lead to a significant increase in education



security. Devolved National Hospital Insurance fund, devolved County Health Fund program and devolved Linda Mama Free healthcare program were all statistically related to poverty index. An increase in receipts lead to a significant increase in poverty security. In summary, an increase in devolved health financing (Devolved National Hospital Insurance fund, devolved County Health Fund program and devolved Linda Mama Free healthcare program) lead to a significant increase in welfare index.

#### **5.4.8: Hypothesis Testing for the Relationship between Devolved Health Financing and Welfare**

The above hypothesis test revealed that the p-value is less than 0.05 ( $p < 0.05$ ) and therefore null hypothesis ( $H_0$ ) was rejected and therefore alternate hypothesis ( $H_{01}$ ) failed to be rejected. This indicated that the influence of devolved health financing on household welfare in Kenya was not statistically significant.

### **5.5 Moderating Relationship of Demographic Indicators on Relationship between devolved Funds and Welfare**

The study also investigated the moderating relationship of demographic indicators on relationship between devolved funds and welfare.

#### **5.5.1 Moderating effect of Household Head on Relationship between Devolved Funds Composite and Welfare Index**

The study assessed the moderating effect of the individual head of the family on the relationship between devolved funding policies and household welfare. The moderating effect of the family head had a significant impact on the relationship

between devolved funding policies and food security with a beta coefficient of -0.056 and a p-value of 0.000. Therefore, we conclude that head of the family factor have a significant moderating impact on the relationship between devolved funding policies and food security.

**Table 5.19: Moderating effect of Household Head on Relationship between devolved Funds Composite and Welfare Index**

Moderating effects	Food Security index	Health Security Index	Education Index	Poverty Index	Welfare Index
Constant	-1.623	-1.575	-1.645	-1.616	-1.62
X Composite (x1+x2+x3+x4)/4	1.66	1.657	1.667	1.646	1.663
Interaction term (X composite* Head of Household)	-0.056, 0.000	-0.054, 0.001	-0.045, 0.001	-0.041, 0.002	-0.05, 0.000
R-squared	0.705	0.671	0.677	0.672	0.707
Adjusted R2	0.704	0.671	0.676	0.671	0.706
Fstat, df	1435.507, 304	1240.34, 304	1307.617, 304	1244.115, 304	1472.067, 304

**Source:** Survey Data (2022)

The moderating influence of the family head showed a beta coefficient of -0.054 and a p-value of 0.001 in the link between devolved funding policies and health status. Because of this, we infer that the role of the head of the family has a significant moderating effect on the link between devolved funding policies and health status. The moderating effect of the family head had a significant impact on the relationship between devolved funding policies and education status with a beta coefficient of -0.045 and a p-value of 0.001.

Therefore, we conclude that head of the family factor have a significant moderating impact on the relationship between devolved funding policies and education status. The moderating influence of the family head showed a beta coefficient of -0.041 and

a p-value of 0.001 in the link between devolved funding policies and poverty status. Because of this, we infer that the role of the head of the family has a significant moderating effect on the link between devolved funding policies and poverty status.

### 5.5.2 Moderating effect of Size of Family on Relationship between Devolved Funds Composite and Welfare Index

The study assessed the moderating effect of the size of family on the relationship between devolved funding policies and household welfare.

**Table 5.20: Moderating effect of Size of Family on Relationship between devolved Funds Composite and Welfare Index**

Moderating effects	Food Security index	Health Security Index	Education Index	Poverty Index	Welfare Index
Constant	-1.623	-1.575	-1.645	-1.616	-1.62
X Composite ( $x_1+x_2+x_3+x_4$ )/4	1.66	1.657	1.667	1.646	1.663
Interaction term (X composite* Size of family)	-0.056, 0.000	-0.054, 0.000	-0.045, 0.001	-0.051, 0.002	-0.052, 0.000
Rsquared	0.705	0.671	0.677	0.672	0.707
Adjusted R2	0.704	0.671	0.676	0.671	0.706
Fstat, df	1435.507, 304	1240.343, 304	1307.617, 304	1244.115, 304	1472.067, 304

**Source:** Survey Data (2022).

The moderating effect of the family size had a significant impact on the relationship between devolved funding policies and food security with a beta coefficient of -0.056 and a p-value of 0.000. Therefore, we conclude that size of family factor has a significant moderating impact on the relationship between devolved funding policies and food security. The moderating influence of the family size showed a beta coefficient of -0.054 and a p-value of 0.001 in the link between devolved funding policies and health status. Because of this, we infer that the role of the size of family

has a significant moderating effect on the link between devolved funding policies and health status.

