



Inflation, Economic Growth, and Household Consumption in Developing Economies: An Empirical Analysis of Macroeconomic Conditions and Household Welfare

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ARTICLE INFO	ABSTRACT
Submission: July 08, 2026 Revised: July 26, 2026 Accepted: August 26, 2026 Available Online: September 08, 2026 Keywords: <i>Inflation, Economic Growth, Household Consumption, Household Welfare, Purchasing Power, Developing Economies, Panel Data, Macroeconomic Conditions</i> Corresponding author: Abdullah Shabbir Email: abdullah.shabbir7637@gmail.com	This study examined the effects of inflation and economic growth on household consumption as an indicator of household welfare in developing economies. A quantitative, explanatory panel-data research design was employed using annual secondary data from selected developing economies covering the period 2000–2024. The data were analyzed using descriptive statistics, correlation analysis, panel unit-root tests, and fixed-effects panel regression, with country and year effects controlled to account for unobserved heterogeneity and time-specific influences. The empirical results showed that inflation had a statistically significant negative effect on household consumption ($\beta = -0.384$, $p < .01$), indicating that rising prices reduce purchasing power and constrain household expenditure. In contrast, economic growth had a statistically significant positive effect on household consumption ($\beta = 0.271$, $p < .05$), suggesting that improvements in economic activity contribute to household welfare through increased income and economic opportunities. The overall regression model was statistically significant ($F = 18.64$, $p < .001$) and explained approximately 42.7% of the variation in household consumption ($R^2 = .427$). The findings indicate that sustainable economic growth can improve household welfare, but its benefits may be weakened by persistent inflation. The study therefore highlights the importance of combining growth-oriented policies with effective inflation management and measures that protect household purchasing power, particularly among economically vulnerable populations.

Introduction

Inflation, economic growth, and household consumption are the main macroeconomic dimensions for assessing household welfare in developing economies, where households are typically exposed to food price volatilities, foreign exchange rate movements, gaps in income stability, and formal financial markets. Changes in price levels erode the real value of income, economic growth drives the expansion of productive activities and income generating opportunities, while household consumption reflects the impact of macroeconomic quantities and conditions on living standards of households. Together, these factors assist in answering whether improving growth in aggregate economies benefits households. Recent studies indicate that macroeconomic instability influences household consumption, while the welfare impacts of growth on households differ substantially across developing country contexts (Tremblay, 2026).

These relationships were uncovered after a series of international disruptions in the economy caused by the COVID-19 pandemic, volatile changes in the international market prices of commodities, disruptions in supply chains, volatile foreign exchange markets, and inflation (Whitmore, 2026). The developing world is the most severely affected by these disruptions. In developing countries, food and essential goods generally account for a large portion of households' spending. In such countries, when prices rise faster than incomes, the purchasing power of households decreases, leading households to consume at a lower level and adjust their spending to a savings-exhausting level, cut discretionary spending, or purchase items of lower quality (Azam & Khan, 2022).

Studies from South Asia show that inflationary pressures are allocated differently along the income distribution. In particular, inflationary pressures are shown to adversely affect low-income households by shrinking the volume of real spending on non-essential and durable goods. This distribution effect is apparent in studies from the World Bank (2023), (Ezako, 2023).

There are other factors that may lighten inflationary pressures on low-income households. Rapid economic growth is expected to increase employment, wages, household income, and generate greater productive capacity and investment (Sinha, 2023). However, that does not necessarily mean household welfare will be greater. Recent studies show that for many developing countries the transmission or cascading of growth in GDP per capita into increases in the income and consumption levels of households is weak or negligible in several countries in Sub-Saharan Africa due to such structural constraints as poor connectivity, low quality of human capital, reliance on natural capital, and chronic conflict (Subhan et al., 2024). In such circumstances, inflation might erode the welfare effect of economic growth by increasing uncertainty and reducing the real income level. The goal of this research is to understand how inflation and economic growth interact on the macro level to affect consumption and the welfare of household, rather than addressing economic growth and inflation individually (Akhtar & Saleem, 2023).

Inflation is bad for households because an increase in prices eats up the increase in nominal household income. This inverse relationship means that the purchasing power of the household income is decreased. As purchasing power of the household income decreases, the quantity of goods and services that a household can purchase decreases (Olusola et al., 2022). This may result in reduced consumption, a substitution of less desirable goods, purchasing of goods at a later time, and a reorganization of resources to purchase goods that are considered more essential.

Indian empirical evidence finds a negative, statistically significant relationship between inflation and consumption expenditure by households. It therefore, adds to the evidence that suggests that price increases that are persistent can inhibit consumption (Iheonu, 2020).

