DETERMINANTS OF URBAN HOUSEHOLD CONSUMPTION EXPENDITURE: THE CASE OF GULELLE SUBCITY OF ADDIS ABABA, ETHIOPIA

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DECLARATION

I, Samuel Abera, declare that, this study, "**DETERMINANTS OF URBAN HOUSEHOLD CONSUMPTION EXPENDITURE:THE CASE OF GULELLE SUBCITY OF ADDIS ABABA "** is my own work. I have undertaken the research work independently with the guidance and support of the research supervisor.

This study has not been submitted for any degree or diploma in this or any other institution. It is in partial fulfillment of the requirements for the Degree of Master of Science in Economics (Development Economics). All sources of material used for the research have been duly acknowledged.

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ACRONOYM

AIH: Absolute Income Hypothesis

CSA: Central Statistical Agency

GDP: Gross Domestic Production

LCH: Life Cycle Hypothesis

PIH: Permanent Income Hypothesis

RIH: Relative Income Hypothesis

ABSTRACT

The main objective of this study was to examine the determinants of urban household consumption expenditure in Gulelle Sub-City of Addis Ababa. A total of 100 respondents, were randomly selected to administer the questionnaire for data collection from two Woredas. Descriptive and explanatory research designs as well as qualitative and quantitative research approach were employed in conducting the study. The data were described using means and histograms .The multiple linear regression model was applied to identify determinants for consumption expenditure of a household. The descriptive result shows mean disposable monthly income, consumption expenditure, and saving amount of Male household heads are higher than that of Female household heads. Considering education level of the household heads, the consumption level is more or less the same. Regarding marital status, those who are married consume little more than those who are single. The econometric results of the study showed significant interrelationships between disposable income and consumption plus saving and consumption. The econometric model result pointed that household disposable income directly related to consumption; and saving amount is negatively related with consumption. Finally, Implications and recommendations were suggested in accordance with the major findings. The implications are concreted efforts should be geared towards improving the income base of households. This can be achieved, among other options, through encouraging small businesses and discouraging income generating impediments such as excessive taxation. Through this, more employment will be generated and more income will accrue to the households which will in turn promotes aggregate consumption.

Key words: *Consumption, Disposable income, Household consumption Expenditure, Liquidity, Income tax, Utility, Woreda.*

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

Consumption is the most important component of national income accounting and the aggregate demand. It is the ultimate economic activity on which the welfare of the economy depends and constitutes a major portion of disposable income of the households on micro economic level. Household consumption plays an important role in the socio-economic development. Peoples reasonable consumption patterns and moderate consumption size conducive to sustaining economic health of scale of growth, and this is the concrete embodiment of people's living standards.

Household consumption expenditures consist of the market prices of all goods and services purchased by the households to satisfy their needs and wants. It includes all durable and non-durable goods such as cars, household washing machines, television etc.

Household consumption expenditures excludes purchases of residences but includes owner-occupied residences imputed rent (World Bank, 2007). The consumption decision is crucial for short-run analysis because of its role in determining aggregate demand. Consumption consists of the goods and services bought by households in different product categories. It makes two-thirds of GDP, so fluctuations in consumption are a key element of booms and recessions of the business cycle. The consumption decision is also crucial for long-run analysis because of its role in economic growth. Household consumption expenditures, investment, public expenditures and net export are the components of GDP.

Due to the high share in GDP, consumption expenditures are taken into account in macroeconomic policies for fiscal planning. Policy makers try to predict how the consumers will behave in the face of income fluctuations (M. Gregory, 2015). Household's decision on how much to consume or save is a microeconomic question as it deals with the individual units of the economy. However, it has an influence on the economy as a whole since aggregate household consumption determines the behavior of the economy in the short and long run.

The impact of changes in private consumption on aggregate demand is important for short-term analysis. Consumption accounts for about two-thirds of GDP. Fluctuations in consumption levels

can therefore create shocks for the economy. In the short run, the marginal propensity to consume determines the multiplier for fiscal policy. Individual household consumption also influences long-term analysis as it affects economic growth. The most common terms are:
Consumption and personal consumption are used interchangeably. There are obvious differences between the two. Consumption is the quantity of goods and services consumed over a period of time, and final consumption expenditure is the expenditure on consumer goods over a period of time. A consumption function calculates the total consumption expenditure of an economy.

Various Schools of thought have come up with propositions with regards to the measurement of Consumption. Consumption is one aspect of the human life which cannot be done away with. Even now and then individual households and the Government come across the status of consumption. Despite the fact that consumption is one of the fundamental determinants of aggregate economic activities there is no consensus among economists about the consumption hypothesis which represents consumer behavior. Various Schools of thought have propounded ways of measuring consumption. Of all the Schools of thought, the most commonly used is the Permanent Income Hypothesis (Park, 2016).

A study conducted in Addis Ababa city found that household income and family size as main determinants of the household consumption behavior(Zelalem, 2005). But this study would need more explanatory variables that determine the consumption expenditure of the household. Therefore, this paper analyzes the determinants of Urban household consumption expenditure in the case of Gulelle sub city.

1.2. Statement of the problem

Consumption is perhaps the most important economic behavior of human beings. Because of that, generations of economists have studied the major variables that affect the people's consumption pattern. Income is the most important factors that determine the level of household's consumption and demographic characteristics shape the spending pattern of the households. The consumption pattern of the household may not only vary with income per person in a household but also with its size, age of the head of household, and sex composition. The aging of the population has two implications for the patterns of consumption. First people purchased different things at different ages, for example, younger people spend more on children care services and clothing, while older people spend relatively more on health care. It implies the age of the household head is one of the factors for variation in consumption patterns among household (Bajari et al., 2013).

Consumption as an economic concept has been a source of controversy. Its controversial nature is underlined by the applicable number of studies and contributions that have been made towards establishing its determinants. In effects therefore, a lot of hypothesis are associated with consumption expenditure as economic concept. Among those, the famous American economist Friedman has advanced a hypothesis regarding consumption behavior, called permanent income hypothesis, according to which consumption of an individual depends on permanent income rather than current level of income (Segura, 2006).

Duesenberry has propounded that consumption expenditure depends on income of an individual relative to incomes of others rather than the absolute size of his own income (Duesenberry and James, 1949). In all aspects households face problems to satisfy their needs, because individuals are live in the incomplete world. Therefore, the household consumption expenditure in world, continent and country even at regional level are different. This is due to variation of income and other variables among nations and peoples in the world. When individual income increases, consumption and saving also increases. It implies that consumption is determined by household income (Sitotaw and Nigus, 2006).

A study conduct in Addis Ababa city found that household income and family size as main determinants of the household consumption behavior (Zelalem, 2005). But this study would need more explanatory variables that determine the consumption expenditure of the household.This study wants to search other variables that determine the household consumption expenditure. This is one reason that initiates to conduct a research on household consumption expenditure.

On the other hand, according to (Asimakopulos, 1986) saving or investment is almost proportional and affected by consumption level. That is, if the household consumption has such type effect on the economy, the economy has changed. In least developed countries like the Ethiopia, household are more interested on consumption than investment. Thus, the consumption level of the household can determine the investment level of country.

This study provided an important addition to the existing literature by identifying the determinants of household consumption expenditure in downtown Güle. However, although some research has been done on this topic, the main factors that influence household consumption expenditure in the surveyed regions have not been sufficiently researched. In Ethiopia, several surveys have been conducted on the Amhara region and a subset of the national character and population of southern Ethiopia. Several studies conducted so far ignore the areas of production, marketing, poverty and

microfinance institutions. However, consumption is an economic activity that is not practiced in the study area. Therefore, this paper focuses on the determinants of household final consumption expenditure. People have no plan and poor understanding of what and how much of their income should be spent on daily, monthly and annual consumption. What makes this study different from previous studies is that it helps people understand their income and expenses in the areas studied. Thus, important contextual, conceptual and knowledge gaps based on the factors that influence annual household spending have been closed.

1.3 Research Questions

In general, the study will answer the following basic research questions:

- What are the demographics and socio-economic factors affecting the household consumption expenditures in the study area?
- What is the households‟ consumption expenditure pattern in the study area?

1.4. Objective of the study

1.4.1 **General objective**

The general objective of the study is to identify the Determinants of the Household Consumption Expenditures in Gulelle sub-city of Addis Ababa.

1.4.1 Specific Objectives

The specific objectives of the study were the following:-

- To investigate the major determinants that affect the household consumption expenditure.
- To analyzes the households' consumption expenditure pattern in the study area

1.5. Significance of the study

The importance of this study was to provide better knowledge and understanding of the factors that influence household consumption spending. The study will help develop measures to improve the consumer spending of ordinary households in the study area. It is important to note that this study is the beginning of the research field. The research results will be important in informing governments and stakeholders in addressing consumption issues in society. However, a lot of research has been done on this subject in various fields. What differentiated this study from previous studies was that it filled important knowledge gaps, time and place gaps, and empirical gaps in the research field. Also, this study will be a reference for those who are

interested in doing further research in the same research field in the future. Moreover, a deeper understanding of this paper will help policymakers and planners design appropriate policies and strategies to improve household living standards in the country.

1.6 Scope of the study

The study was conducted in Gulelle Sub-city, one of the sub-city in Addis Ababa, Ethiopia. This study was primarily focused on identifying the factors that influence consumer spending in suburban households. The central idea was to use cross-sectional data collected from surveyed householders to shed light on household final consumption expenditure issues.

1.7 Limitations of the study

The study itself was limited to cross-sectional data on determinants of household consumption expenditure in the downtown area of Gulelle, Addis Ababa, Ethiopia. This study had the following limitations: Although various data quality control measures were used in this study to obtain accurate information, most respondents were reluctant to provide detailed information on their annual income, consumption and savings. Another problem the researchers faced during data collection was that the head of household was not at home on the day of the survey, causing some respondents to be late in completing the questionnaire at the requested time. Other issues that limited the researchers during the study were the generality of the independent variables influencing consumer spending and similar literature limitations as there were no similar studies in the field in question.

CHAPTER TWO

2. LITERATURE REVIEW

2.1Theoretical literature

2.1.1 Definition and Concepts

Consumption is the use of commodities by the household. It is a three stage process, encompassing acquisition of goods and services from all sources, their use to maintain household well-beings and the disposal of consumption residues. Disposal of consumption residues is another neglected aspect of consumption that is being forcefully brought to our attention by growing problems and solid waste disposal and environmental deterioration (Magrabi et al., 1991).

Consumption is simply defined as the total demand for all consumer goods and services. The authors in (Ndubueze-Ogaraku et al., 2016) defined consumption as the spending by households on goods and services such as clothing, food items, entertainment, health services and acquisition of assets among others. Arising from this definition is the concept of consumption function which shows the relationship between consumption and disposable income. The term "consumption" originates from Lord Keynes psychological law which says that men are disposed as a rule and on the average increase their consumption as income increases but not by as much as the increase in their income. This law is known as the Absolute Income Hypothesis (AIH). However, further investigation into the determinants of consumption expenditures have revealed that consumption expenditures is determined by many other factors aside income.

The author in (Keynes and John Maynard, 1936), defined consumption as the part of income that was not saved, there by distinguishing between purchases that satisfy wants directly and investments that became assets in the absence of a satisfactory means of measuring the goods actually consumed, thus monetary measure of consumption has been widely accepted and used as a basis for predicting economic trend.

The author in (Thomas, 2013), opined that consumption represents the total quantity of goods and services bought and consumed by consumers during a period, that is, it is the expression of total consumer demand. In modern industrial economics, consumption as previously defined accounts for 70% to 80% of total national expenditure. On the other hand the authors of

(Schorfheide and Frank, 2010), defined consumption expenditure as the amount that household spends on purchasing goods and services for consumption.