The moderating effect of the size of family had a significant impact on the relationship between devolved funding policies and education status with a beta coefficient of -0.045 and a p-value of 0.001. Therefore, we conclude that size of family factor has a significant moderating impact on the relationship between devolved funding policies and education status. The moderating influence of the size of family showed a beta coefficient of -0.041 and a p-value of 0.001 in the link between devolved funding policies and poverty status and we infer that the role of the size of family has a significant moderating effect on the link between devolved funding policies and poverty status.

### **5.5.3 Moderating effect of Age on Relationship between Devolved Funds Composite and Welfare Index**

The study assessed the moderating effect of the individual's age on the relationship between devolved funding policies and household welfare. The moderating effect of the individual's age had a significant impact on the relationship between devolved funding policies and food security with a beta coefficient of -0.02 and a p-value of 0.006. Therefore, we conclude that individual's age factor has a significant moderating impact on the relationship between devolved funding policies and food security. The moderating influence of the age showed a beta coefficient of -0.017 and a p-value of 0.011 in the link between devolved funding policies and health status. Because of this, we infer that the role of the age has a significant moderating effect on the link between devolved funding policies and health status.

**Table 5.21: Moderating effect of Age on Relationship between Devolved Funds Composite and Welfare Index**

Moderating effects	Food Security index	Health Security Index	Education Index	Poverty Index	Welfare Index
Constant	-1.766	-1.726	-1.772	-1.674	-1.667
X Composite ( $x_1+x_2+x_3+x_4$ )/4	1.663	1.662	1.671	1.647	1.661
Interaction term (X composite* Age)	-0.02, 0.006	-0.017, 0.011	-0.014, 0.057	-0.016, 0.016	-0.042, 0.001
R squared	0.701	0.666	0.674	0.671	0.706
Adjusted R2	0.7	0.666	0.673	0.67	0.705
F stat, df	1375.066, 304	1200.436, 304	1272.626, 304	1226.364, 304	1450.471, 304

**Source:** Survey Data (2022).

The moderating effect of the individual's age had a significant impact on the relationship between devolved funding policies and education status with a beta coefficient of -0.014 and a p-value of 0.057. Therefore, we conclude that age factor has a significant moderating impact on the relationship between devolved funding policies and education status. The moderating influence of the age showed a beta coefficient of -0.016 and a p-value of 0.016 in the link between devolved funding policies and poverty status. Because of this, we infer that the role of age has a significant moderating effect on the link between devolved funding policies and poverty status.

#### **5.5.4 Moderating effect of Education Qualification on Relationship between Devolved Funds Composite and welfare index**

The study assessed the moderating effect of the individual's highest education qualification on the relationship between devolved funding policies and household welfare.

**Table 5.22: Moderating effect of Education Qualification on Relationship between devolved Funds Composite and Welfare Index**

Moderating effects	Food Security index	Health Security Index	Education Index	Poverty Index	Welfare Index
Constant	-1.023	-1.017	-1.076	-1.036	-1.036
X Composite (x1+x2+x3+x4)/4	1.07	1.076	1.137	1.123	1.113
Interaction term (X composite* Highest education qualification)	0.062, 0.000	0.076, 0.000	0.073, 0.000	0.072, 0.000	0.076, 0.000
R squared	0.724	0.707	0.713	0.707	0.725
Adjusted R2	0.723	0.707	0.713	0.706	0.724
F stat, df	1635.47, 304	1671.06, 304	1571.325, 304	1506.766, 304	1660.5, 304

**Source:** Survey Data (2022).

The moderating effect of the individual's highest education qualification had a significant impact on the relationship between devolved funding policies and food security with a beta coefficient of 0.062 and a p-value of 0.000. Therefore, we conclude that individual's highest education qualification factor has a significant moderating impact on the relationship between devolved funding policies and food security. The moderating influence of highest education qualification showed a beta coefficient of 0.076 and a p-value of 0.000 in the link between devolved funding policies and health status.

Because of this, we infer that the role of the highest education qualification has a significant moderating effect on the link between devolved funding policies and health status. The moderating effect of the individual's highest education qualification had a significant impact on the relationship between devolved funding policies and education status with a beta coefficient of 0.073 and a p-value of 0.000. Therefore, we conclude that highest education qualification factor has a significant moderating impact on the relationship between devolved funding policies and

education status. The moderating influence of the education qualification showed a beta coefficient of 0.072 and a p-value of 0.000 in the link between devolved funding policies and poverty status. Because of this, we infer that the role of education qualification has a significant moderating effect on the link between devolved funding policies and poverty status.

### 5.5.5 Moderating effect of Marital Status on Relationship between Devolved Funds Composite and Welfare Index

The study assessed the moderating effect of the marital status on the relationship between devolved funding policies and household welfare.