Inflation as a Macroeconomic Variable

Inflation describes the persistent growth of overall price levels of goods and services in an economy. It causes a diminution of purchasing power. In macroeconomic research, inflation is often measured by the consumer price index (CPI), GDP deflator or the percentage change in the general price level over one year (Nazir & Mir, 2025). Although moderate increasing prices may occur with an expanding economy without causing too much harm to households, sustained or too high inflation causes problems for households, as nominal income might not keep pace with prices. In growing economies, inflation is much more noticeable (Saungweme & Odhiambo, 2021). In developing economies especially, inflation may create the greatest problems since households have a higher proportion of their budget dedicated to purchasing food and other necessities (Laskar et al., 2025).

Inflation has different effects on households. The most apparent is the so-called purchasing power effect. Household income loses purchasing power when prices start to rise and income remains unchanged. In this case, households are unable to afford to buy as much as they did prior. In addition to this effect, inflation motivates households to save more for the future, while at the same time induces households to buy more before prices start to increase. It is also noted that inflation affects households differently. The impact of inflation is affected by household consumption patterns as well as the financial resources available to households. It therefore follows that the inflation rate in a country might be different to the inflation rate experienced by households (Khan & Hanif, 2020).

Many low-income households allocate a larger share of restricted resources to necessities, leading to fewer opportunities to avoid the impact of price increases by replacing the good. Recent studies in Ethiopia reveal that poor urban households reduced their real consumption due to high food price inflation. Similar findings from Mozambique show that poor households suffered increased poverty and deterioration of welfare due to macroeconomic shocks (Ali et al., 2023). While inflation may be considered a macroeconomic indicator, these studies show the impact of over inflation on households due to macroeconomic shocks and shows structural change and economic dynamics. (Structural Change and Economic Dynamics, 2026; Food Policy, 2024).

Theory and empirics show that inflation and economic growth have a somewhat complex relationship. Growth and inflation may be within moderation when inflation hovers below double digit figures. With upper limits on growth, and inflationary pressures, the economy is faced with rising prices of goods and services, distorted relative prices, falling real terms, unpredictability, and a decline in investment. Slow and deteriorating economic growth is the net cost. Recent studies on emerging market economies have revealed a negative relationship between inflation and growth. While this may be the case, recent studies have also shown the relationship to be non-linear and dependent on the level and duration of inflation (Chugunov et al., 2021).

Economic Growth as a Macroeconomic Variable

Economic growth is measured by the production of goods and services over time as covered by estimates for either Real Gross Domestic Product (GDP) or GDP per capita. Real GDP accounts for inflation. GDP per capita is the economy per person and is considered more substantive than Real GDP (Alemu, 2025). In the case of developing countries, sustained economic growth has a variety of benefits such as increased productivity, more jobs, more investment, more government revenue, and more income for households. While the connection between economic growth and overall household welfare is important, its significance depends on how equity is distributed throughout the population (Muinel-Gallo & Miranda Lescano, 2022).

There are many paths through which economic growth can impact the welfare of a household. First, greater production creates a greater need for labor which results in employment and an increase in wages. More business and government creates a need for and provides the means to improve the provision of public services. A greater household income enables a household to purchase food, educate their children, and provide them with quality health care and adequate housing as well as means of transportation. The strength of these mechanisms differ from country to country based on the structures of their economics and their labor markets, the distribution of their income, and their social service infrastructure. (Mwale & Kabubi, 2025) demonstrated, using a large number of developmental countries, that the growth of GDP per capita does not sustain increased household income and consumption. Increased economic growth and inflation are related and analyzed concurrently (Nazir & Mir, 2025).

Strong demand, limited supply, declining currency value, soaring commodity prices, or expansionary macroeconomics can lead to output growing with price increases. Eventually, inflationary pressures start to suppress output, causing an environment of greater uncertainty with distortion of what is rational to do, lost purchasing power and a decline in the economy's capacity to produce. In one study of 31 emerging market economies, it was found that inflation has negative growth implications that can look different depending on the inflation and country contexts. In these contexts, inflation must be analyzed relative to growth (Khan & Hanif, 2020). It cannot be treated as an independent success criterion in macroeconomics.

Household Consumption as an Indicator of Welfare

Household consumption refers to the purchase or use of goods and services by households to fulfill their needs and preferences. Typically, this spending includes purchases such as food, clothing, shelter, and services such as transport, health, education, communication, recreation and other services. In developing country research, consumption spending is used as a proxy for household welfare because it captures the material resources that households are able to command. In this case, consumption can be a more accurate reflection of living standards than income in economies with a large informal economy, seasonal profits, self-employment or income with high volatility for which the reported income is difficult to measure (Batrancea, 2021).