The quantitative association between consumption and disposable (After tax) income was first emphasized by Keynes (Keynes and John Maynard , 1936) in his book the “propensity to consume” although nowadays it goes by the less elegant appellation “consumption function”.

Household: A group of person’s normally living together and taking food from common kitchen constitute a household. The word 'normally' means that the temporary visitors are excluded but temporary stay-a ways are included.Thus a son or daughter residing in hostel for studies is excluded from household of his/her parents, but a resident employee or resident servant or paying guest (but just not a tenant in the house) is included in the employers/host's household. 'Living together' is usually given more importance than „sharing food from a common kitchen“ in drawing the boundaries of a household.

Each inmate of mess, hotel, boarding house, etc. is considered as single member household but a family living in a hotel is considered to be one household only; the same applies to residential staff of such establishments (Sharma, 2016).

Household also incur expenditure that do not result in the acquisition of any goods and services for the direct satisfaction of its own needs such as compulsory and quasi-compulsory transfers made to government, non-profit institutions and other household. These are referred to as the non-consumption expenditure of household. Household expenditure is the sum of household consumption expenditure and non-consumption expenditure (Carrol et al., 1991).

2.1.2 Theory of Consumer Behavior

Microeconomic consumer behavior theory provided a framework for analyzing and understanding consumer behavior. They defined this theory as consumer behavior reflected in the search, purchase, use, evaluation and disposal of goods, services and ideas. Consumer behavior theory studies how, when, and why people buy what they consume, Schiffman and Kanuk (2000). This theory is based on individual decision-making at both the individual and household level to provide marketers with the skills and knowledge necessary to process consumer analysis, understand the market, and develop marketing strategies. It focuses on factors that influence processes, says Hamansu (2008). Buyers have to compromise in purchasing decisions that income is limited and desire is unlimited. Consumers need to weigh their budgets and preferences to buy what they want. Assume that the purchaser is reasonable

and seeks to achieve the highest level of satisfaction given their income and market value. Consumers spend their income in ways that give them the greatest possible pleasure (Colander, 2008).

2.1.3 An Evolutionary Theory of Household Consumption Behavior

The study proposes the following general theoretical formulation, while not yet fully fleshed out, has the promise of bringing many aspects of consumer behavior with encompass of a behavioral and evolutionary economic theory. Regarding the objectives and satisfaction sought by household in their purchase of goods and services, as we have noted a number of empirical studies indicate strongly that the idea that household have a well defend coherent general utility function. In its place, we assume that a household has asset of particular wants it attends and that the goods and services it purchases are intended for use in meeting those wants.

In contrast, the study propose that, while not strictly random, once basic levels of wants satisfaction are met, households can have difficulty in judging whether they are better or worse off when one wants is met better and another less well than in an earlier situation, and their evaluation of this can be in consistent (R.Nelson and David, 2010). This formulation obviously departs from the view in standard neoclassical economics that sees households as having stable well-defined utility functions and acting as "utility maximizers". On the other hand, the formulation is consistent with the view of the households as trying to meet their perceived needs and wants as well as they can give what they know or believe.

It is clear that both the wants that households attend, and the standard means of meeting, are strongly shaped by the culture surrounding a household, and with which its members grow up. But, it also clear that; there are significant differences across households with in a given experiences, circumstances, and other idiosyncratic element (R.Nelson and David, 2010).

Household consumption behavior obviously operates under a set of constraints. Putting cultural bounding and the limits and requirements set by individual household idiosyncrasies aside for a moment, household purchases of the goods and services used in their activities to meet wants are limited by two other kinds of constraints(Mitchell et al., 1999). One is the budget constraints of standard consumer theory. The famous article "the backward art of spending money": despair that many households had little idea as to how to use their budget effectively.

The second constraint stems from the fact the household consumption activities take time. More or less time can be spent sleeping or earning income. People can be hired to perform a variety of

services. Thus, the time constraint for many households contemplating things they would like to do and can afford financially is lack of time to do them (Mitchell et al., 2017). As evolutionary economic theories of the study, recognize that household consumption behavior is never completely static. The circumstance influencing consumption expenditure always includes some new elements. Children get older and adults too. Accidents and illness occur. Old friends move and new ones are made. Ideas are generated for new things to do. These kinds of changes always are going on, even of income and prices are constant.

However, we think the concept household consumption equilibrium is a useful one as a benchmark for analysis of the household response to change condition and perception, and we define such concept below. Household consumption equilibrium involves, first, a set of wants it is attending and a want satisfaction target for each. Second, a collection of activities and activity levels it is using to meet each want, and a customary balance among the several. Third, purchases of inputs associated with those activities and third differential employment. In equilibrium, the mix of activities and their levels, and how the household organizes its activities, just meets want satisfaction targets, and the purchases of inputs fit within the household‟s budget and time constraints with little slack. And of particular importance the household has no tendency to change the circumstance, or changes are the thing it knows or believes (R.Nelson and David, 2010).

2.1.4 The Permanent Income Hypothesis (PIH)

This hypothesis is primarily developed in 1976 winner of prize in University of Chicago; the author's of (Friedman, 1972)point of view is the rejection of the usual concept of current income and its replacement with permanent income. The author in (Friedman, 1972)puts this permanent income is to be interpreted as the mean income regard as permanent by the consumer unit in question which in turn depends on it (Dourn bush, 1975). Households measured or observed income in any particular year may be larger or smaller than its permanent income.

Friedman divides the households measured yearly income into permanent and transitory income, so that is measured income is large or smaller than its permanent income depending on the sum of positive and negative transitory income components.

In the same way, Friedman divides measured consumption in to permanent and transitory components. A good purchased because of an attractive sale price or a normal purchase deferred

due to unavailability of the good are examples of positive and negative transitory consumption (N.Gregory, 2015).

Risk aversion, and the PIH

A key restriction of the model is the absence of any considerations of risk aversion. Given that markets are never found to be complete (e.g. Cochrane, 1991) and Attanasio and Davis, 1996) and given aggregate uninsurable shocks this must be a central issue. Friedman was explicit about the role both of taste shifter variables, such as demographic composition and about uncertainty, in determining the average/marginal propensity to consume. Friedman however, rightly warned against "controlling" in a simple minded way for demographic effects or other variables that may proxy for permanent income, since these could exacerbate the impact of measurement error and falsely imply that the PIH does not work. This "partial correlation analysis", as he calls it, can in his words render a budget study "worthless" however much "loving care" is put into the analysis. This issue recurred in the work of Griliches (1977) many years later in the context of studying the impact of education on wages, when education has been measured with error. The argument indicates, that allowing for taste shifter variables when testing the PIH is a delicate matter and may undermine the hypothesis.

2.1.5 The Life Cycle Hypothesis (LCH)

It is like permanent income hypothesis in that the individual consumption in any given time period does not depend on to a significant degree on his income during that period but depends on value of expected income wealth (Modigliani, 1986). The life cycle hypothesis is based on the argument that the rate of consumption in any given period is a facet of plan, which extends, over his life cycle, although his income displays a quit different pattern over the same year. According to him, age structure of the population is an important determinant of consumption pattern of different households in the economy. Consumption over someone's life time cannot exceeds his lifetime income unless that person is born wealth then according to Franco consumption spending is financed by life time income and wealth (Friedman, 1972).

One important reason that income varies over a person life is retirement. Host people plan to stop working at about age 65 and expect their income to fall when they retire. Yet, they do not want large drop in their standard of living, as measured by their consumption. To maintain consumption after retirement, people must save during their working years (N.Gregory, 2015). Based on the life cycle hypothesis, when a household enjoys an increasing or decreasing in income, there is little effect on consumption.That economic growth must necessarily increase

saving rates was challenged in an early critique by James Tobin (1967). Tobin noted that, if each person expects their incomes to grow throughout their life, then the life-cycle hypothesis would mean that they should consume more than their income in early life, so that there would be dissaving at both ends of the life cycle, financed by saving in middle-age.

Modigliani had no time for the version of the life-cycle hypothesis in which families are assumed to live for ever, in the sense that they are assumed to maximize, not only their own lifetime utility, but a dynastic utility, including also the utility of all of their descendants. In this model of behavior, Robert Barro (1974), established the so-called Ricardian equivalence hypothesis, that government surpluses and deficits have no effect on national saving, because the dynasties perfectly anticipate the implications for future taxation, and can always rearrange their own plans so as to offset government actions and restore national saving to its desired level. Modigliani certainly used theory to help understand the economy. But the man who had meticulously constructed a theory of aggregate consumption by rejecting the idea of a representative agent, had predictably little interest in a theory that was based on such a story.

2.1.6 Absolute Income Hypothesis (AIH)

Keynes (Keynes and John Maynard, 1936) postulated the Keynes psychological law otherwise known as the Absolute Income Hypothesis (AIH).The law says that current consumption expenditures is a function of current disposable income and that as income increases, consumption expenditure also increases but at a decreasing rate. According to him, the marginal propensity to consume (MPC) is less than the average propensity to consume (APC) and that APC falls as income increases. Keynes proposition can thus be summarized as follows:

i. The MPC is positive but less than one
ii. The APC falls as income increases

The inadequacy of Keynes hypothesis led to more investigations on the determinants of consumption expenditures.Prior to Keynes, consumption had been viewed as a passive residual, the amount of income remaining after saving. In this view, the decision of any economic agent to save was determined by the payment for the utility lost from consuming, by implication consumption was depended on the interest rate - a key factor of saving behaviour (Bunting, 2001). Keynes observed that there are not many people who will alter their way of living because the rate of interest has fallen from 5 to 4 percent" (Keynes, 1936: 94).

"The fundamental psychological law, upon which we are entitled to depend with great confidence both a priori from our knowledge of human nature and from the detailed facts of experience, is that men are disposed, as a rule and on the average, to increase their consumption as their income increases, but not by as much as the increase in their income"(Keynes and John Maynard, 1936).

Keynes postulates that as a rule households increase their utility by consuming more of the produced goods and services as their income increases. They increase their well-being by this major component of the aggregate demand.

Research on the aggregate consumption function is thought to have begun with Keynes‟s General Theory, though we need not disregard excellent earlier work of Ramsey (1928) and Fischer (1930). Since then consumption has been the subject of countless theoretical and empirical studies.

Keynes treated consumption on a very "common sense" level. He relied almost entirely on intuition - like most other economists of his day, his methods included neither mathematical theory nor detailed econometrics, as he demonstrated the central principle of his consumption theory.

According to Keynes an economic agent by natural instinct tend as a rule and on the average, to increase his consumption as his income rises, but not by as much as the increase in his income. In his work on the relationship between income and consumption, he came out with the finding that income is the sole determinant of consumption (Tsenkwo, 2011). Keynes gave no basis for his theory in terms of utility maximization nor indeed gave any consideration of why a consumer would behave in the way he assumed.

While Keynes placed consumption theory at the center of the macroeconomic stage, he left it for future generations of economists to work out the micro-foundations for his theory. Keynes also inspired pioneers in the emerging field of econometrics to swarm over the newly invented national income and product statistics looking for verification or refutation of his model (Parker, 2010).

2.1.7 Relative Income Hypothesis (RIH)

The author of (Duesenberry and James, 1949) developed the relative income hypothesis (RIH). The hypothesis says that the APC of a family depends on the family‟s level of income relative to the income of the neighborhood with which he identifies.

The idea is that a family with any given level of income spends more on consumption if it lives in a community in which the income is relatively high. This is probably due to pressure on the family to keep up with other families in the environment.

