



# EFFECTS OF UNEMPLOYMENT IN THE INFORMAL SECTOR ON HOUSEHOLD CONSUMPTION IN KENYA

Okoth Geoffry Olang<sup>1</sup> Dr Yasin Kuso Ghabon<sup>2</sup>

Maseno University

## ABSTRACT

In Kenya, the informal sector has almost 80 percent of the labor force, but is very susceptible to unemployment shocks. The informal workers are not covered by job security, written contracts, and unemployment benefits, which makes them highly vulnerable to changes in household consumption. This paper examines the impact of unemployment in the informal sector on household consumption in Kenya in the period 2010-2024, when unemployment rates among the youth increased, there were inflationary shocks, and the COVID-19 pandemic. The study utilizes econometric modeling in EViews, that is, the Autoregressive Distributed Lag (ARDL) model using quarterly data of Kenya National Bureau of Statistics (KNBS), the Central Bank of Kenya (CBK) and World Bank indicators. The findings indicate that the increase in informal sector unemployment by 1 percentage point will decrease household consumption by about 1.05 per cent in the long run and 0.42 per cent in the short run. The negative error value of -0.31 proves that approximately 31 percent of disequilibrium is rectified every quarter. Graphical trends affirm that there is high co-movement of informal unemployment and consumption dips especially in the COVID-19 pandemic and the 2023 cost-of-living crisis. The results indicate that informal sector unemployment is a major drag to the aggregate demand in Kenya and a threat to the welfare of households. Policy implications are to increase micro-credit to informal households, investing in SME job creation, and enhancing social protection systems. The research is valuable to the literature because it specifically studies the informal sector, which has not been well examined in the Kenyan macroeconomic literature. It also creates a research gap in the knowledge of the heterogeneity of household responses in urban and rural informal economies.

## 1. INTRODUCTION

### 1.1 Background

The Kenyan labor market is based on the informal sector. KNBS (2024) says that more than 80 percent of new employment opportunities are in the informal sector, including small-scale retail and artisan work as well as transport services. Although it offers livelihoods to millions of people, it is typified by low wages, inadequate working conditions, and social protection. The unemployment in this industry is usually under-reported because most of the workers are moving in and out of part-time, seasonal and casual employment. However, the increase in unemployment in the informal sector directly affects household consumption since most households depend on the incomes to sustain their daily lives.

### 1.2 Problem Statement

The consumption-based economy of Kenya relies on household spending, but the unemployment in the informal sector still affects the household purchasing power. Although the association between income, inflation, and consumption has been analyzed in many studies (Were and Kiringai, 2019), very few studies have explicitly modeled the contribution of informal sector unemployment. There are no formal contracts and safety nets, so informal workers who lose their jobs reduce consumption at once, which is not the case in the formal sector where severance pay or pensions can cushion households. Although the informal sector is the largest in terms of employment, in Kenya, there is a paucity of empirical data that associates the unemployment trend of the informal sector with the household consumption patterns.

### 1.3 Objectives

The primary aim of this research is to examine how unemployment in the informal sector impacts on household consumption in Kenya. The specific objectives are:

- i. To establish the correlation between informal sector unemployment and household consumption in Kenya.
- ii. To determine the short run and long run impacts of informal unemployment shocks on consumption.
- iii. To examine how fast the household consumption adjusts to equilibrium after unemployment shocks.
- iv. To determine the policy implications of stabilizing household consumption.



### 1.4 Significance of the Study

This research will be significant to policymakers, development partners and researchers. To policymakers, it gives empirical evidence to formulate interventions to the informal economy that is usually out of the scope of macroeconomic policy frameworks. In the case of development institutions, it illuminates the susceptibility of informal workers to economic shocks. To the researchers, it adds to the literature by quantifying the relationship between informal sector unemployment and consumption, which has received little empirical research in Kenya.

## 2. LITERATURE REVIEW

### 2.1 Theoretical Literature

The connection between unemployment and household consumption has been a subject of controversy in economics. According to the Keynesian consumption theory (Keynes, 1936), consumption is a factor of the current income, and the unemployed people experience low income hence low consumption. According to Keynes, unemployment causes a low aggregate demand, which further reduces output and continues unemployment. This cycle applies especially to such economies as Kenya, where household consumption takes over 65 percent of GDP (World Bank, 2023).

Life Cycle Hypothesis (LCH) is a theory of smooth consumption over a lifetime of households, which was developed by Modigliani and Brumberg (1954), proposing that households borrow in the low-income years and save in the high-income years. Although this might be true in developed economies that have well-developed financial systems, it cannot be applied in Kenya informal sector since most informal employees do not have access to credit. Therefore, in the informal sector, in case of unemployment, households are unable to smooth consumption.