**Table 5.23: Moderating effect of Marital Status on relationship between devolved Funds Composite and Welfare Index**

Moderating effects	Food Security index	Health Security Index	Education Index	Poverty Index	Welfare Index
Constant	-1.017	-0.765	-0.671	-0.737	-0.757
X Composite ( $x_1+x_2+x_3+x_4$ )/4	1.576	1.576	1.576	1.565	1.56
Interaction term (X composite* Marital status)	-0.143, 0.000	-0.141, 0.000	-0.157, 0.000	-0.142, 0.000	-0.146, 0.000
R squared	0.717	0.706	0.717	0.707	0.724
Adjusted R2	0.716	0.705	0.717	0.706	0.723
F stat, df	1704.727, 304	1446.725, 304	1673.305, 304	1503.715, 304	1624.761, 304

**Source:** Survey Data (2022).

The moderating effect of the marital status had a significant impact on the relationship between devolved funding policies and food security with a beta coefficient of -0.143 and a p-value of 0.000. Therefore, we conclude that marital status factor has a significant moderating impact on the relationship between devolved funding policies and food security. The moderating influence of marital status showed a beta coefficient of -0.141 and a p-value of 0.000 in the link between

devolved funding policies and health status. Because of this, we infer that the role of the marital status has a significant moderating effect on the link between devolved funding policies and health status.

The moderating effect of the marital status had a significant impact on the relationship between devolved funding policies and education status with a beta coefficient of -0.157 and a p-value of 0.000. Therefore, we conclude that marital status factor has a significant moderating impact on the relationship between devolved funding policies and education status. The moderating influence of the marital status showed a beta coefficient of -0.142 and a p-value of 0.000 in the link between devolved funding policies and poverty status. Because of this, we infer that the role of marital status has a significant moderating effect on the link between devolved funding policies and poverty status.

#### **5.5.6 Hypothesis testing for the Moderating effect of Demographic Statistics on Relationship between devolved Fund Composite and Welfare Index**

The moderating effect of the head of household had a significant impact on the relationship between devolved funding policies and household welfare with a beta coefficient of -0.05 and a p-value of 0.000. Therefore, we conclude that head of household factor have a significant moderating impact on the relationship between devolved funding policies and household welfare. The moderating influence of Size of family showed a beta coefficient of -0.052 and a p-value of 0.000 in the link between devolved funding policies and household welfare. Because of this, we infer that the Size of family has a significant moderating effect on the link between devolved funding policies and household welfare.



The moderating effect of the age had a significant impact on the relationship between devolved funding policies and household welfare with a beta coefficient of -0.042 and a p-value of 0.001. Therefore, we conclude that age factor has a significant moderating impact on the relationship between devolved funding policies and household welfare. The moderating influence of the highest education qualification showed a beta coefficient of 0.076 and a p-value of 0.000 in the link between devolved funding policies and household welfare. Because of this, we infer that the role of highest education qualification has a significant moderating effect on the link between devolved funding policies and household welfare.

The moderating effect of the marital status had a significant impact on the relationship between devolved funding policies and household welfare with a beta coefficient of -0.146 and a p-value of 0.000. Therefore, we conclude that marital status factor has a significant moderating impact on the relationship between devolved funding policies and household welfare. Therefore, we conclude that demographic factor has a significant moderating impact on the relationship between devolved funding policies and household welfare.

**Table 5.24: Summary of Hypotheses Testing**

Alternative Hypothesis	P value	Conclusion
Ha1: There is a significant influence of Devolved Social Safety funds on household welfare in Kenya	0.000	The alternative hypothesis was not rejected indicating there is significant relationship between Devolved Social Safety funds and household welfare. This was because the corresponding p value was less than 0.05
Ha2: Devolved enterprise funds has a significant influence on household welfare in Kenya	0.000	The alternative hypothesis was not rejected indicating there is significant relationship between Devolved enterprise funds and household welfare. This was because the corresponding p value was less than 0.05
Ha3: There is a significant influence of Health financing on household welfare in Kenya	0.000	The alternative hypothesis was not rejected indicating there is a significant relationship between Health financing and household welfare. This was because the corresponding p value less than 0.05
Ha4: There is a significant influence of devolved education funds on household welfare in Kenya	0.000	The alternative hypothesis was not rejected indicating there is significant relationship between devolved education funds and household welfare. This was because the corresponding p value was less than 0.05

**Source:** Survey Data (2022).

## **CHAPTER SIX**

### **DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

#### **6.1 Chapter Overview**

This chapter covers the summary of findings, the conclusions and recommendations covered by the researcher. The results of the independent variables are discussed in relation to the dependent variable and the study objectives. The study objectives and hypotheses are reflected in the study's summary, conclusions, and suggestions. In addition, this chapter provides some recommendations for future study.