Hence consumption is a function of the income of the individual and the average income of the group he belongs. Moreover, Duesenberry (Duesenberry and James, 1949) argued that current consumption depends not only on current income but also on the history of income.

2.1.8 Inter temporal Choice

The Inter temporal Choice model was developed by an American Economist called Irving Fisher. The theory materialized in the 1940s, after the failure of the Keynesian model. Contrary to Keynes who assumed that current consumption is mainly determined by current income, Irving Fisher proposed a model which explains how rational consumers make choices concerning how much to consume today and save for tomorrow in order to maximize utility.

He identified that people had a desire to consume more but are constrained by their income. Thus, their budget constraint hindered them from consuming as much as they wanted. He went on to compare consumers‟ decision on how much to consume today with how much to save for tomorrow with regards to the total resources available to him. This is known as the Inter temporal Budget Constraint (Fischer, 1961).

2.2 Households consumption expenditure pattern and its determinants

It is unbiased to assume that people know what they are looking for and have reasons for their preferences when they choose one consumption pattern over another. There are many factors causing these constraints on consumption option of the households. Income is not the only one. Other factors include household size, age of the head of household, education of the head of household etc. (Mignouna and D.B, 2015).

2.2.1 The Impacts of the Age of the Head of the Household on household’s consumption expenditure

Older people have generally shorter life spans and tend to save less and to spend more than younger people. From another point of view, the elderly may have experienced a decrease in income and as such, face the decision of how to allocate money during the late period of the life stage. The age structure of the household plays an important role. Young family members may spend substantially on education, while old people may want to put a good amount of money into health insurance.

People tend to make major investment decisions in their earlier age. It is reasonable to say that people allocate more for entertainment and leisure services during their prime age. As people get older their health the state of their health deteriorates and more is allocated towards health care and health related expenditures (Samuel Berhanu, 1999).

2.2.2 The impact of educational status on household consumption expenditure

The consumer unit's educational attainment and the employment status of the consumer unit head and the spouse are expected to influence the expenditure patterns due to the impact on prices of goods and services and permanent incomes.

Based on home production models of behavior pioneered by (Becker and G. S., 2013), households are postulated to produce basic goods by combining market purchased goods and services with the time of various members of the household. As time becomes more expensive, production of all basic goods will become less time-intensive. The rise in the relative prices of time-intensive basic goods will cause the quantities demanded of such products to decline. This will bring changes in the way consumer units spend their incomes on market purchased goods and services. Hence, any changes in the educational attainment that influence valuation of time can be expected to change the pattern of consumer unit expenditures

2.2.3 The Impact of the Family size on household's consumption expenditure

The more the number of people in a household the more food consumed causing an increase in the share of expenditure for food. The effect of the size of the household has a positive effect on goods and services which are considered basic necessities; goods such as food, health and utilities (Samuel Berhanu, 1999).

2.2.4 Consumption and disposable personal income

The relationship between consumption and personal disposable income is called consumption function. Consumption depends on real disposable income, wealth, the overall price level,

expectations, etc. This means that the decision to spend income on consumption goods largely is determined by these factors. Some of these factors have positive impact on consumption expenditure, others have negative impact. Of all these factors the most important is the level of real disposable income (Mishkin and F. S., 2007).

If real disposable income increases, individual and households are likely to increase their consumption spending. Decreasing real disposable income will depress total consumption. Therefore, there is a positive relationship between real disposable income and consumption (Balli et al., 2011).

2.2.5 The effect of household saving status on household consumption expenditures

The author in (Mutyaba, 2014) defines household savings as the difference between a household's disposable income and its consumption. The household savings rate is calculated by dividing household savings by household disposable income. A negative savings rate indicates that a household spends more than it earns as regular income and finances some of its expenditure through credit or through gains from the sale of assets or by running down cash reserves.

Generally, saving may be thought of as resources created or outputs produced in the current period that are not consumed in the current period but rather are made available for future consumption. With this idea in mind, saving is alternatively defined as income minus consumption, or the change in wealth, or the supply of capital.

In addition, they save to enjoy a sense of financial freedom and independence (independence motive); to secure finance to carryout speculative or business project (enterprise motive); to bequeath a fortune (bequest motive); to satisfy pure miserliness (avarice motive); and finally, to accumulate deposits to buy houses, vehicles and other durables (down payment motive) (Ando et al., 1963).

2.3 Review of Empirical Literature

The empirical analysis of the household consumption behavior was pioneered by the work of Engel. In the mid19th century, he proposed his famous law of consumption, which is formulated based on the family budget studies of different countries. The establishment of this law itself is

thus taken as the first significant quantitative approach contributed to the field (Stigler and G. J., 1954). In addition to this; the author in (Zelalem Tesfaye, 2005), analyzed household consumption behavior in Addis Ababa by using 871 households as a sample size with simple random sampling technique. His methodology was both descriptive and econometric. The variables that he used as explanatory were household‟s income and family size.

Accordingly, both explanatory variables affect household consumption positively. As he mentioned in his paper subsequent studies by ((Magrabi et al., 1991) and (Steyn et al., 2004)) using this law of consumption have proved that the share of food consumption in poor countries is higher than that in rich countries and even within a country it declines over time as its national income raised. Several studies were also attempted to drive generalization about the other categories of consumption, particularly for housing and clothing but the result lack harmony by themselves to provide a universally accepted law like the one for food. Additionally, author of (Kuma, 2010) analyzed changes in consumption patterns in urban Ethiopia, Addis Ababa by using working lesser demand function as a Dependent Variable, per capita income and other demand factors like dependence ratio, age and family dummy As Independent Variables. He used both primary and secondary data. According to his finding, age affects food demand negatively. The demand for high value food items (example: meat, milk vegetables and fruits) increase with higher income. They are also expensive source of energy. This implies that poor households are unlike to access them. This is largely because poor households prioritize to fulfill their basic energy requirement to avoid hunger. This is mainly because high value food to be expensive source of energy for them.

Empirical analyzes of household spending on consumer behavior are influenced by both social and demographic variables such as location, marital status, education, household composition and age, as well as cultural structures and development policies. In Malawi, Magza Tembo and Edris (2014), urban households spend higher in the lower quantile than rural households, and spend more in the upper quantile. A study on the economic determinants of household final consumption expenditure in the West African region conducted by Ekong and Effiong (2020) identified key determinants such as gross national income, inflation, savings and interest rates. Gross National Income and Inflation had a significant positive effect at the significance level of one percent.

In some West African countries, per capita GDP, exchange rates, remittances and domestic credit to the private sector have a positive impact on household consumption. Analysis shows that

inflation has a negative impact on household consumption, Iheonu and Nwachukwu (2020). This study, assessed on the basis of several statistical descriptions and the 2SLS method, showed the socioeconomic and demographic characteristics of respondents employed with middle-aged male workers, indicating that more than 70% of Shown to have been a middle-aged male worker. Families were large, with about 76% 8% (76.8%) of respondents belonging to local cooperatives. Regression results showed that wages, taxes, worker family size, non-food consumption expenditure, and agricultural income affected food expenditure of rubber plantation workers in Cross River State, southern Nigeria (Akpan and et al. al., 2013).

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Households with income near to subsistence level, consume large quantities of grains and starchy staples and few fruits, vegetable, meat, milk, and milk products. Consumer preferences on the other hand, shape the decision of consumer what to do consume or not. Poor households, until they meet physiological need to satisfy hunger, they have little choice but to focus on cheap sources of energy as grains and starchy staples. Once they satisfied their basic energy needs, households start to diversify their diets by including animals' food sources, dairy products and fruits and vegetable (Ruel et al., 2005). Most previous research studies reached from the following results.

First, there has been a considerable improvement in frequency of food consumption between 1994 and 2004. Second, Ethiopians urban consumption pattern is shifting from traditional stable and high value food items such as milk and milk products, meat and fruits. This change in consumption pattern is stronger in Addis Ababa than others. Among others, share of food expenditure spent on meat has registered a radical shift from about two percent in 1994 to 13 % in 2004. This is perhaps expected to continue to increase at a significant rate if current growth

momentum of economy maintained. Third, deviation in average monthly per capita food expenditure between the poorest and the richest is exceedingly wide. The richest group has nine times higher per capita expenditure on food compared to poorest. Fourth, the estimated income elasticity of demand for stable foods is significantly lower than most non- stable high value food products. This imply that food consumption pattern in urban Ethiopia is shifting from stable grain commodities to no stable and high value food products. Fifth, in addition to income, food demand in urban Ethiopia is affected by Regional and demographic factors that are Gender, education, household size and age (Zelalem, 2005) and (Kuma, 2010).

The empirical evidence explained above indicates that the determinants of the household consumption in many areas are similar but, some socio-economic factor, shows different effect based on specific conditions of the study area. Many studies have looked at the effects of income on consumption expenditures. Researchers have studied how family size affect consumption. However there has not been a lot of attention given to other explanatory variables which can affect the independent variable. Even though the previous studies are so good, they are not taken into account some determinants like disposable income, saving and some other socio-economic factor that determine household consumption pattern.

As mentioned above, the biggest factor affecting household consumption is income. So, there are many studies analyzing the relationship between income and consumption in different countries. Christopher D. Carroll, in his study in the United States, investigated the effect of expected lifetime income on consumption and found that consumption was closely related to projected current income, but unrelated to predictable changes in income (Carrol, 1992). One of the studies that analyzed the relationship between income and consumption from different points of view was conducted by Zhu and Jin. In this work they analyzed the relationship between the income and expenditure of city and village population in the Chongqing city of China between 2000 and 2009. They found that the relationship between income and consumption did not change according to village and city criteria, and followed the same trend (Zhu and Jin, 2011).

In line with this finding, (Ezeji et al., 2015) found a positive relationship between consumption expenditure and income. There is a positive and significant effect of income on household consumption expenditures in West Africa. As expected, income is one of the core determinants of consumption especially under the Keynesian framework.

The studies that investigate the effect of household income on the consumption of households in Azerbaijan are Alirzayev (2010) and Rakhmanov's (2017) researches. Alirzayev examined the

impact of long-term income on household consumption in 1995-2008, and found that there is a positive relationship between these variables. Rakhmanov (2017) also found a positive correlation between these indicators and added that the demand for luxury items increased as household income increased in 2000–2015.

One of the important factors affecting the prices of goods and services in the economy is exchange rate. In the literature, there are different studies investigating the relationship between household consumption and exchange rate. McCarthy (2000), in his research covering some industrialized countries in 1976 and 1998, employs vector autoregression model, (VAR) to examine the transition of exchange rates to prices. The McCarthy's study found that exchange rates had a moderate effect on local price inflation, while import prices had a stronger effect. The transition rate was higher in countries with large imports and more constant exchange rates.

There is a positive and significant effect of inflation rate on household consumption expenditure in West Africa. Here, the role of expectations is put to play. When households expect that prices will increase in the future, they are likely to consume more at present to offset the price increase in the future. Households expecting higher inflation are more likely to buy durables compared to households that expect constant or decreasing inflation (D'Acunto et al., 2015)

Taxes are one of the other important factors affecting household consumption expenditures. Taxes are shaping household consumption, because they affect household disposable income and the price of goods and services. There are several studies investigating the impact of taxes on household consumption. Bertola and Drazen (1993) in the study based on the relationship between fiscal policy and expected tax incomes, and Sutherland (1997) in the study of the dynamics of budget deficits and the expected distribution of taxes found that the decrease in taxes has led to an increase in household incomes and expenditures on their consumption.

(Lewis, 2014) studied the relationship between personal well-being and household income and expenditure. The result shows that the distribution of income across society, source of income and spending affect life satisfaction.