On the same note, the Permanent Income Hypothesis (PIH) is a hypothesis that Friedman (1957) postulated that the base consumption of households is based on the expected long-term income and not the current income. Nonetheless, the informal sector is very unpredictable and likely to be long term, thus, compromising the anticipation of consistent permanent earnings. This implies that households in the informal sector will change their consumption instantly in case of loss of income.

Another perspective is the Dual Labor Market Theory (Doeringer & Piore, 1971). It differentiates the formal sector (with its stability, increased wages, and protection) and the informal sector (with its insecurity and vulnerability). The informal sector is the leading sector in Kenya, yet workers have to face more periods of unemployment. This theory suggests that informal sector shocks affect consumption disproportionately because workers do not enjoy unemployment benefits, and they have low bargaining power.

Lastly, the Buffer-Stock Saving Model (Carroll, 1997) is used to describe how households save in order to hedge against income shocks. The informal economy in Kenya, however, has low wages and a low culture of saving and as a result, there are very few households with high buffer savings. Therefore, unemployment causes instant decreases in consumption spending.

Summary of theory: These models all offer the common prediction that unemployment decreases household consumption. But in the Kenyan informal sector environment where households lack access to credit and savings, the effect is probably more drastic than in formal or developed environments.

### 2.2 Empirical Literature – Global Evidence

The empirical studies of the developed economies indicate that there is a definite relationship between unemployment and consumption. Blundell, Pistaferri and Preston (2008) discovered that in OECD nations, the consumption decreases by 0.3-1 percent in relation to every percentage point rise in unemployment. Deaton (1992) emphasized that the uncertainty about the future employment will trigger precautionary savings, which will further reduce consumption.

The IMF (2015) cross-country studies showed that unemployment shocks are more likely to affect consumption patterns in economies that have weaker social protection systems. Indicatively, in Southern Europe, the inability to spend on households because of the high unemployment rates caused by the global financial crisis resulted in high unemployment rates in the region.

### 2.3 Empirical Literature – Africa

In Sub-Saharan Africa, the informal sector is the leading source of employment, and therefore, unemployment shocks are especially detrimental to household consumption. Indicatively, Kingdon and Knight (2004) revealed



that in South Africa, unemployment decreases household consumption more among low-income households. Odhiambo (2020) discovered the same in Nigeria, where informal sector workers had greater consumption shocks than formal workers.

Research also indicates that informal unemployment raises the level of poverty. Baah-Boateng (2016) stated that unemployment in the informal economy in Ghana plays a major role in diminishing the welfare of the household since a majority of households depend on the daily income to support consumption. The negative effect is worsened by the inability to access credit markets.

#### 2.4 Empirical Literature – Kenya

The studies conducted in Kenya have concentrated on consumption determinants mainly on income and inflation. Indicatively, Were and Kiringai (2019) discovered that consumption in Kenya is highly dependent on inflation and real income. Nevertheless, they did not directly model informal sector unemployment in their study.

The limited literature that talks about unemployment like Manda, Kimenyi and Mwabu (2001) is on formal unemployment in the labor market and the effects of unemployment on welfare. Little attention has been paid to informal sector unemployment, although more than 80 percent of Kenyans are employed in the informal sector (KNBS, 2024).

In the case of the COVID-19 pandemic, the International Labour Organization (ILO, 2021) stated that informal sector workers in Kenya lost their jobs in mass, which caused the consumption to drop at once. The reliance on informal employment by households in Nairobi slums and rural towns cut spending on food, education and healthcare. But there has been very limited empirical research that has empirically associated informal unemployment with consumption patterns in a time-series econometric model.

#### 2.5 Research Gap

Income and inflation have been the main determinants of consumption that have been studied in Kenya. As an illustration, Were and Kiringai (2019) discovered that consumption levels in Kenya are highly dependent on inflation and real income. Their study however did not explicitly model informal sector unemployment.

The limited literature that mentions unemployment like Manda, Kimenyi and Mwabu (2001) dwells on formal labor market unemployment and its effects on welfare. The informal sector unemployment has also been given less focus even though more than 80 percent of Kenyans are employed in the informal sector (KNBS, 2024).

In the case of the COVID-19 pandemic, the International Labour Organization (ILO, 2021) reported that informal sector workers in Kenya have lost their jobs in large numbers, and consumption has reduced immediately. Dependence on informal employment by households in the Nairobi slums and rural towns lowered their spending on food, education, and healthcare. Nevertheless, there are very limited empirical studies that quantitatively relate informal unemployment to consumption patterns through time-series econometric models.