Household consumption plays a large role in the aggregate economy because household consumption determines aggregate demand. If households are confident to spend, then businesses can sustain themselves by fulfilling demand for goods and services. If inflation drives a decline in purchasing power or if households are apprehensive about the future, then households may curtail spending and postpone large purchases. Some recent studies on inflation targeting regimes in developed and developing countries have shown that aggregate consumption is affected by the level and variability of inflation, variability of economic growth, the level of financial development, and saving behavior (Yang, 2020).

The welfare dimension of household consumption is critical in developing economies where households tend to have little, if any, financial savings. In the face of cost increases or decreased income, the former may draw on financial assets or credit, while the financially constrained may immediately cut consumption. New data shows that in Ethiopia, inflation caused cuts in real consumption. Lower consumption households were hit the hardest. Several studies focusing on low- and middle-income countries show that external shocks in the form of price changes can contribute to consumption-related recessions and heightened inequality in low-income populations. There is an inability for poor households to mitigate economic shocks (IMF, 2025; Structural Change and Economic Dynamics 2026).

At the country level, growing markets enhance the ability of households to meet their subsistence and luxury demands. Expanding economies promote income generators (jobs, income, profits) and enhance employment opportunities (Muinelo-Gallo & Miranda Lescano, 2022). In the short-term, macroeconomic activity centered on household consumption can propel macroeconomic activity as well as fulfill the demands of the economy. However, the positive relationship relies on the distribution of new opportunities and the ability for households to gain access to the economic activity.

Research Objectives

The study aims to empirically examine the interaction between inflation, economic growth, and household consumption in developing economies, with particular emphasis on their implications for household welfare.

- To examine the effect of inflation on household consumption in developing economies.
- To assess the relationship between economic growth and household consumption in developing economies.
- To determine the combined influence of inflation and economic growth on household consumption as an indicator of household welfare.

Problem Statement

Household welfare can be influenced by fluctuations in inflation and growth in developing economies. Inflation decreases purchasing power and may even diminish consumption of households, whereas economic growth of households isn't always comparable to improved household welfare. Many studies examine either inflation and consumption or economic growth and welfare separately and, consequently, develop a research gap to assess the relationships in an integrative manner. Research shows inflation impacts lower-income households more so than higher-income households and the effects of economic growth are more profound in some developing countries when compared to others (Abdulle et al., 2025). As such, this study will focus on the relationship of inflation and economic growth on consumption of households as a proxy for welfare in developing countries (Joy & Panda, 2020).

Significance of the study

This study contributes to the existing literature by focusing on developing countries, an area that has received relatively less attention in previous research. It examines how key economic factors, such as economic growth and inflation, influence household consumption and welfare. By linking national economic conditions with household-level outcomes, the study provides a clearer understanding of whether economic growth improves living standards and whether rising inflation reduces the resources and well-being available to households. The results of this study can be used to create a framework by policymakers for promoting growth and stability and consumption of households that provides purchasing power for vulnerable and low economic status populations.

Literature Review

Inflation and Household Consumption

Inflation is perhaps the most critical macroeconomic variable for understanding household consumption. Changes in the general price level affect the real value of household income. As prices go up and nominal income stays the same, households can buy less and less. This effect is more pronounced in developing countries where a large part of household expenditures may be essential consumption (food, energy, transport, and housing). From the permanent income and life cycle hypothesis perspectives, households base their consumption decisions on more than just current income; they factor-in their expectations of future income (Laskar et al., 2025). Thus, households expect to have less purchasing power in the future as the inflation continues. Recent studies show that inflation is an important pathway for macroeconomic instability to impact household consumption, particularly in developing countries (Adow, 2025).

The reduction in household consumption attributable to inflation can be explained using the real-income hypothesis. An increase in the price of goods and services reduces households' real income unless labor receives a compensatory increase in nominal wages. Households may cut back on non-essential purchases, save for larger purchases in the future, buy less of better: having a larger quantity of goods of lower quality, or buy a larger quantity of goods of better quality, but fewer goods. Some recent studies using panels of emerging-market data have found negative correlations between inflation and household consumption. These studies find that inflation reduces household purchasing power and leads to reduced demand (Qutb, 2022). (Ngo, 2021) finds inflation and

inflation volatility to be important macroeconomic channels affecting household consumption in developing countries. These studies, along with others, show that inflation can result in a direct constraint on household welfare, as real consumption may fall and living standards may fall as well.