Demographics:

As (Gounder N., 2012) Larger families have a propensity to have lower levels of per capita consumption. The results show the coefficient on household size is negative and significant at the 1% level for all the six different regressions. The impact of an additional family member is larger in rural areas (32%) than urban areas (29%). A rather surprising result is the household

size squared, which is positive and significant for all the regressions. Yet this result points out that there may be economies of scale associated with larger households.

As Lanjouw and Ravallion (1995) caution against concluding that larger families tend to be poorer due to the fact that larger members allow sharing or bulk purchases which results in a lower cost per person for a given standard of living as individuals are living together than separately. Also, this result is similar to Mukherjee and Benson (2003) for their study on Malawi. Nevertheless, further research is required as to the critical value of the household size elasticity of the cost of living at which the nexus between poverty and size changes sign. The positive and significant coefficient of the age of the household head indicates that older heads increase household welfare. Squared of household head, however, is negative and significant in all except the Northern and Eastern

estimations. In terms of household with female head, there is no evidence that female headed households have lower or higher consumption. Although the results are rather surprising, it is not entirely reclusive.

For instance, Buvinic and Gupta (1997) show that out of 61 case studies, female

headed households to be disproportionately represented among the poor in only 38 cases. Also, household budget survey in southern Africa found that rural female headed households are no poorer,

and may in fact be less poor, male headed households (International Fund for Agricultural Development, 1999). The marital status of household heads shows no evidence of any influence on the level of household welfare. Also of importance is the coefficient of the ethnicity variable which

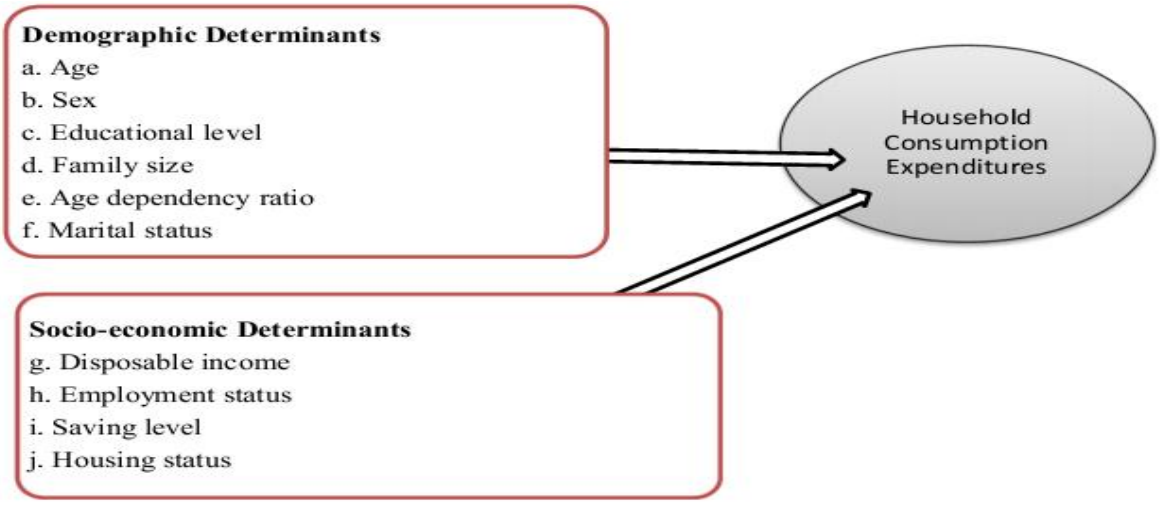
suggests that on average an indigenous Fijian headed household is expected to have a higher per capita consumption in Central and Eastern divisions, and urban areas.

(Caglayanand Astar, 2012) applied Quantile regression method to identify the determinants of household consumption expenditure in Turky Urban, Rural areas and country level . But they did not consider residential housing ownership of the household. In addition they didn't include the result of OLS on their research paper. Their findings show that age increases the consumption expenditure at country and urban areas. (Ekong and Effiong, 2020) found a significant relationship between saving and consumption expenditure. There is a negative and significant effect of savings on household consumption expenditures in West Africa. This is an indication of the prevalence of the life cycle hypothesis in the consumption pattern in West Africa. When more is saved, less will be available for present consumption, hence, the negative effect.

2.4. Conceptual framework

Based on the above literature, any reader of this work can understand which microeconomic variables influence consumer spending at the household level. In surveying the literature on factors influencing household final consumption expenditure, we reviewed key theoretical literature and relevant empirical studies to relate studies to documented data. These empirical studies show how different methods and different data sets in different settings lead to results that are very important for research. However, this study was done at the micro level. Several researchers persuaded themselves to find that household income levels, family size, savings, employment, education level, age, food and non-food prices, and credit availability differed at the individual level. Moreover, even at the national level, national income, national savings, government spending, money supply, interest rates, inflation rates, exchange rates and business cycles generally affect consumer spending.

Figure 1: Conceptual Framework of the Study

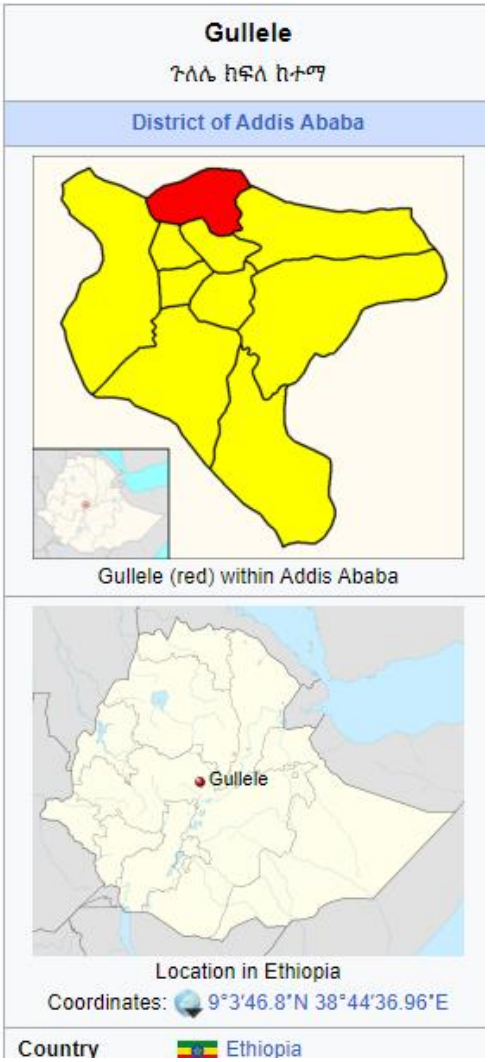


Chapter 3

3. RESEARCH METHODOLOGY

3.1 Description of the Study Area

Gullele is a district of Addis Ababa, Ethiopia. As of 2011 its population was of 248,865. The district is located in northern suburb of the city, near the Mount Entoto and Entoto Natural Park. It borders with the districts of Kolfe Keranio, Addis Ketema, Arada and Yeka.



3.2 Study Design

The study design used for this study is cross-sectional analysis and covers two woredas of Gulelle sub city. Data was collected on ten variables which are taken as a proxy of urban consumption expenditure as a dependent variable. To achieve the desired objectives in this study primary data was used and to maintain the validity of the research most of the questionnaires was adopted from previous researches with modifications.

3.3. Types and Source of Data:

A cross-sectional primary data along with secondary data was employed for the study. The primary data has been collected through a standard questionnaire from sampled households. The questionnaire have set of questions containing both closed ended and open ended questions. Structured Interview Schedule was used to get reliable information on:

- Demographic characteristics like family size, age of the household head, education, gender, marital status to assess the consumption pattern of households and to investigate the major determinants that affect the household consumption expenditures in Gulelle subcity.
- Economic characteristics like employment status, credit availability, inflation expectation, saving status, and disposable income was collected to investigate the major determinants that affect the household consumption expenditures in Gulelle subcity.

3.4 Methods of Data Collection:

Both primary and secondary data sources were used to collect relevant data. As primary data collection instruments, a combination of questionnaires, individual in depth interviews was employed. The secondary data for this study was collected from an internet, newspaper, journals/articles, and policy manuscripts.

3.5. Sampling Design and Strategy:

For the purpose of data collection, sample for the study was selected by using multistage random sampling technique. At the first stage the sub city was subdivided in to a number of geographical clusters (Woredas), and then simple random sampling method was applied to draw two sample Woreda. At the second stage, systematic random sampling techniques was used to the sampled Woreda in order to draw a total sample size of ‘N’ households from the population of the sampled Woreda.

3.6 Sample Size Determination:

To determine the sample size for the study, Kothari (2004)'s statistical formula was used. In order to determine the sample size from the total population, the following formula, Kothari (2004) used:

$$n = \frac{z^2 \,.\, p \,.\, q \,.\, N}{e^2(N-1) \,+\, z^2 .\, p \,.\, q}$$

$n = \frac{15734.23}{41.9154}$

n=375.5

Where:

n - Sample size

N - Total households of the town

e - Precision level (standard error (0.05 for 95% confidence interval) = 5%

z - Confidence level (standard variate as per table of area under normal curve for the given confidence level of 95%) = 1.96

P - Proportion of success (probability to be included in the sample) = 50% = 0.5 based on most conservative sample size.

q = proportion of fail = (1-p) = 0.5 = 50%

We get n = 375, where 'n' is the calculated Sample size. These 390 sampled households are respondents to collect primary data.

3.7 Method of data analysis

3.7.1 Descriptive Analysis:

- Descriptive statistical methods such as mean, standard deviation and percentage was used to describe the data gathered from households to assess the consumption pattern of households in Gulelle subcity of Addis Ababa;

3.7.2 Econometric Analysis

1. Model Specification

- The model was estimated by using OLS (ordinary least squares) to investigate the major determinants that affect the household consumption expenditure, and it was used to determine socio-economic and demographic factors affecting the household consumption expenditure.

Ordinary least squares (OLS) is a linear regression technique used to find the best-fitting line for a set of data points. It is a popular method because it is easy to use and produces decent results. The regression model specifies as follows:

$C_i = \beta_0 + \beta_1 Ydi + \beta_2 Agei + \beta_3 Ni + \beta_4 Educi + \beta_5 Si + \beta_6 Genderi$ +Emplo+FuInc+InfExp+CredAvl μi

- Ci = total household consumption expenditure per month of a household (in Birr) , i= 1,2,…100
- Y_di =disposable income per month of the household
- Ni =family size of the household.
- Educi =education level of household head (1= primary education(1-8) 2= secondary education(9-12) 3= college level education 4= higher level education)
- Agei = age of household head in year
- Si = household saving status:(yes=1, no=0)
- Genderi =gender, if the respondent is male=0, female=1
- Emplo= Employment status of the household
- FuInc= Future income expectation of the household.
- InfExp= Inflation expectation of the household.
- CredAvl= Credit availability for the household.
- μi =error term
- Bi=coefficient of explanatory variables
- B0 =autonomous consumption or constant

2. Variable Hypothesis

I. Dependent Variable: Household Consumption Expenditure

Household consumption expenditure is obtained by adding reported household expenditure on food and non-food items. The definition of consumption is quite comprehensive as it incorporates all food and non-food items consumed. But expenditure on durable goods are excluded. So for this analysis consumption expenditure will be dependent variable.

II. Independent Variables

According to (Caglayan ,and Astar, 2012) the following are the major explanatory variables that affect consumption expenditures of households.