#### **6.2 Discussion of Findings**

The summary of findings section presents a brief of the findings as per the study objectives. The data was analyzed based on model fitness adjusted  $R^2$ , ANOVA, F-statistic and significance which allows the researcher to either accept or reject the null hypothesis, regression coefficients to analyse association between every independent variable and the dependent variable as well as moderated regression model. The main objective of the study was to examine the effect of devolved funding policies on household welfare in Kenya. The results are summarized in the following sections in accordance with the objectives.

##### **6.2.1 Devolved Social Safety Funds and Household Welfare**

The first objective of the study looked at the impact of devolved social safety funds on Kenyan household wellbeing. The results showed a strong and positive correlation between devolved safety funds and all five indices. The correlation coefficients ranged from 0.890 to 0.902. The p-values for all correlations were less than 0.01, indicating that the results were statistically significant. Overall, the

findings suggest that devolved safety funds are positively associated with various indicators of social welfare and security. On the results of the relationship between various types of devolved social safety funds and indices related to food security, health security, education, poverty, and welfare. The study found that receipt of hunger safety net program benefits, as well as receipt of benefits for elderly persons, persons with disabilities, and orphans and vulnerable children, were all statistically related to all five indices with all affecting positively the overall welfare.

In summary, the study suggests that increased investment in devolved social safety funds can lead to significant improvements in various indicators of social welfare and security. Andrews, Hsiao, and Ralston (2018) found similar results, reporting an increase in household consumption equal to 80 percent of the amount of the transfer. Beneficiaries of cash transfers in Niger saw sustained gains in livestock holdings (Stoeffler, Mills, & Premand 2016). There is also evidence that programs like Kenya's Give Directly, Lesotho's Child Grants, and Sierra Leone's Cash for Work have all contributed to an increase in home improvement spending, such as the purchase of metal or plastic sheeting for roofing and wall coverings (Haushofer & Shapiro, 2016; Pellerano et al., 2014; Rosas & Sabarwal, 2016).

### **6.2.2 Devolved Enterprise Funds and Household Welfare**

The Second objective of the study looked at the impact of devolved enterprise funds on Kenyan household wellbeing. The study found that there was a positive relationship between devolved enterprise funds and all five indices, with correlation coefficients ranging from 0.376 to 0.391. The p-values for all correlations were less than 0.05, indicating that the results were statistically significant. Overall, the

findings suggest that devolved enterprise funds are positively associated with various indicators of social welfare and security. On the results of the relationship between various types of enterprise funds and indices related to food security, health security, education, poverty, and welfare.

The study found that receipt of women enterprise fund and receipt of youth enterprise fund were statistically related to all five indices, with an increase in receipts leading to a significant increase in each index. In contrast, receipt of Uwezo Funds was not statistically related to any of the indices, indicating that this particular fund may not have a significant impact on social welfare and security. Overall, the findings suggest that targeted investments in certain types of enterprise funds, such as those aimed at women and youth, can lead to significant improvements in various indicators of social welfare and security. The results corroborate well with the outcome of study by Opil (2019).

### **6.2.3 Devolved Health financing and Household Welfare**

The third objective of the study was to examine the impact of devolved health financing on Kenyan household wellbeing. The study found a positive correlation between devolved education funds and all the security and welfare indices. Specifically, an increase in devolved education funds leads to a significant increase in food security index, health security index, education index, poverty index, and welfare index. All correlation coefficients were positive and statistically significant with p-values less than 0.05. The bursary money received from the constituency development fund, Higher Education Loans Board, and County Government were all positively correlated with the food security, health security, education security, and

poverty security indices.

An increase in the bursary money receipts led to a significant increase in each of these indices. In summary, an increase in these devolved education funds (constituency development fund bursary money, Higher Education Loans Board bursary money, and County Government bursary money) was positively related to the welfare index. These findings are consistent with those made by Rono (2017), who found that a number of variables, including family size, income, hospital type, insurance coverage, the presence of a child under the age of five, the presence of a chronic illness, malaria, respiratory disease, and the presence of a child under the age of five. These factors played a role in catastrophic health care expenditures. Li et al. (2015) found that a sizeable fraction of households in South Africa's top income quintile use private healthcare even when they are not covered by private medical insurance. In contrast, low-income families frequently turn to the overwhelmed public healthcare system because they cannot afford private healthcare.