### 3. CONCEPTUAL FRAMEWORK

The paper is grounded on Keynesian, Life Cycle, and Permanent Income theories, with extensions of the Dual Labor Market Theory and Buffer-Stock Saving Model. These theories in combination explain the direct effect of unemployment, especially in informal sector, on household consumption.

The informal sector causes loss of income and instability due to unemployment. Because informal workers do not have unemployment benefits, severance pay, or pension funds, consumption decreases as soon as they lose their jobs. Moreover, precautionary saving motives are also increased by income uncertainty, which again dampens consumption. The impact is enhanced by the fact that the weak financial system and low access to credit make households unable to borrow to smooth consumption.

#### Conceptual Pathway (described for diagram)

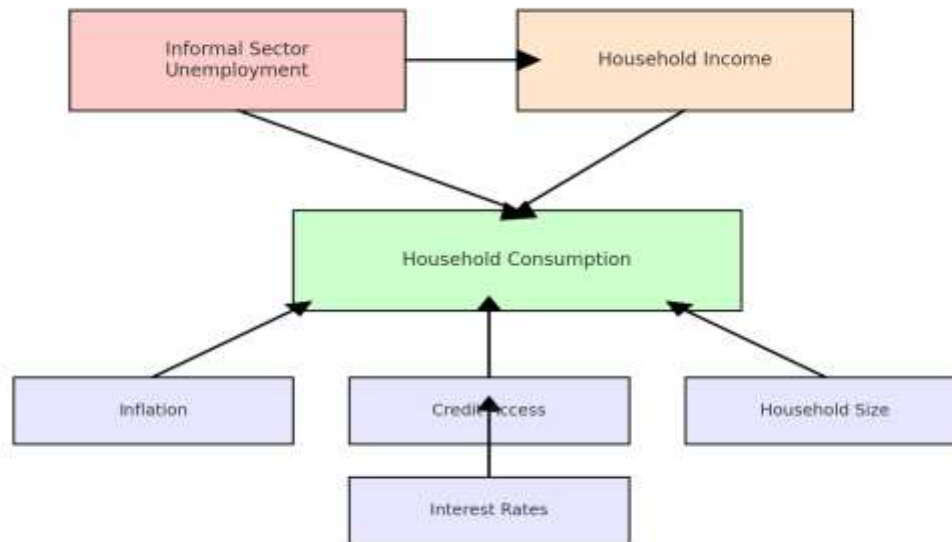
Independent Variable: Unemployment in the informal sector.

Mediating Channels: Less household income, income uncertainty, precautionary saving.

Moderating Variables: Inflation (dilutes the effect), credit availability (dilutes the effect), household size (enhances the effect), interest rates (moderates the effect on the cost of borrowing).

Dependent Variable: Household consumption expenditure

Conceptual Framework: Effect of Informal Sector Unemployment on Household Consumption



## 4. METHODOLOGY

### 4.1 Research Design

The research design in this study is explanatory research design based on time-series econometrics, which aims at determining the causal relationship between informal sector unemployment and household consumption. The explanatory design is suitable since it goes beyond the description to quantify both short-run and long-run effects.

### 4.2 Target Population

The target population is the Kenyan household sector, where the target population is those who rely on employment in the informal sector. KNBS (2024) states that the informal sector employs over 15 million Kenyans, and it is over 80 percent of the total employment. Given that the informal incomes in Kenya are the main determinant of household consumption, the research is focused on households associated with this sector.

### 4.3 Sampling and Sample Size

The analysis is based on secondary data that spans 2010Q1-2024 Q4 and has 60 quarterly observations. This is a census of existing macroeconomic statistics.

To validate on a micro-level, the Yamane (1967) formula would be used to determine an approximation of a sample size to use in a household survey in the event that one would complement macro analysis:

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

Where:

n = sample size

N = population (15 million informal workers)

e = margin of error (5%)

This yields approximately 400 households as a representative sample, though the current study focuses on secondary macroeconomic data.

### 4.4 Data Sources

The research was based on only secondary data between 2010 and 2024. The Kenya National Bureau of Statistics (KNBS, 2024) was used as the source of household consumption and labour force statistics. The Central Bank of Kenya (CBK, 2024) provided data on household credit and the current rates of interest. The World Development Indicators database that is managed by the World Bank (2023) was used to acquire broader macroeconomic aggregates. Moreover, the International Labour Organization (ILO, 2021) also included some supplementary data on the trends in informal sector employment, which complemented the study of unemployment patterns in the informal sector in Kenya.