- Household disposable income (Yd) - It is the income after tax (net income of the household from different source of income).
- Family size (ni):- It is the total numbers of the household members.
- Age of the household head (age)
- Education level of the household head (Educ)
- Saving status of the household (si)
- Employment status of the household(Eplom)
- Future income expectation of the household(FuInc)
- Inflation expectation of the houseold(InfExp)
- Credit availability for the household(CredAvl)

(D'ACUNTO et al., 2015) analyzed the effect of inflation on household consumption expenditures (Beaton, 2009) investigated the effect of credit availability on consumption expenditure.

Table. 01 Variable Description

Explanatory Variables	Variable Discription	Variable Code	Variable Type
Household disposable income	Disposable income of the respondents in ETB	Yd	Continuous
Saving Status	Saving status of the respondents in ETB	si	Continuous
Family size	Number of family size: person per household	ni	Continuous

Age of the household head	Age of the respondents in year	age	Continuous
Education level of the household head	Educational level of the respondents in years of schooling	Educ	Continuous
Employment status of the household	Employment status of the respondents whether they are educated or not.	Eplom	Dummy
Future income expectation of the household		FuInc	Continuous
Inflation expectation of the houseold	Inflation expectation of the respondents.	InfExp	Continuous
Credit availability for the household	Credit availability for the respondents, Yes/No question.	CredAvl	Dummy

CHAPTER FOUR

RESULT AND DISCUSSIONS

4.1 Descriptive Analysis

This chapter presents the finding of study with the consumption pattern of households in Gulelle sub city and the evidence on the determinant of urban household consumption expenditure On the study area. The data collected are presented and analyzed descriptively using tables, percentiles and figures.

- Descriptive result of Patterns of consumption of respondents

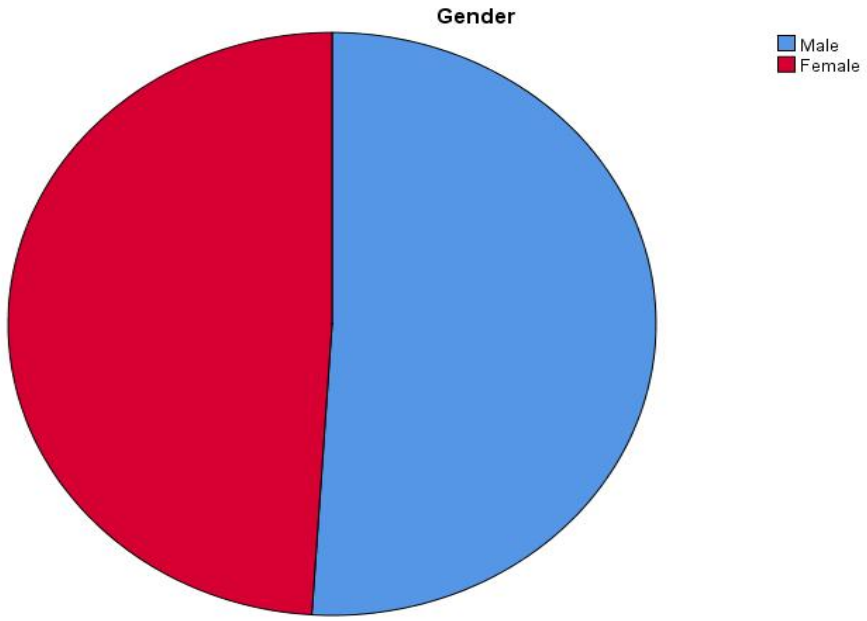
Variables	Min.	1st Qu	Median	Mean	3rd Qu	Max
Education	58.0	300.0	400.0	542.6	700.0	2500.0
Food	300	1950	2500	2779	3000	13000
Energy	20.0	100.0	158.5	240.3	300.0	1100.0
Health	12.50	54.25	112.50	262.09	200.0	5000.0
Recreation	10.0	100.0	200.0	289.6	387.5	2000.0
Cloth	41.0	250.0	400.0	649.3	800.0	6000.0
Social life	20.0	260.5	417.0	570.7	600.0	3000.0
Other	7.0	92.5	200.0	343.8	412.8	4000.0
Total	683	3738	4586	5359	6133	16433

Table 4.1 Patterns of consumption of respondents

As the above Table shows, households expend more for food and next to this for cloth, Social life and education. Fewer amounts were spent to recreation, health, and energy usage (based on mean value). For other social and miscellaneous activities like washing, transportation and so on together a house spends a mean value of less than 500 birr monthly.

4.1.1 Sex distributions of the respondents

Figure 4.1 Sex distributions of the respondents



Source: own survey, 2023

From the above figure, 51 % of the sample respondents are males and the remaining 49 % of the sample respondents are females.

4.1.2 Family size of the respondents

Table 4.2 Household family size

Household family size

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	11	11.0	11.0	11.0
	2	20	20.0	20.0	31.0
	3	29	29.0	29.0	60.0
	4	23	23.0	23.0	83.0
	5	10	10.0	10.0	93.0
	6	4	4.0	4.0	97.0
	7	1	1.0	1.0	98.0
	8	1	1.0	1.0	99.0
	10	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

Source: Own survey, 2023

The above table 4.2 shows that, 60% of the respondents have family size of 1-3, 36% of the respondents have family size of 4-6, 3% of the respondents have family size of 7-10. This implies that the majority of the sample respondents have family size of 1-3.

4.1.3 Total monthly household consumption expenditure of respondents

Statistics

Total household consumption expenditure per month

N	Valid	100
	Missing	0
Mean		5997.24
Std. Error of Mean		433.943
Median		5185.00
Mode		4100
Std. Deviation		4339.428
Variance		18830633.073
Skewness		3.159
Std. Error of Skewness		.241
Kurtosis		13.142
Std. Error of Kurtosis		.478
Range		28900
Minimum		1100
Maximum		30000
Percentiles	25	3708.75
	50	5185.00
	75	6812.50

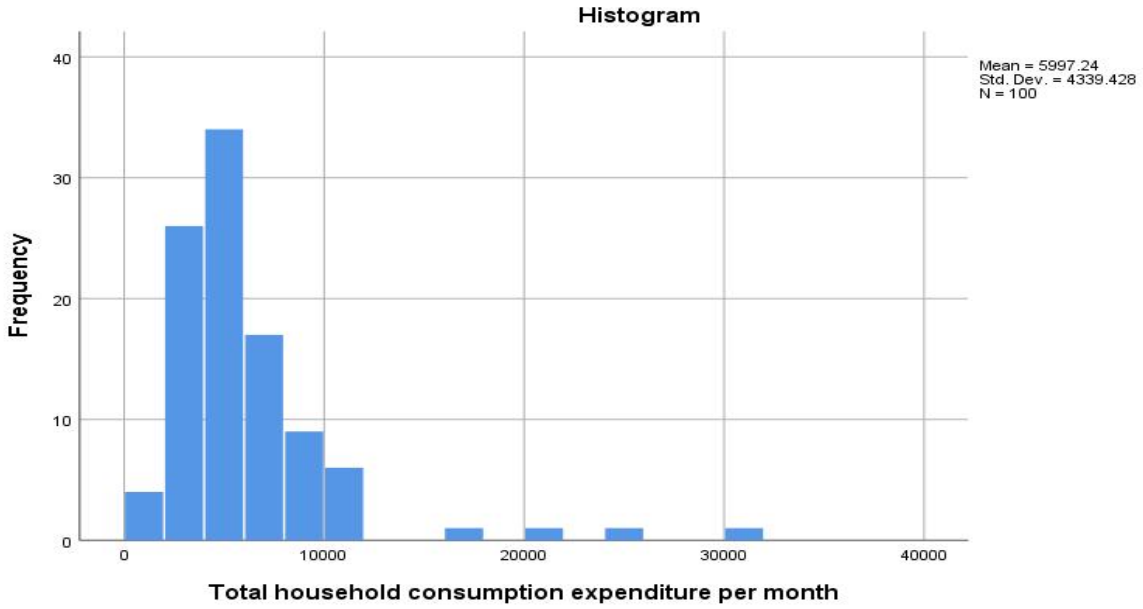
Source: Own survey, 2023

Table 4.3: Descriptive result of Total monthly consumption of respondents

As shown in Table 4.3 above, the minimum monthly consumption level is 1100 Birr, maximum 30,000 Birr. Half (50%) of the respondents was consumed less than 5500 Birr (Median value) and the rest above this value. The mean was 5997.24 Birr, large as compared to median. This is because some households consume high as compared to most of the households, indicated by a skewness value (3.159 which is greater than zero). So the data is near to approximately normal.

The kurtosis value (=13.142 >3) also indicates the consumption data has a thin bell with a high peak which is leptokurtic. (See the figure below).

Figure 4.2 Histogram of total household expenditure vs. frequency



Source: Own survey, 2023 SPSS Output

4.2 Econometric results

4.2.1 Regression Analysis

In order to investigate the major determinants that affect the household consumption expenditure a multiple regression analysis was carried out to determine the influence of independent variables on the dependent variable. Multiple regressions also used to determine the overall fit (variance explained) of the model and the relative contribution of each of the predictors to the total variance explained.

According to Dougherty C. (2007), the correct use of the multiple regression models requires that several critical assumptions be satisfied in order to apply the model and establish validity. Inferences and generalizations about the theory are only valid if the assumptions in an analysis have been tested and fulfilled.

Before carrying out multiple regression analysis, the researcher has checked the required assumptions that the data must meet to make the analysis reliable and valid. The following assumptions of multiple linear regressions were tested using SPSS.

After the data was checked for the above required multiple regression assumptions and confirmed that it has meet all these assumptions, multiple regression analysis was carried out to determine how well the regression model fits the data (model summary), independent variables

statistically significantly predict the dependent variable (ANOVA) and statistical significance of each of the independent variables (regression coefficients).

4.2.2 Model Summary

Goodness of fit of the model

The goodness of fit of the model is measured by coefficient of determination, which measures the percentage of the total variation in the dependant variable that is explained by the variation of all the explanatory variables included in the model As indicated in the table below model summary table (table 4.4), The "R" column represents the value of R, the multiple correlation coefficient. R value of 0.922 indicates very strong correlation between urban household consumption expenditure and the eleven independent variables which shows a good level of prediction. The "R Square" column represents the R2 value (also called the coefficient of determination), which is the proportion of variance in the dependent variable that can be explained by the independent variables. As shown from the below table, R2 value of .851 indicates that 85.1% of the variation in the urban consumption expenditure in Gulelle Sub-city of Addis Ababa can be explained by the demographic & socioeconomic determinants (independent variables included in the model).

Table 4.4 Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.922[a]	.851	.817	1853.891

Table 4.4: Model Summary

a. Predictors: (Constant), Emplo = Self-employed, Marital = Widowed, Household family size, Educ = Preparatory, Inflation Expectation, Educ= None, Emplo = Unemployed, Educ = Highschool, Credit Availability, Household saving status, Gender, Educ = Elementary, Future Income Expectation, Marital = Divorced, age of the household head, Marital = Single, Educ = Basic, Household disposable income per month

b. Dependent Variable: Total household consumption expenditure per month

Source: Own survey, 2023 SPSS Output

The model summary table contains multiple correlations (also known as multiple R) between the set of IV's and the DV. The Value of R and R-square range from 0 to 1. R-square is positively biased (as an estimator of population R-square) when sample size is smaller and there are greater number of predictors. The adjusted R-square provides on adjustment to R-square based on the sample size and number of IV's in the model. In this output, there is very little difference between R-square (.851) and the adjusted R-square (.817). The difference between R-square and adjusted R-square is shrinkage.

4.2.3 ANOVA Model Fit

The F-ratio in the below ANOVA table (table 4.13) tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly predict the dependent variable, $F = 25.761$, $p < 0.05$ (i.e., the regression model is a good fit of the data).