#### **6.2.4 Devolved Education Funds and Household Welfare**

The main objective of the study was to examine the impact of devolved education funds on household welfare in Kenya. The correlation coefficients between devolved health funds and food security index, health security index, education index, poverty index, and welfare index were all positive and statistically significant with p-values less than 0.05. These results indicate that an increase in devolved health funds is positively related to increases in all five indices, including food security, health security, education index, poverty index, and welfare index. The study found that an increase in receipts from devolved National Hospital Insurance fund, devolved

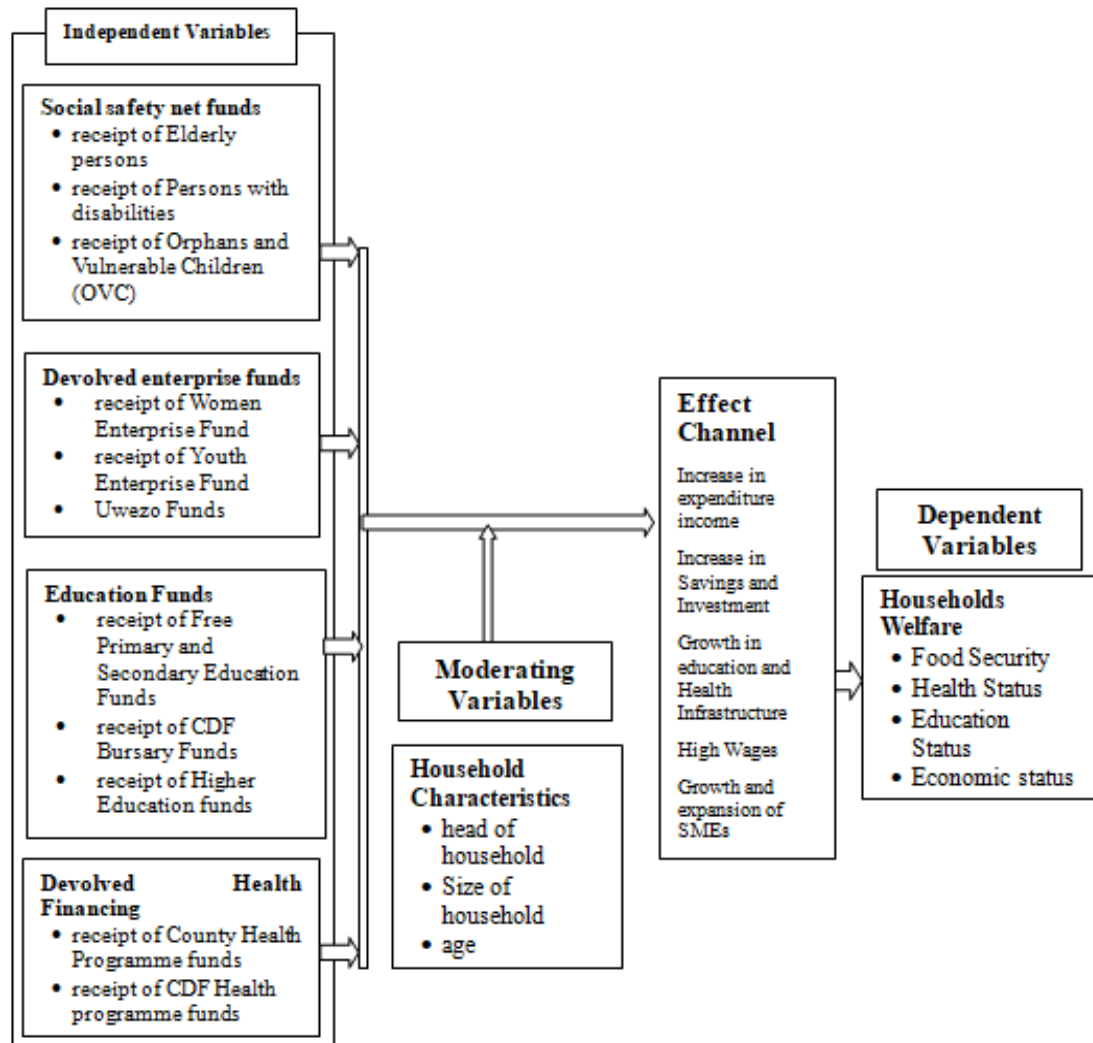
County Health Fund program and devolved Linda Mama Free healthcare program led to a significant increase in food security, health security, education security, poverty security and welfare index. These devolved health financing programs showed a positive relationship with all the security and welfare indices.

According to Okeyo (2015), whose findings are consistent with those of the present study, the CDF bursary had no effect on the retention of girls in school because the amount of money provided was only Ksh 3,000/= per year, which was insufficient to cover the required costs of Ksh 20,000/=. She observed that, despite knowing of the fund's existence, the majority did not benefit due to non-application (Olendo, 2009), unavailability of application forms, and lack of reaction by CDF managers.