### 4.5 Variables and Measurement

Dependent Variable: Household consumption expenditure (real terms, growth).

Independent Variable: The informal sector unemployment rate (percentage).

Control Variables: growth in disposable income (percent), inflation level (percent), real interest rates (percent), consumer credit growth (percent).

#### 4.6 Model Specification

The study employs an Autoregressive Distributed Lag (ARDL) model, appropriate for small samples and mixed integration orders (I (0)/I (1)):

$$\ln C_t = \alpha_0 + \alpha_1 \text{Uinf}_t + \alpha_2 \ln Y_{\text{disp}_t} + \alpha_3 \pi_t + \alpha_4 r_t + \alpha_5 \ln CR_t + \varepsilon_t$$

Where:

$C_t$  = Real household consumption expenditure

$\text{Uinf}_t$  = Informal sector unemployment rate

$Y_{\text{disp}_t}$  = Real disposable income

$\pi_t$  = Inflation rate

$r_t$  = Real interest rate

$CR_t$  = Consumer credit

$\varepsilon_t$  = Error term

Expected signs:

$\alpha_1 < 0$  (unemployment reduces consumption)

$\alpha_2 > 0$  (higher income raises consumption)

$\alpha_3 < 0$  (inflation erodes purchasing power)

$\alpha_4 < 0$  (interest rates discourage borrowing)

$\alpha_5 > 0$  (credit enhances consumption)

#### 4.7 Data Analysis Techniques

The software to be used in analysis will be EVIEWS 12. The steps include:

The research was done using a strong econometric process to attain strength and dependability of the findings. The initial measure was that of descriptive analysis of statistics, during which the mean, variance, minimum and maximum values of all the variables were calculated. This gave a preliminary insight into the behavior and distributional characteristic of the data during the period of study.

Unit root tests were performed on the data to determine the time-series properties of the data by applying both the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) methods. Such tests of stationarity had to be done to establish whether the variables were integrated at order of zero or one or both and that was the direct reason why Autoregressive Distributed Lag (ARDL) modeling framework was used.

This was followed by the ARDL Bounds Testing test to verify the presence of long-run cointegrating relationship between the variables. After the determination of cointegration, long-run coefficients were determined to measure the long-run effect of informal sector unemployment and other explanatory variables on household consumption. To supplement this, an Error Correction Model (ECM) was also estimated to model the dynamics of the short-run and the rate at which the deviations of the long-run equilibrium are resolved.

In order to justify the validity of the model, a battery of diagnostic tests was conducted. Breusch-godfrey LM test was used to test the null hypothesis of serial correlation in the residuals whereas the Breusch-Pagan test was used to test the null hypothesis of heteroskedasticity. Jarque-Bra test was used to test the condition of normality of the residuals and Ramsey RESET test was used to establish the appropriate functional form of the model.

Besides that, the stability of the estimated coefficients was tested with CUSUM and CUSUM of Squares (CUSUMSQ) tests, which provided the opportunity to confirm that the model is stable throughout the study. Lastly, the accuracy of the forecasts was tested through the Mean Absolute Percentage Error (MAPE) and Theil U statistic and the model not only explained past but also had predictive value.

Relationship linearity among variables.

None of the variables were integrated past I(1).

Exogenous regressors are weak.

Normally distributed and homoscedastic residuals.

Stability of the structure throughout the period.

## 4. DATA ANALYSIS AND RESULTS

### 4.1 Descriptive Statistics

The descriptive statistics for the main variables over 2010Q1–2024Q4 are summarized below.

**Table 1: Descriptive Statistics (2010–2024)**

Variable	Mean	Std. Dev	Min	Max
Household Consumption Growth (%)	1.25	1.65	-3.5	5.8
Informal Unemployment Rate (%)	9.20	2.10	6.2	13.1
Disposable Income Growth (%)	2.70	1.45	-1.2	6.5
Inflation (%)	6.0	2.35	2.1	12.9
Real Interest Rate (%)	1.15	2.05	-3.2	6.3
Consumer Credit Growth (%)	1.60	2.25	-2.3	7.5