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1602333045.458	19	84333318.182	25.761	.000[b]
	Residual	261899628.782	80	3273745.360		
	Total	1864232674.240	99			

Table 4.5: ANOVA

a. Dependent Variable: Total household consumption expenditure per month

b. Predictors: (Constant), Emplo = Self-employed, Marital = Widowed, Household family size, Educ = Preparatory, Inflation Expectation, Educ= None, Emplo = Unemployed, Educ = Highschool, Credit Availability, Household saving status, Gender, Educ = Elementary, Future Income Expectation, Marital = Divorced, age of the household head, Marital = Single, Household saving status, Educ = Basic, Household disposable income per month

Source: Own survey, 2023 SPSS Output

The ANOVA table shows P value for F test is less than 5% this implies at least one of the explanatory variable included in the model is a relevant variable in explaining total urban

household expenditure per month. From the regression result F calculated is 25.761 and p value is 0.0000 this shows that reject null hypothesis and accept alternative hypothesis. That means the coefficient of all explanatory variables affect the variation of urban household consumption expenditure is statistically significant. By excluding other variables and fitting the model with significant variables at 5 % level of significance the model with higher precision was made.

4.2.4 Regression Coefficients

Table 4.6: Regression coefficients

Source	Ss	df	Ms	No of Obs= 369
Model	5.5345e+09	8	691807710	F(8, 360) = 139.40
Residual	1.7866e+09	360	4962831.7	Prob >F= 0.0000
Total	7.3211e+09	368	19894242.1	R-squared = 0.7560
				Adj R-squared = 0.7505
				Root MSE = 2227.7

Ci	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]
Ydi	.232621	.0096906	24.00	0.000	.2135633 .2516788
Agei	-20.74955	10.2422	-2.03	0.044	-40.892 -.6071078
Ni	760.2626	88.15945	8.62	0.000	586.8871 933.638
Educi	-103.6424	78.37104	-1.32	0.187	-257.7679 50.48306
Household Saving status	-.898	289.5591	-13.55	0.000	-40.34238 1098.559
Genderi	-218.9126	269.0006	-0.81	0.416	-747.9326 310.1073
Emplostat	-163.8608	225.8456	-0.73	0.469	-608.0115 280.2899
marital	-42.12201	143.4327	-0.29	0.769	-324.1986 239.9545
FuInc	-351.3872	279.0351	-1.26	0.209	-900.1411 197.3668
CredAvl	1192.693	287.9725	4.14	0.000	626.3633 1759.024
_cons	1809.987	143.4327	3.17	0.002	685.8627 2934.112

Source: Survey (2023)

Standardized Coefficients

The standardized coefficients are useful to know which of the different independent variables is more important. They are used in comparison of impact of any independent variable on the dependent variable. As indicated in regression coefficients table (table 4.5), household disposable income had the highest standardized coefficient (1.755) followed by credit availabilty (.89). This revealed that household disposable income, saving status and credit availabilty had higher relative effect on the consumption expenditure of households. familysize, age, gender, marital status, education, inflation expectation, employment status and future income expectation

had been ranked from four to eleven respectively in their relative importance on consumption expenditure of households.

As it can be seen from the regression coefficient table, the predictor variables of household disposable income per month, saving status, and credit vailability are statistically significant in predicting consumption expenditure of urban households because all their p-values are less than alpha level of 0.05. However, the p-value for age (0.717) , family size (0.228) and gender (0.317) and for future income expectation, inflation expectation, marital status, employment statuand education are greater than alpha level of 0.05, which indicates that they are not statistically significant which shows that changes in those variables are not associated with changes in the dependent variable (consumption expenditure of urban household). As table 4.5 shows as age, disposable income, family size, marital status , gender, education, employment and credit availability has positive effect. Future income expectation, inflation expectation, and saving status has negative effect.Therefore null hypothesis are all accepted.

Unstandardized Coefficients

Unstandardized coefficient denotes the change in the dependent variable with a unit change in the independent variable. But they are not comparable in terms of impact on the dependent variable. As stated in chapter three, the study used the following multiple regression model to

Ci = 810.13 + 0.575Ydi – 6.847Agei + 22.14Ni – 449.96(fem) – 0.927Si – 296.07 Fulnc + 825.35 Credavl – 296.69Infexp + 339.58(illitera) – 309.3(Basiclit) -41.65(highsc) -535.62 (prepa) – 663.17(Ele) + 121.8(sing) -304.07(divor) + 438.57(wido) + 346.8(unemplo) +143.37(selfemplo) + u

Where;

- ✓ Ci = Household consumption expenditure
- ✓ Ydi = disposable income per month, sing = single
- ✓ Agei = age of the household head, divor = divorced
- ✓ Ni = family size, wido = widowed
- ✓ Fem = female, unemplo = unemployed
- ✓ Fulnc = future income expectation, selfemplo = self-employed
- ✓ Credavl = credit availability of the household, u = error term
- ✓ Infexp = inflation expectation
- ✓ Illitera = illiterate
- ✓ Basiclit = basic literacy
- ✓ Highsc = highschool

- ✓ Prepa = preparatory
- ✓ Ele = elementary

The constant value (β0 = 810.13) shows that household consumption expenditure of study area would be 810.13. Regression coefficient results shows that three out of the eleven variables are statistically significant in predicting the household consumption expenditure of the study area. The statistically significant variables are household disposable income, saving status and credit availability as evidenced by their P-values (P<0.05).

Interpretation of Significant Variables

Household disposable income per month

The regression result shows that urban household disposable income had positively and significantly affects urban household consumption expenditure at 5% level of significance. By keeping all other explanatory variable constant, as disposable income of the household in increase by one thousand urban household consumption expenditure increases by 57.5%. The econometric estimation result basically feet with the prior positive Null hypothesis and hence, it is not rejected at 5% significance level.

The finding is somehow consistent with the finding of Zehiwot Honea and Senapathy Marisennayyab (2019) in Debremarkos town, Amhara region in which increment in consumption expenditure was found to be the result of arable increase in household disposable income. But, the study was conducted on rural households.

Household saving status

The regression result shows that saving status had negatively and significantly affects urban household disposable income at 5% level of significance. By making all other explanatory variable constant, as household saving status increase by one thousand urban household consumption expenditure would decrease by 92.7%.

Credit availability

The regression result shows that credit availability had positively and significantly affects urban household disposable income at 5% level of significance.

Table 4.7: IV's relative contributions to the regression model.

	Semi-partial	Squared semi - partial	Rank of importance
Household disposable income	0.776	0.602	1
Household credit availability	0.189	0.035	3
Household saving status	-0.605	0.366	2

Source: Own survey, 2023

The final model is written as follows:

$\widehat{C}$ = 810.13 + 0.575Ydi + 825.35Credavl – 0.927 Si

Where,

- $\widehat{Ci}$ = Represents estimated monthly total consumption of the urban household
- Ydi = household disposable income per month (measured in Birr)
- Credavl = household Credit availability
- Si = household saving status (measured in Birr)

The model above tells us, disposable income and credit availability are positively related with consumption whereas saving is negatively related. The value 825.35 is the marginal increase to consumption for one additional increase of a Credit availability, while saving amount and disposable income held constant. If saving amount increases consumption will decrease. (The sign is negative). As disposable income increases also is consumption. This supports the theory of consumption. The multiple R squared value = 0.851, indicates about 85.1% of variation of consumption is due to disposable income, saving amount and credit availability. The rest 14.9 %

is due to other factors not mentioned in the model. Thus R square is large, indicating the model fits well to the data.

4.3 Diagnostic test

4.3.1 Multicollinearity test

Multicollinearity exist when two or more explanatory variables of the model are linearly interdependent each other. Interdependence of explanatory variables is tested by Variance inflating factors (VIF). If VIF is greater than or equal to ten (VIF ≥10) or tolerance (1/vif) is less than or equal to 0.10, accept alternative hypothesis that is multicollinearity. If VIF is less than ten (VIF<10) or tolerance (1/vif) is greater than 0.10 (1/VIF) > 0.10, accept null hypothesis that is no multicollineanrity.

Result of Multicollinearity test

Hypothesis

Vif<10: no problems of mulicollinearity

Vif>/=10: there is a problem of Multicollinearity

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Household disposable income per month	.069	5.108
	Household saving status	.072	4.997
	Credit Availability	.654	1.529

Table 4.8: collinearity statistics

Source: Own survey, 2023 SPSS Output

From the result VIF is less than 10 for all of independent variables that are included in the model. From this the Null hypothesis is accepted and the conclusion is that there is no problem of multicollinearity between explanatory variables.

4.3.2 Hetroskedasticity test

Hetroscedasticity occurs when variance of random disturbances term around its zero mean is not constant or changes with the explanatory variable of the model. It causes the variance of Ordinar least square (OLS) parameter estimates large and hence less precise but presence of hetroscedasticity does not affect unbiasedness and consistence properties of OLS estimators.

Under the presence of hetroscedasticiy the variance of the coefficient of OLS estimate are incorrect and inefficient

The presence or the absence of hetrodcedarstocity in the model can be tested by Cameron & Trivedi 'decomposition of IM-test. If p-value is below the chosen level of significance (5%), we reject null hypothesis and accept alternative hypothesis that means there is hetroscedasticity (large variance). Otherwise, rejected alternative hypothesis and accept null hypothesis that means there is Homoscedaticity (constant variance).

Hypothesis

Ho: constant variance

Ha: not constant variance

The result shows that p-value (0.460) is above the chosen level of significance (5%), we reject alternative hypothesis and accept null hypothesis that means there is homoskedasticity (constant variance). Therefore there is no problem of hetroscedasticty (see appendix)

4.3.3 Normality test

Ordinary least square (OLS) assumes that the random term U has a normally distributed. Symbolically which read as: U is normally distributed around zero mean and constant variance. This means that small value of U's have a higher probability to observe than large values. This assumption is necessary for constracting confidence interval. If the assumption of normality is violated, the estimate of parameters are still unbiased but the statistical reliability by the classical tests of significance of the parameters can not be assessed becouse this tests are based on the assumption normal distribution of the U. The normality test adopted Shapiro-wilk test for normal distribution. This test computes the skeweness and kurtosis measure of the OLS residual and it follows the chi square distribution (SHAPIRO et. al., 1965). The null hypothesis is that has normal distribution against the alternative hypothesis that the U is not normally distributed.