According to Okeyo (2015) people knew about the CDF, but did not apply, since application forms were unavailable, or lack of feedback from CD administrators. According to Naliaka (2018), there are insufficient funds for students and the criteria for disbursing funding is highly contentious due to a lack of openness and accountability. Owuor (2018) affirmed that free primary education in Kenya increased enrollment and retention of impoverished children. However, inequitable access to uniforms, food, and other amenities hinders students from disadvantaged households from entering secondary school.

### **6.3 Modified Conceptual Framework**

The revised conceptual framework is as shown in Figure 6.1



**Figure 6.1 Revised Conceptual Framework**  
**Source:** Author's Compilation (2023)

#### 6.4 Conclusion

From the overall regression model, it was clear that all devolved funding policies had effect on households' welfare. Social safety net funds had more effect on households' welfare followed by Devolved enterprise funds, Education Funds and Devolved Health Financing. This is because change in social safety net funds by one unit would shift households' welfare by 0.565 units, change in Devolved enterprise funds by one unit would shift households' welfare by 0.307 units, while change in Education Funds and Devolved Health Financing by one unit would change

households' welfare by 0.306 and 0.275 units respectively. The moderation results also showed that Disbursement Characteristics moderates the devolved funding policies of households' welfare significantly. Figure 5.1 illustrates the revised conceptual framework.

#### **6.4.1 Devolved Social Safety Funds**

Devolved Social Safety funds significantly and positively influence household welfare in Kenya. Therefore, if devolved Social Safety funds are properly distributed to many households in Kenya, household welfare will improve. The government of Kenya needs to provide devolved social safety funds to many households so as to alleviate poverty thereby improve overall household welfare and as a result enhance economic growth in the country. The research study has concluded that the devolved social safety funds that have been benefitted by most households in Kenya have helped the households meet their needs hence improving their welfare.

#### **6.4.2 Devolved Enterprise Funds**

Devolved enterprise funds significantly and positively influence household welfare in Kenya. Therefore, if devolved enterprise funds are properly distributed to many households in Kenya, household welfare will improve. The government of Kenya needs to provide devolved enterprise funds to many households to empower women, youths and other groups in the community thus improve overall household welfare and as a result enhance economic growth in the country. The research study has concluded that the devolved enterprise funds that have been benefitted by most households in Kenya have helped the households meet their needs hence improving their welfare.



### **6.4.3 Devolved Health Financing**

Devolved health financing significantly and positively influences household welfare in Kenya. Therefore, if devolved health financing is properly distributed to many households in Kenya, household welfare will improve. The government of Kenya needs to provide devolved health financing to many households to improve overall household welfare and as a result enhance economic growth in the country. The research study has concluded that the devolved health financing that has been benefitted by most households in Kenya have helped the households meet their needs hence improving their welfare.

### **6.4.4 Devolved Education Funds**

Devolved education funds significantly and positively influence household welfare in Kenya. Therefore, if devolved education funds are properly distributed to many households in Kenya, household welfare will improve. The government of Kenya needs to sensitize its people on the need to apply for devolved education funds and equitably distribute the funds to the people so as to improve ability to access education resources therefore improve overall household welfare and as a result enhance economic growth in the country. The research study has concluded that the devolved education funds that have been benefitted by most households in Kenya have helped the households meet their needs hence improving their welfare.

## **6.5 Recommendations**

### **6.5.1 Policy Recommendations**

#### **6.5.1.1 Social Safety Net Fund**

From the findings, it was observed that social safety net fund had a greater impact on

household welfare. First, the government develop a policy on the targeting mechanism by basing on the available data from KNBS. This will weed out inclusion error. From the analysis, less than 33 percent of the sample benefitted from the programme and therefore the government should come up with deliberate action targeting particularly the extreme poor in the rural environment. The current statistics from Kenya National Bureau of Statistics indicate (April 2023), indicate that about 51 percent of households in Kenya are living below US 1.5. Therefore, there is an urgent need to bring more people on board.

The government should also ensure timely disbursement of the grants in each cycle. Most of the recipient 30 percent complained of late and irregular disbursement of the grant and therefore unable to plan for it. The effectiveness of this programme depends on how well it is utilized by the beneficiaries. The government should also develop an exit strategy for all current the beneficiaries. This is necessary because continuous stay in the programme will create a dependence syndrome. The strategy should indicate a clear timeline as to how long an individual should stay in the programme. The objective should be to give every needy person a chance to participate in the programme.

#### **6.5.1.2 Devolved Enterprise Funds**

Since the results showed that households headed by women derived greater effects from participation in microfinance than in households headed by men, the government should create incentives scheme that encourage more women participation in microfinance. In addition, microfinance providers should establish financial products that are tailor-made to attract greater women participation in

microfinance. In light of the finding that only male-owned firms derived positive and significant from participating in microfinance, the government and microfinance providers should address obstacles that hinder women-owned firms from benefitting from to participation in microfinance. Commonly cited obstacles include less access to financial opportunities, less ownership of productive assets that may aid access to finance as well as firm performance and lack of business training.