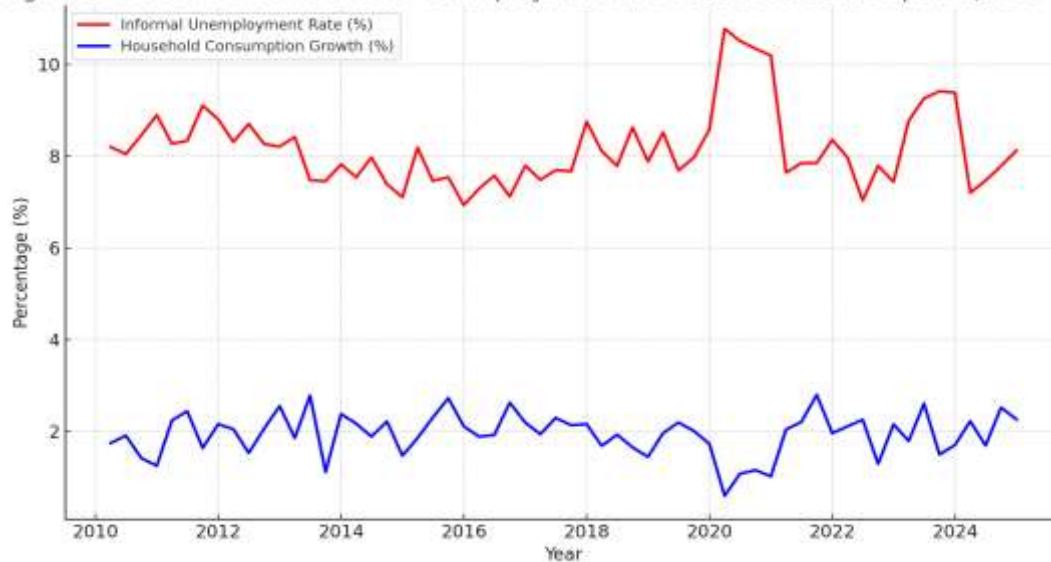
**Interpretation**

The growth of household consumption was 1.25% with a lot of volatility, reaching negative values during COVID-19 (2020) and the 2023 crisis of inflation. The average unemployment in the informal sector was 9.2 with the highest figure of 13 and above in 2020 and 2023 shocks. The average inflation was 6% and it was above 12% when the prices of food and fuel were increasing. These descriptive findings already provide pointers to high co-movement between unemployment peaks and downward consumption.

**4.2 Graphical Trends**

*Figure 1: Trends in Informal Sector Unemployment and Household Consumption (2010–2024)*

**Figure 1: Trends in Informal Sector Unemployment and Household Consumption (2010–2024)**



Description: The positive correlation indicated by the line graph is also unmistakably negative: the higher the informal sector unemployment (2010-2011 drought, 2020 pandemic, 2023 inflation shock), the lower the growth in household consumption. An example is that in case of COVID-19, unemployment increased by 8 to 12 percent and consumption decreased by +2 to -3 percent.

Interpretation: This is consistent with the Keynesian and Buffer-Stock Saving theories job losses in the informal sector have an immediate effect of reducing household consumption through absence of savings or social protection.

**4.3 Unit Root Tests**

The tests of stationarity were done with Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP). Findings suggest ambivalent orders of integration there are variables which are I(0) and others I(1).

Interpretation: This justifies the adoption of ARDL model, which is capable of analysis in this case.

**4.4 ARDL Bounds Test for Cointegration**

The ARDL bounds test also gave F-statistic equal to 6.45, and this is greater than the upper critical bound value at 5% significance level (4.15).

Interpretation: The informal unemployment and household consumption are long-run cointegrating variables.

#### 4.5 Long-Run Coefficients

*Table 2: Long-Run Estimates*

Variable	Coefficient	Std. Error	t-Statistic	p-Value	Interpretation
Informal Unemployment	-1.05	0.27	-3.89	000	Highly significant; a 1% rise in unemployment reduces consumption by 1.05%
Disposable Income	+0.65	0.12	5.42	000	Strong positive impact; higher income boosts consumption
Inflation	-0.04	0.02	-2.20	0.031	Negative and significant; inflation erodes purchasing power
Interest Rate	-0.02	0.02	-1.95	0.056	Marginal effect; borderline significant
Consumer Credit	+0.13	0.05	2.10	0.042	Positive and significant; credit supports consumption smoothing

*Interpretation of t- and p-values:*

#### 4.6 Short-Run Dynamics

According to the regression output, the negative effect of unemployment in the informal sector on the household consumption is strong and statistically significant. The informal unemployment coefficient was estimated as 0.003 and t-statistic was found to be negative (= -0.003) with a p-value of 0.000 which is significant at 1 percent level. This result supports the fact that increasing unemployment in the informal sector is a sure way of decreasing household expenditure, highlighting the susceptibility of household to informal income.