Hypothesis

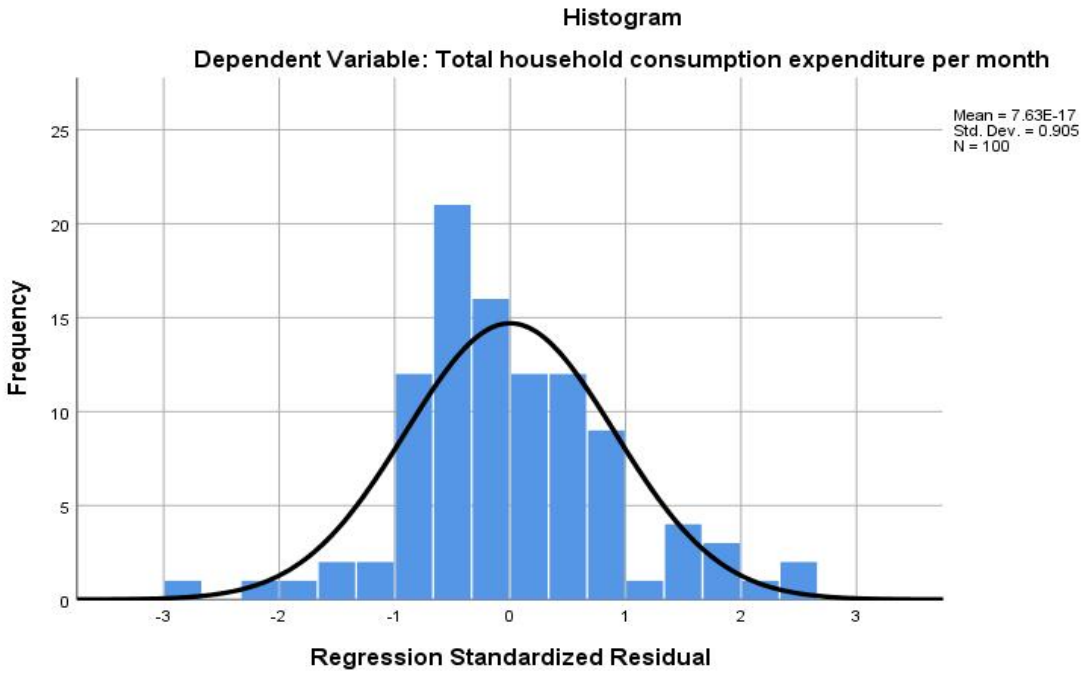
Ho: u is normally distributed

Ha: u is not normally distributed

The result show lower p-value ($p = .00 < .05$) for the three IV's, which implies that the residual (error term) do not follows Normal distribution. So, the null hypothesis is rejected. And it has been presumed that there is a statistically significant difference between household disposable,

credit availability, and saving status and normal distribution. And the IV's are not normally distributed. (see appendix)

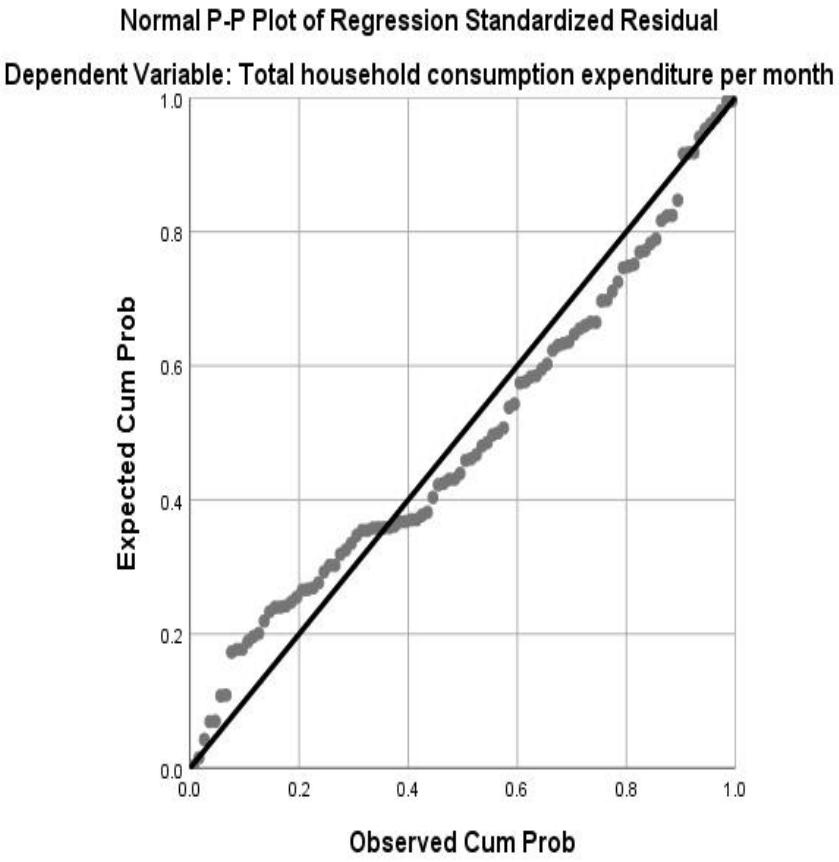
Fig. 4.3 frequency vs. regression standardized residual



Source: Own survey, 2023 SPSS Output

One of the assumptions of the linear regression is that the residuals are normally distributed. Here, the residuals exhibit only a minor departure from normality.

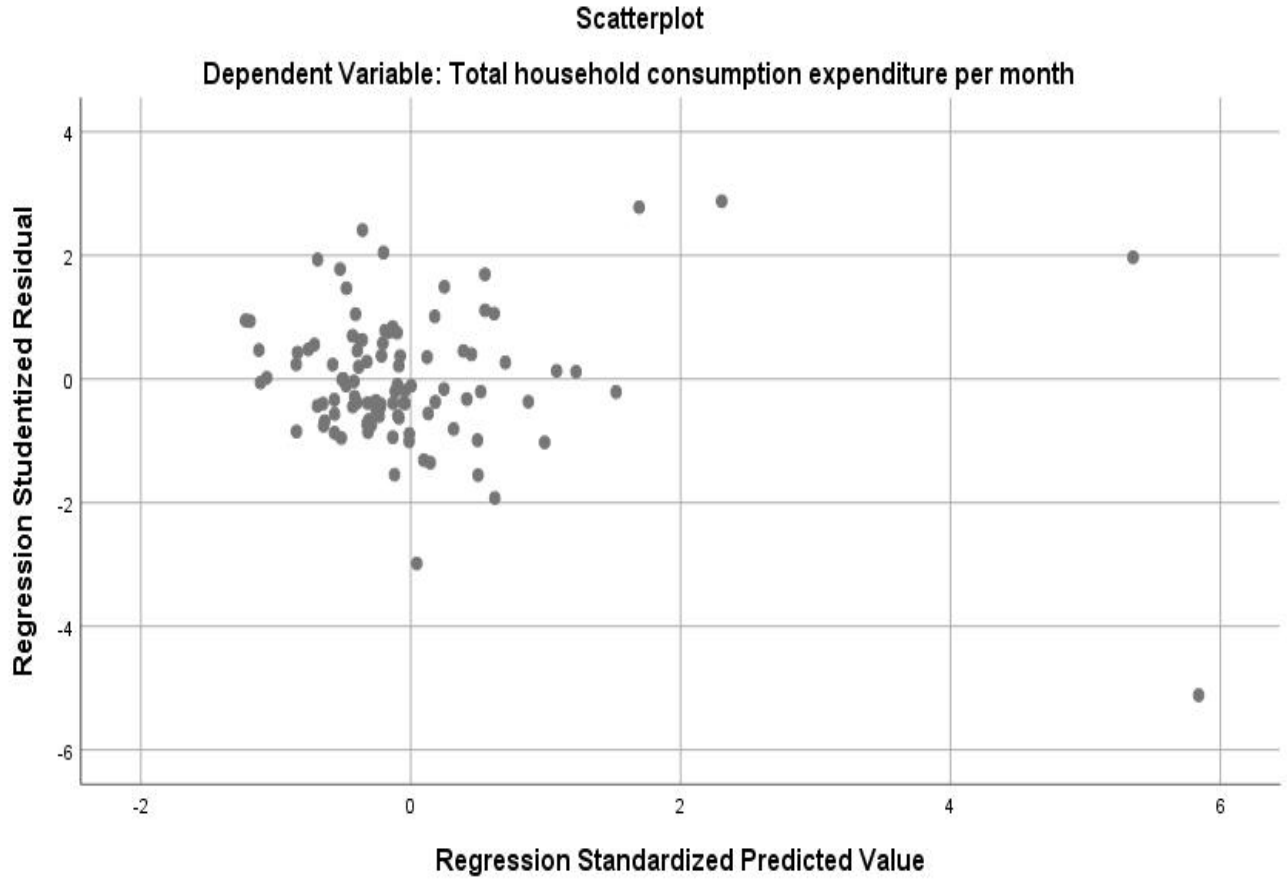
Fig. 4.4 Normal p-p plot of regression standardized residual



Source: Own survey, 2023 SPSS Output

The normal P-P plot can also be used to assess normality of the standardized residuals. This plot shows the relationship between the observed residuals against those expected under the condition of normality. The closer observed residuals fall in relation to the regression line, the more evidence of normality.

Fig. 4.5 scatterplot between regression Studentized residual vs. regression standardized predicted value



Source: Own survey, 2023 SPSS Output

A plot of the studentized residuals against the standardized predited values shows some residuals has the largest distance from the regression line (the horizontal line at 0). The remaining cases have considerably lower distances from the regression line.

CHAPTER FIVE

5. CONCLUSIONS AND RECOMMENDATION

5.1 CONCLUSION

The main core objectives of the study was To assess the consumption pattern of households in Gulelle subcity of Addis Ababa and to analyze the determinants of urban household consumption expenditures in the study area. A total of 100 households were included in the present study using simple random sampling technique from the two woredas. Descriptive and inferential statistics were applied.

Descriptive statistics revealed the consumption pattern of the households in the study area. The households spend on food monthly with minimum 300 and a maximum of 13000 birr while, fewer amounts were spent to recreation, health, and energy usage. For other social and miscellaneous activities like transportation and so on together a household spends a mean value of less than 500 birr monthly.

The multiple regression model reveals the major determinants of urban household consumption of the study area. The overall model is statistically significant for the data. All the assumption of regression analysis was satisfied. Normality, constant variance, absence of Multicollinearity, linearity and absence of autocorrelation were satisfied due to formal tests and diagnostic plots.

From results obtained in descriptive and econometrics analysis Disposable monthly income, consumption expenditure, and saving amount of Male household heads are higher than that of Female household heads. Most of the households consume around 5997.24 Birr monthly in the study woredas.

Even though education level and marital status are not significant, they may have effect on daily life decisions. And Urban household Disposable income is found to be most determinant factor to confirm the household consumption expenditure. While Disposable income and credit availability are directly related to consumption and saving status is negatively related with consumption.

5.2 Recommendations

Based on the findings of the study, it is recommended that concreted efforts should be geared towards improving the income base of households. This can be achieved, among other options, through encouraging small businesses and discouraging income generating impediments such as excessive taxation. Through this, more employment will be generated and more income will accrue to the households which will in turn promotes aggregate consumption.

The study recommend that government of Ethiopia especially Gullele sub city should design and implement policies that raise disposable income of households so that the households work to earn more money and make their living standard better by not only spending their money for food but also other aspects of their life. And it is advisable for households to improve their income level per month by involving in various different activities that help them generate additional income. Focus should also be placed on the raising household saving through financial education, training and information provision.

Policy must be put into place as a mechanism to control the natality rate. And Family planning practice is important to limit family size. As such it is possible to minimize consumption and it increases saving amount. Households should be aware of saving habit rather than spending more to extraneous activities.

Further research study should be conducted in other sub cities of Addis Ababa and comparison may be done for future.

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APPENDICES

Appendix I SPSS output table

1. Multicollinearity Test Result

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Household disposable income per month	.069	5.108
	Household saving status	.072	4.997
	Credit Availability	.654	1.529

Table 4.8: Multicollinearity test result.