#### **6.5.1.3 Devolved Health and Education Financing Funds**

The central and county government should strive to enhance health and Education infrastructure. They should increase budgetary allocation towards building or expanding the existing schools and hospitals. The government should strengthen the free basic education and the Universal Health Care (UHC) programmes. This will increase the access to these facilities and this will increase literacy levels and improve the health status hence the household welfare. They should generally be advised to ensure equitable and transparent allocation of devolved funding to various households. This will ensure that households even in the marginalized regions have their needs addressed. This is because the probability of increasing household welfare has been seen to increase with frequency of receipt of such funding as education, health and enterprise funds.

Secondly, for those households that have never received devolved funding have been found to have a decreasing social welfare. Therefore, this can be attributed to poor accountability and misuse of public funds. Thus, the study recommends the fight against corruption and misuse of public funds to ensure every household in Kenya have access the allocated devolved funding. Third, the government should identify

the factors, restrictions, and processes that contribute to and perpetuate poverty. It should guarantee that the poor are included in the formulation of policies and the identification of particular initiatives that will advance development. As a result, they will have been effectively represented in different policy-making organizations and institutions, therefore resolving their challenges. Fourthly, the study recommends and calls for policy makers to improve on management of the devolved funds. Sufficient and appropriate public administration on decentralization should form the basis of fiscal decentralization and allocation of devolved funding to various constituencies.

#### **6.5.2 Contribution to Knowledge**

The study contributes to the existing literature on how devolved funding policies influence the house hold welfare in Kenya and particularly within the context of devolution which has been in place for the last one decade. In addition to demonstrating that devolved funding policies has a positive effect on household welfare, the study has shown that the degree of influence varied across the various policies. The study has also demonstrated that social safety net funds have more effects on household welfare as compared to the rest of policy funds.

Therefore, this study reveals that the design of policies should be aligned to the segments of interest in order to derive maximum effects on the household welfare. This study has therefore contributed to the debate and therefore, literature, that cash devolved funding has a significant and positive effects on household welfare in Kenya and that the government should prioritize cash transfers.

### **6.5.3 Recommendations for Further Studies**

This study focused on evaluating the effects of devolved policies on household welfare in Kenya. After establishing that these devolved policies can actually increase the household welfare in Kenya, further studies should be conducted to investigate the effects of these devolved policies on household savings and investment and their impact on house Welfare in Kenya.

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Divorced/Separated [ ]

### Section B: Social Safety Net Funds

The section attempts to establish the extent to which households received social safety funds. Use the Likert scale of 1 to 5 to where;

1= Strongly Disagree, 2= Disagree, 3 =Moderately Agree, 4= Agree, 5= Strongly Agree

	SD=1	D=2	MA=3	A=4	SA=5
This household is a beneficiary of money from Hunger Safety Net Program (HSNP) in the past					
This household is a beneficiary of money from Elderly Person cash transfer program					
This household is a beneficiary of money from person with Disabilities cash transfer program					
This household is a beneficiary of money from Orphans and Vulnerable Children (OVC) cash transfer program					
This household receives money from social safety cash transfer programs regularly					
The social safety cash transfers meets the needs of this household					

7. Indicate the approximate amount of funds received in the last 5 years.

Type of Social Safety Fund	Amount			
	Ksh 0 – Ksh 10,000	Ksh 10,001 – Ksh 20,000	Ksh 20,001 - Ksh 30,000	Above Ksh 30,000
Hunger Safety Net Program (HSNP)				
Elderly funds				
Persons with disabilities				
Orphans and Vulnerable Children (OVC)				

### Section C: Enterprise Empowerment Funds

The section attempts to establish the extent to which households received enterprise Empowerment funds. Use the Likert scale of 1 to 5 to where;



1= Strongly Disagree, 2= Disagree, 3 =Moderately Agree, 4= Agree, 5= Strongly Agree

	SD=1	D=2	MA=3	A=4	SA=5
<b>8.</b> This household is a beneficiary of money from Women Enterprise Fund					
<b>9.</b> This household is a beneficiary of money from Youth enterprise Fund program					
<b>10.</b> This household is a beneficiary of Uwezo funds program					
<b>11.</b> This household is a beneficiary of other assorted enterprise empowerment funds program					
<b>12.</b> This household receives money from enterprise empowerment funds programs regularly					
<b>13.</b> The cash transfers from enterprise empowerment meets the needs of this household					