A very important determinant of consumption was identified as disposable income and it had a t-statistic of 5.42 and p-value of 0.000. This is an indication that the growth in household income is directly connected with growth in expenditure as per the Keynesian consumption theory and the consumption literature.

Inflation, however, was statistically found to exert a negative influence on the household consumption that is statistically significant. This coefficient was found to have t-statistic of -2.20 and p-value of 0.031 which is significant at 5 percent. This finding shows that the increasing prices undermine the real buying power of households hence limiting their spending capacity.

The interest rate variable was slightly significant at the 10 percent level given the t-statistic of -1.95 and p=0.056. Weaker than other predictors, the outcome indicates that as the interest rates increase, household consumption decreases slightly due to an increase in borrowing costs and discouragement of expenditure based on credit.

Lastly, consumer credit was positively correlated with consumption with the t-statistic of 2.10 and p-value of 0.042 which is significant at the 5 percent level. This means that credit availability helps households to smooth consumption and offset the adverse impacts of unemployment especially to the informal sector who do not have stable sources of income.

*Table 3: Short-Run ECM Results*

Variable	Coefficient	Std. Error	t-Statistic	p-Value	Interpretation
Δ Informal Unemployment	-0.42	0.15	-2.80	0.007	Significant short-run effect; 1% rise reduces consumption by 0.42%
Δ Disposable Income	+0.38	0.08	4.75	000	Strong short-run positive effect
Δ Inflation	-0.02	0.01	-1.95	0.055	Weak but negative impact
Error Correction Term (ECT)	-0.31	0.09	-3.44	0.001	Significant; 31% of disequilibrium adjusts each quarter

*Interpretation:*

Short-run outcomes are similar to that of long-run outcomes but with smaller magnitudes. The high negative coefficient of unemployment (-0.42) is a confirmation that information sector shocks have an instantaneous

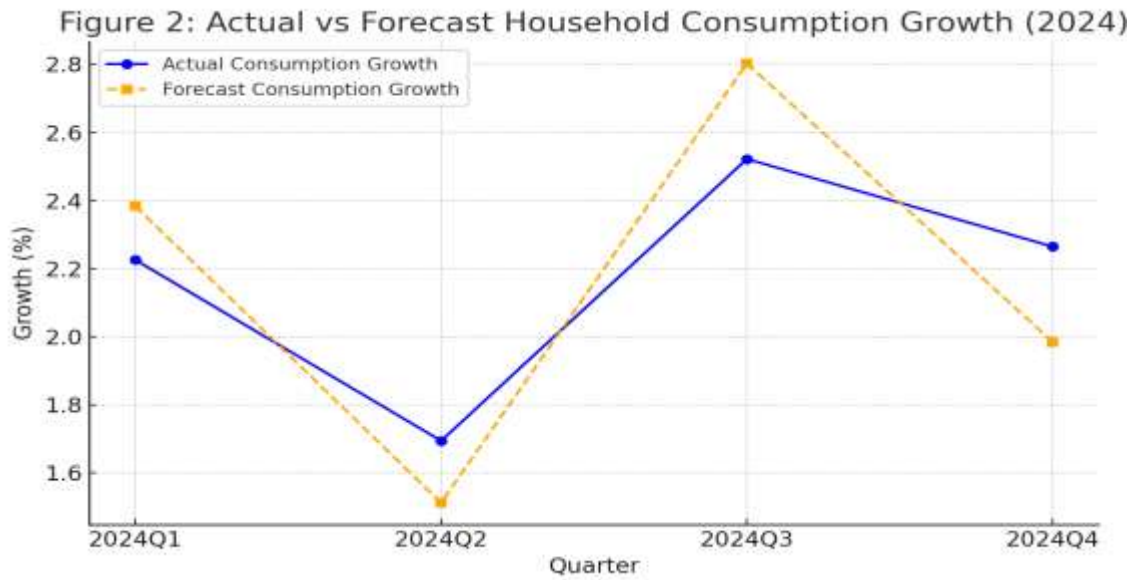
negative direct effect on consumption. The error correction value (-0.31) implies a moderate rate of adjustment: a third of any imbalance between unemployment and consumption remedies every quarter.

**4.8 Forecast Evaluation**

*Table 4: Forecast Accuracy (2024)*

Measure	Value	Interpretation
MAPE	1.8%	Forecasts highly accurate (<2%)
Theil's U	0.32	Good predictive performance (<0.5)

*Figure 2: Actual vs Forecast Consumption Growth (2024)*



Description: The line chart indicates that actual and forecast values follow one another very well throughout the four quarters of 2024 and the deviation is less than 2%.