Source: Own survey, 2023 SPSS Output

1. **Normality Test**

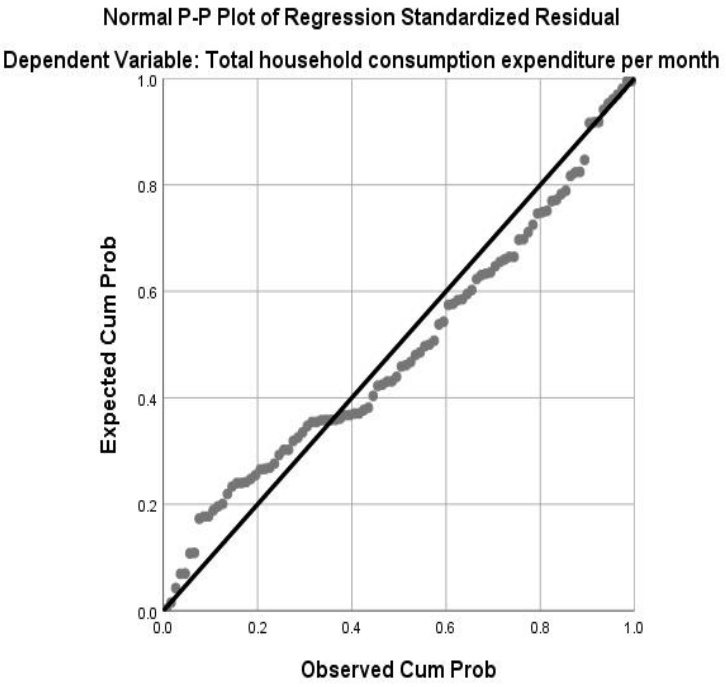
Tests of Normality

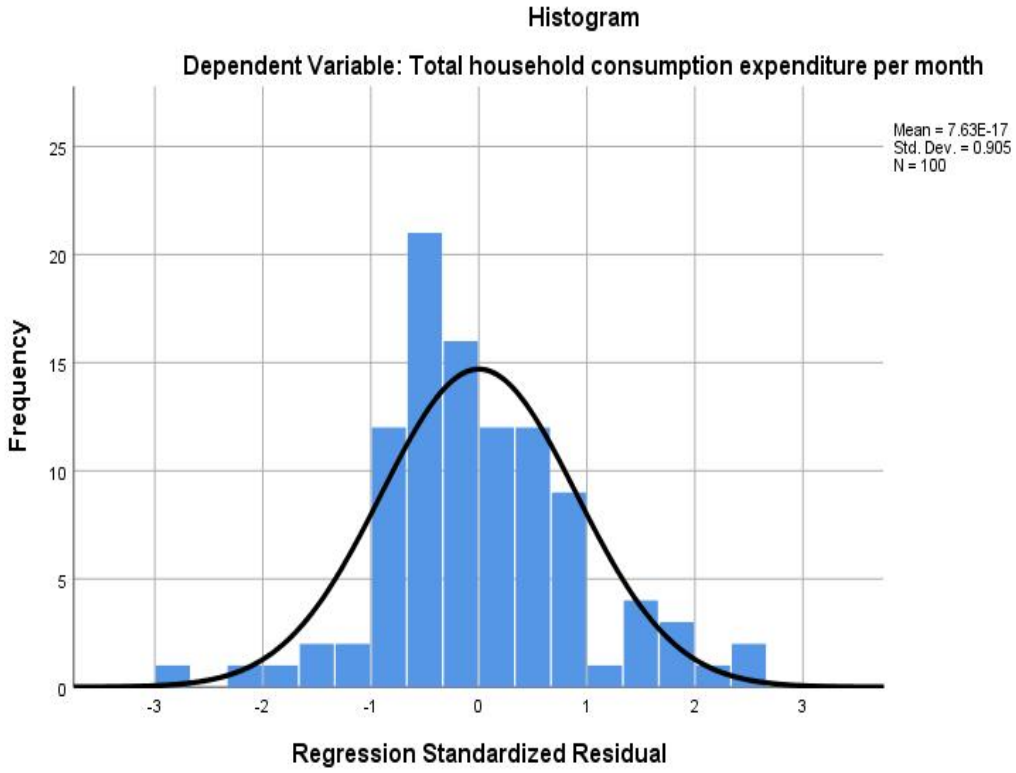
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Household disposable income per month	.275	100	.000	.431	100	.000
age of the household head	.102	100	.012	.973	100	.034
Household family size	.173	100	.000	.904	100	.000
Education level of house hold head	.208	100	.000	.860	100	.000
Gender	.345	100	.000	.636	100	.000
Employment status	.376	100	.000	.716	100	.000
Household saving status	.339	100	.000	.371	100	.000
Marital status	.336	100	.000	.792	100	.000
Future Income Expectation	.340	100	.000	.636	100	.000
Credit Availability	.433	100	.000	.587	100	.000
Inflation Expectation	.407	100	.000	.611	100	.000
Educ = None	.540	100	.000	.225	100	.000
Educ = Basic	.539	100	.000	.252	100	.000
Educ = Highschool	.516	100	.000	.411	100	.000
Educ = Preparatory	.499	100	.000	.466	100	.000
Educ = Elementary	.486	100	.000	.500	100	.000
Marital = Single	.477	100	.000	.520	100	.000
Marital = Divorced	.535	100	.000	.301	100	.000
Marital = Widowed	.516	100	.000	.411	100	.000
Emplo =Unemployed	.538	100	.000	.278	100	.000
Emplo = Self-employed	.462	100	.000	.547	100	.000

Table 4.9: Normality Test

a. Lilliefors Significance Correction

Source: Own survey, 2023 SPSS Output





Source: Own survey, 2023 SPSS Output

2. Heteroskedasticity test

ANOVA[a]

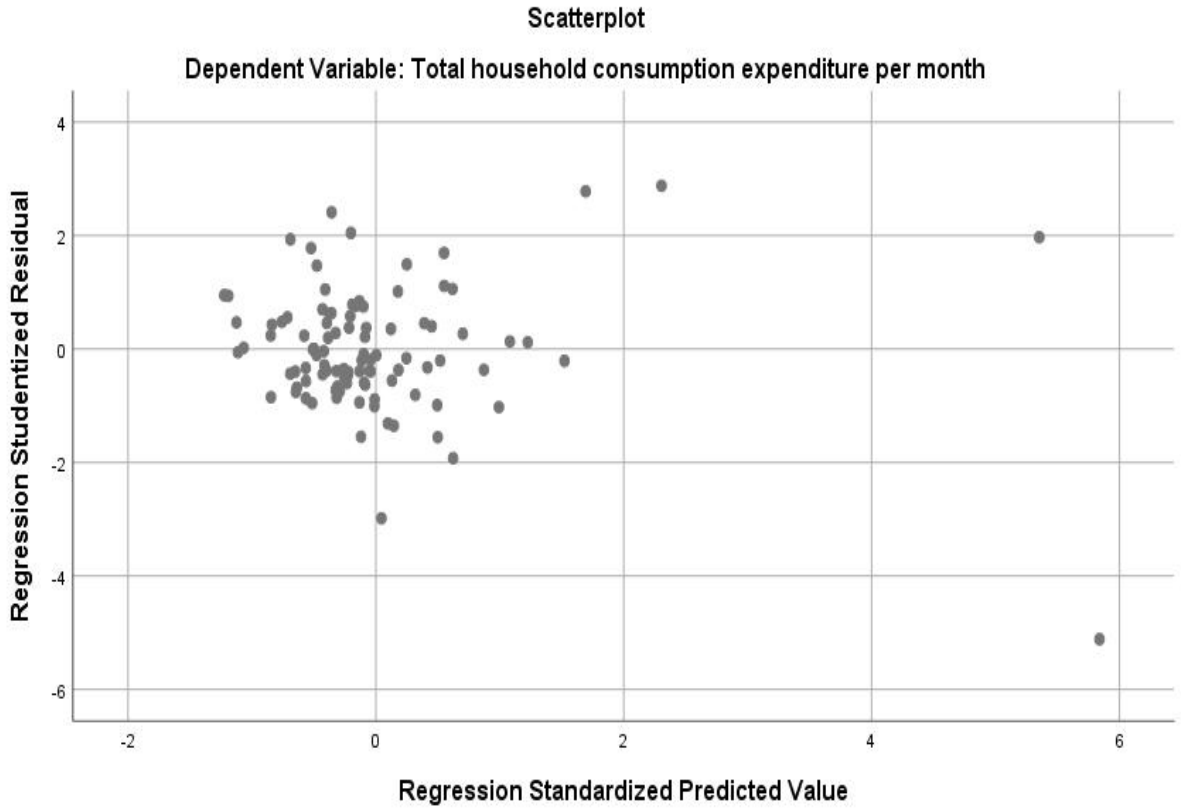
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1602333045.458	19	84333318.182	25.761	.460[b]
	Residual	261899628.782	80	3273745.360		
	Total	1864232674.240	99			

Table 4.10: Heteroskedasticity test

a. Dependent Variable: Total household consumption expenditure per month

b. Predictors: (Constant), Emplo = Self-employed, Marital = Widowed, Household family size, Educ = Preparatory, Inflation Expectation, Educ= None, Emplo = Unemployed, Educ = Highschool, Credit Availability, Household saving status, Gender, Educ = Elementary, Future Income Expectation, Marital = Divorced, age of the household head, Marital = Single, Household saving status, Educ = Basic, Household disposable income per month

Source: Own survey, 2023 SPSS Output



Source: Own survey, 2023 SPSS Output

Appendix 2
Questionnaire

St Marry's University

Department of Development Economics

Survey Questionnaire

This is a Questionnaire is to be filled by the residents of woreda ---- , kebelle ---- in Gulelle sub city of Addis Ababa. This questionnaire is prepared by Samuel Abera to conduct the research by the title of "DETERMINANTS OF URBAN HOUSEHOLD CONSUMPTION EXPENDITURE IN GULELLE SUBCITY OF ADDIS ABABA"..

Above all I express my heartfelt gratitude to every respondent of my questionnaire for sharing me your valuable information and time.

- ✓ **Instruction about the questionnaire**

I. No need to mention name

II. You are required to put only a tick mark (√) in the questions followed by boxes □ that correspond your answer

III. You are required to circle the letter of the choice that is most appealing to you IV. Write your answer in the space provided is so required.

IV. Give a precise short answer on the questions followed by blank spaces

V. or open ended questions you may use given blank spaces or additional blank paper that will be attached at the back

VI. VII. For further information or ambiguity contact the researcher at the following address Tell: +251 910992943

Date _____ E.C.

Section I: Personal details

1	How old are you?	----------

2	Sex?	----------

3	Marital status	
	Single	□
	Married	□
	Divorced	□
	Widowed	□

4	Level of education	
	None	□
	Informal basic literacy skills	□
	Grade 1-8	□
	Grade 9-10	□
	Grade 11-12	□
	Above grade 12 (describe shortly)	□

5	Family size	Number ----------

Section II: Employment Status

1	what is your employment status?	
	Unemployed	□
	Employed	□
	Self-employed	□

III. Income Level

1	what is your current monthly income?	
	Below ETB 500.00	
	ETB 501.00 -1000.00	
	ETB 1001.00-2000.00	
	ETB 2001.00-3000.00	
	ETB 3001.00-5000.00	
	Above ETB 5001.00	

2	Do you have other source of income currently?	
	□ Yes	□ No

3	If you response for the above question is „YES", specify?	
	Source ----------	Monthly income ----------

Section III. Expected future income

1	Do you think your future income will increase?	
	□ Yes	□ No
2	If you response for the above question is „YES", specify?	
	Source ----------	

Section IV: Inflation Expectation:

1	Do you think rising inflation will increase your consumption?	
	□ Yes	□ No

Section V: Saving Status

1	Do you save money every month?	
	□ Yes	□No

2	If you respond to the above question yes, how much do you save?	
	---------- ETB	□

2	If you respond to the above question, how much do you save per month?	
		□
		□
		□
		□

Section VI: Credit availability

1	Do you have credit access?	
	□ Yes	□ No
2	If you response for the above question is „YES“, does if increase your consumption?	
	□ Yes	□ No

Section VII: **consumption pattern**

1.	how much do you spend for the following?	
	Food	□
	Cloth	□
	Education	□
	Social life	□
	Energy consumption	□
	Recreation	□
	Other	□