**14.** Indicate the approximate amount of enterprise funds received in the last 5 years?

Type of Enterprise Fund	Amount			
	Ksh 0 – Ksh 10000	Ksh 10000 – Ksh 200000	Ksh 20001 - Ksh 30000	Above Ksh 30000
Women Enterprise Fund				
Youth Enterprise Fund				
Uwezo Funds				

#### Section D: Education Funds

The section attempts to establish the extent to which households received education funds. Use the Likert scale of 1 to 5 to where;

1= Strongly Disagree, 2= Disagree, 3 =Moderately Agree, 4= Agree, 5= Strongly Agree

	SD=1	D=2	MA=3	A=4	SA=5
15. This household is a beneficiary of bursary money from Constituency Development Funds (CDF )					
16. This household is a beneficiary of bursary money from Higher Education Loans Board (HELB)					
17. This household is a beneficiary of bursary money from County Government					
18. This household is a beneficiary of other assorted devolved bursary programs					
19. This household receives bursary money from devolved sources regularly					
20. The bursary money from enterprise empowerment meets the needs of this household					

21. Indicate the approximate amount of enterprise funds received in the last 5 years?

Type of Enterprise Fund	Amount			
	Ksh 0 –Ksh 10,000	Ksh 10001 – Ksh 20,000	Ksh 20,001 - Ksh 30,000	Above Ksh 30,001
Bursary Money from Constituency Development Fund (CDF)				
Bursary Money from Higher Education Loans Board (HELB)				
Bursary Money from County Government				

### Section E: Devolved Health Financing

The section attempts to establish the extent to which households received devolved health financing. Use the Likert scale of 1 to 5 to where;

1= Strongly Disagree, 2= Disagree, 3 =Moderately Agree, 4= Agree, 5= Strongly Agree

	SD=1	D=2	MA=3	A=4	SA=5
22. This household is a beneficiary of devolved National Hospital Insurance Fund (NHIF)					
23. This household is a beneficiary of devolved County Health Fund program					
24. This household is a beneficiary of devolved Linda Mama free health program					
25. This household is a beneficiary of devolved universal health care (UHC) program					
26. This household receives health care financing from devolved sources regularly					
27. The health are financing from devolved sources meets the needs of this household					

28. Indicate the approximate amount of devolved health care financing received in the last 5 years?

Type of Enterprise Fund	Amount			
	Ksh 0 – Ksh 10,000	Ksh 10001 – Ksh 20,000	Ksh 20,001 - Ksh 30,000	Above Ksh 30,001
Devolved National Hospital Insurance Fund (NHIF)				
Devolved County Health Fund program				
Devolved Linda Mama Free healthcare program				

### Section F: Household Welfare

The section attempts to establish the status of household welfare. Various dimensions of welfare including food security status, education status, health status, and poverty indicators were used.

### Section F1: Food Security

The section attempts to establish the status of food security. Use the Likert scale of 1 to 5 to where;

1= Strongly Disagree, 2= Disagree, 3 =Moderately Agree, 4= Agree, 5= Strongly Agree

Scale	SD=1	D=2	MA=3	A=4	SA=5
This household takes 3 or more meals in a day					
This household consumes food which is safe, nutritious and balance diet					
This household has physical access to food					
This household has access to affordable food					
This household access to food is not limited by social challenges					

### Section F2: Health Status

The section attempts to establish the status of health status. Use the Likert scale of 1 to 5 to where;

1= Strongly Disagree, 2= Disagree, 3 =Moderately Agree, 4= Agree, 5= Strongly Agree

scale	SD=1	D=2	MA=3	A=4	SA=5
1. This household has physical access to health care					
2. This household has access to affordable health care					
3. This household has access to quality health care					
4. This household has access to health care is not limited by social and religious norms					
5. This household regularly seeks health when need arises.					

### Section F3: Education Status

The section attempts to establish the status of education status. Use the Likert scale of 1 to 5 to where;

1= Strongly Disagree, 2= Disagree, 3 =Moderately Agree, 4= Agree, 5= Strongly Agree

scale	SD=1	D=2	MA=3	A=4	SA=5
1. This household has physical access to education					
2. This household has access to affordable education					
3. This household has access to quality education					
4. This household has access to education is not limited by social and religious norms					
5. Majority of household members have attained basic education					

#### Section F4: Poverty Status

The section attempts to establish the status of poverty status. Use the Likert scale of 1 to 5 to where;

1= Strongly Disagree, 2= Disagree, 3 =Moderately Agree, 4= Agree, 5= Strongly Agree

Scale	SD=1	D=2	MA=3	A=4	SA=5
This household has a daily expenditure of more than 1.9 dollars					
This household is able to cater for its basic and non-basic needs.					
This household has ability to cope with current cost of living					
This household has assets that can cushion it against harsh economic times					
Majority of household members can afford basic needs					