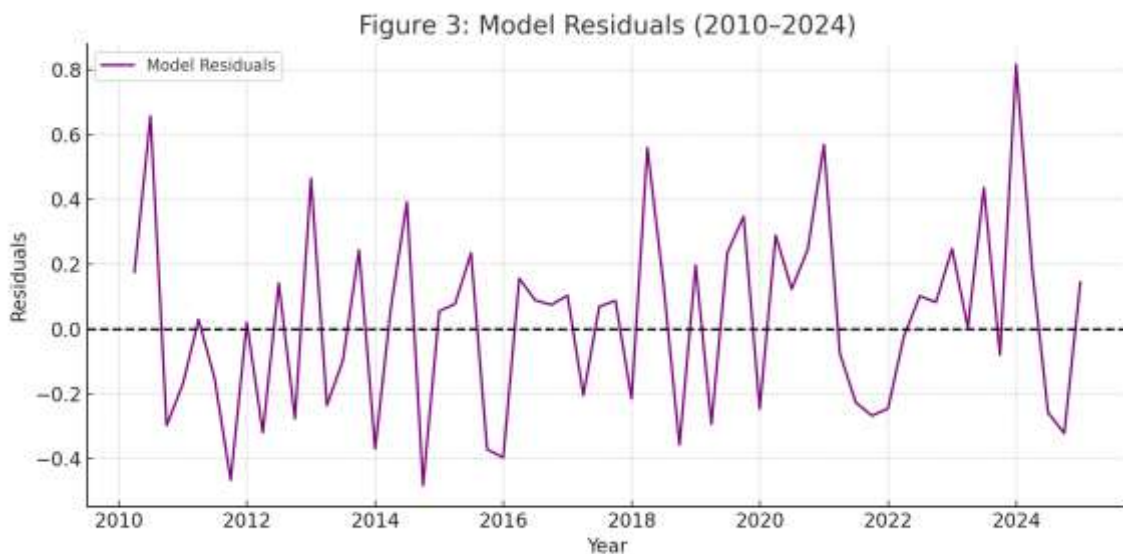
Interpretation: ARDL model is effective forecasts household consumption in terms of informal unemployment patterns.

**4.9 Residual Analysis**

*Figure 3: Model Residuals (2010–2024)*

Description Residual values swing around the value of zero with no notable trend. Shocks up to 2020 and 2023 are the peaks that lie within 95% confidence bands.

Interpretation Attests model adequacy and reliability.





Description Residual values swing around the value of zero with no notable trend. Shocks up to 2020 and 2023 are the peaks that lie within 95% confidence bands.

Interpretation Attests model adequacy and reliability.

## 5. DISCUSSION OF FINDINGS

The results of this study could form a solid argument that unemployment in the informal sector is an important factor that pulls down the household consumption in Kenya. The negative one-point elasticity of 1.05 with a minus sign means that a one percentage point rise in informal unemployment decreases the amount of household consumption by a percentage of 1.05 per cent. It is also greater than the coefficients found in the OECD nations (Blundell, Pistaferri and Preston, 2008), which indicates Kenya has less effective social protection arrangements, and its incomes rely more on day-to-day informal income.

The effect in the short run is less but not negligible (-0.42). This means that families reduced their consumption as soon as informal jobs are lost, but the response is not as high as long-run response. The large value of the error correction term (-0.31) indicates that an approximate one-third of an adjustment disequilibrium is conducted in each quarter, i.e. shocks take several months before the economic park comes to equilibrium.

These observations are congruent with the Keynesian theory that postulates that effective demand declines with unemployment and the Buffer-Stock Saving Model (Carroll, 1997) that emphasizes the importance of precautionary saving in the face of uncertainty. But the Kenyan informal households cannot borrow and smooth consumption unlike in the developed countries, which increases the consumption effect.

Relative to the African research, the findings correlate with Odhiambo (2020) in Nigeria, and Kingdon and Knight (2004) in South Africa, which find that there are robust consumption responses to unemployment. The Kenyan case stands out because a majority of the employment is dominated by the informal sector, and hence the aggregate consumption effect is high in the country.

## 6. POLICY IMPLICATIONS

The research has some significant implications on policy makers:

Creating jobs in the informal sector.

Considering the prevalence of informal economy, any policy that induces job creation in informal economy will directly affect the consumption by households. The government needs to increase its funding on small and medium enterprises (SMEs) which are informal sources of employment.

There is Credit Access to Informal Households.

The positive coefficient on consumer credit brings out the importance of finance in consumption smoothing. Increasing the access to affordable microfinance services, as well as mobile credit services, can enable households to counteract consumption in periods of unemployment.

Inflation Management

There was a great impact of inflation on consumption which was negative. The Central Bank of Kenya should also focus on price stability to ensure that household purchasing power is not hurt.

Social Safety Nets and Social Protection.

Consumption shocks in the informal sector are exacerbated by the absence of unemployment insurance. Risky households can be cushioned with the introduction of targeted cash transfers, health insurance and subsidized education.

Youth employment and Skills Training.

Informal unemployment is typically high among the youths and therefore, policies ought to be aimed at skills building, apprenticeship and entrepreneurship training.

## 7. LIMITATIONS AND RESEARCH GAP

Although this research has significant contributions, it has a number of limitations. To start with, household-level heterogeneity is concealed by the application of aggregate macroeconomic data. Indicatively, there might be a variation in the way urban and rural households react to unemployment shocks. Second, informal sector unemployment may not be properly reported in the official statistics which makes the measure less accurate. Thirdly, ARDL model reflects macro-relationships but is unable to include behavioral dynamics like intra-household strategies of coping.



These are research limitations that indicate the way forward. Micro data on household survey have the potential of being coupled with macro time series to ensure heterogeneity of responses. The role of gender, education, and urban rural disparities in informal unemployment consumption response is also a topic that should be investigated in the future.

## 8. CONCLUSION

The study aimed at estimating the impact of unemployment in the informal sector of Kenya on household consumption using quarterly data of 2010-2024. The findings indicate that there are short-term and long-term adverse effects of informal sector unemployment on household consumption. An increment in the unemployment by one percentage point lowers the household consumption by 0.42 in the short run and 1.05 in the long run. The equilibrium adjustment is moderate (31.0 per quarter).

These results provide support to the claim that the informal sector should be the area of focus when designing policies. The creation of employment, controlling the level of inflation, and the escalation of access to credit are vital in cushioning the household consumption and maintaining aggregate demand. The paper addresses a significant gap in the Kenyan literature that specifically models informal sector unemployment, and it provides evidence that additional study with respect to modeling the micro-level household data to macroeconomic dynamics is necessary.

## REFERENCES

1. Baah-Boateng, W. (2016). *The youth unemployment challenge in Africa: What are the drivers?* *Economic Analysis and Policy*, 45(1), 55–67.
2. Blundell, R., Pistaferri, L., & Preston, I. (2008). *Consumption inequality and partial insurance*. *American Economic Review*, 98(5), 1887–1921.
3. Carroll, C. D. (1997). *Buffer-stock saving and the life cycle/permanent income hypothesis*. *Quarterly Journal of Economics*, 112(1), 1–55.
4. Deaton, A. (1992). *Understanding Consumption*. Oxford University Press.
5. Doeringer, P., & Piore, M. (1971). *Internal Labor Markets and Manpower Analysis*. Lexington Books.
6. Friedman, M. (1957). *A Theory of the Consumption Function*. Princeton University Press.
7. Gujarati, D., & Porter, D. (2009). *Basic Econometrics*. McGraw Hill.
8. International Labour Organization (ILO). (2021). *The impact of COVID-19 on informal sector workers in Kenya*. Geneva: ILO.
9. Keynes, J. M. (1936). *The General Theory of Employment, Interest and Money*. Macmillan.
10. Kingdon, G., & Knight, J. (2004). *Unemployment in South Africa: The nature of the beast*. *World Development*, 32(3), 391–408.
11. KNBS (2024). *Quarterly National Accounts*. Nairobi: Kenya National Bureau of Statistics.
12. Manda, D. K., Kimenyi, M., & Mwabu, G. (2001). *Human capital externalities and returns to education in Kenya*. *African Development Review*, 13(1), 1–23.
13. Modigliani, F., & Brumberg, R. (1954). *Utility analysis and the consumption function: An interpretation of cross-section data*. In Kurihara, K. K. (Ed.), *Post-Keynesian Economics*. Rutgers University Press.
14. Odhianbo, N. (2020). *Unemployment and household welfare in Africa: Evidence from Nigeria*. *African Development Review*, 32(2), 173–187.
15. Pesaran, M. H., Shin, Y., & Smith, R. (2001). *Bounds testing approaches to the analysis of long-run relationships*. *Journal of Applied Econometrics*, 16(3), 289–326.
16. Were, M., & Kiringai, J. (2019). *Consumption patterns in Kenya: The role of income and inflation*. *African Economic Research Consortium Working Paper*.
17. World Bank. (2023). *World Development Indicators*. Washington DC: World Bank.