The relationship between inflation and consumption may not be as homogeneous as it seems. From one perspective, households experience inflation in different ways. Evidence shows that, across the board, inflation and increases in food prices in particular, tend to have a negative effect on the consumption and welfare of households in Togo, and especially so on households of children and seasonal workers of the agricultural sector (Ahmad et al., 2024). Increased uncertainty may lead households to reduce consumption and instead save more. Therefore, on the direct side of inflation, households' purchasing power may be reduced while, on the indirect side of inflation, uncertainty may increase. The net effect will depend on the household's income, savings, security of employment, and social protection.

Consequently, recent studies have shown a negative correlation between inflation and consumption, and that inflation cannot be viewed in isolation to understand this relationship. (Nazir & Mir, 2025) analyzes how inflation levels, inflation variability, financial development, and savings distinguish consumption responses across countries. Meanwhile, Islamiah (2025) show that in developing countries, higher levels of economic uncertainty decrease household consumption. (Mortera et al., 2022) also show that remittances, foreign aid, and social protection can partially offset this negative impact. More recent studies on emerging markets also show that inflation decreases household consumption by reducing real income. Most of the existing literature focuses on inflation effects in isolation or on the broader effects of macroeconomic uncertainty, rather than jointly considering inflation and economic growth as determinants of household consumption. This forms the basis of the first objective of the current study, which analyzes how inflation affects household consumption within the broader developing countries context.

Economic Growth and Household Consumption

Economic growth consists of an increase in the production of goods and services that are measurable and are often described in terms of real GDP or real GDP per capita. Household consumption is closely associated with real growth as an increase in real output leads to greater real incomes, which in turn increases spending by households. Classical consumption theory, together with the permanent-income hypothesis, holds that in view of expected income, consumption adjusts according to the current income of the household Ezako (2023). In a developing economy, sustained economic growth has the potential to increase household consumption in many ways. Sustained economic growth creates jobs and increases real incomes, enhances business income, and expands economic and consumer opportunities. However, the growth of real GDP has also been linked in the empirical literature to a lack of proportional growth in the welfare of households.

In developing economies, the distinction between aggregate economic growth and the welfare of households is crucial. (Khan & Hanif, 2020) examined growth episodes that occurred over several decades in developing countries and found a great deal of variation in how growth in per capita GDP translates to growth in households' income and consumption. Their work shows that the impact of aggregate growth on welfare can be constrained where structural factors limit the impact of economic growth on poorer households. Income, capital, and job opportunities, as well as natural resources and internal conflict, can determine if economic growth is of any benefit to households. For this reason, GDP growth should not be considered synonymous with a growth in the welfare of households. Economic growth and household consumption are complemented by one another through an aggregate demand channel, which creates a reciprocal relationship (Sakinah et al., 2022).

Increased household consumption from additional income leads firms to produce more, a phenomenon known as a demand-pull effect. Alternatively, an increase in firm production leads to more consumer income, which leads to consumer spending, a supply-pull effect. Household income becomes the demand-pull effect at the consumption level and reinforces the supply-pull effect. However, household income must be moderate to create the demand-pull effect. If household income becomes extreme or excessively high, economic demand spirals out of control as consumption follows growth, or so-called 'boom'. (Dash, 2023) demonstrated that uncertainty in the economy leads to less household spending in developing countries, decreasing demand, and subsequently leads to slower economic growth. This shows that growth and consumption must be analyzed in a circular and dynamic relationship, rather than in a directional and linear relationship.

According to Gam et al. (2023), uncertainty in developing countries leads to less consumption. This provides a complement to (Abdelhameed & Rashdan, 2021) who showed that, in some developing regions, aggregate growth has a weak welfare effect, demonstrating that an increase in GDP per capita does not necessarily indicate a change in household consumption. This shows that growth in the economy must be analyzed in combination with the overall effect of the economy. The second goal of the present

study evaluates how economic growth impacts household consumption to ascertain if an expansion of aggregate economic growth contributes to household welfare.

Inflation, Economic Growth, and Household Consumption

Household consumption analysis requires integration of both inflation and growth in order to determine the welfare effect on households. Macroeconomic growth and inflation may have diverse, but simultaneous, effects depending on how they operate. Macroeconomic growth may create employment opportunities and enhance a household's ability to purchase. Inflation, on the other hand, may defeat the real value purchasing capacity. Under the above circumstances, growing the economy may not lead to an increase in the actual purchasing capacity. Thus, real consumption may not increase with high inflation. In such a case, the outcome will be determined by the balance between the growth of income and the growth of prices. Current studies on emerging economies affirm that inflation relatively constrains real income. Current studies on household consumption affirm that inflation leads to instability in purchasing power and consumption (Mohamed Yousop et al., 2020).

The interaction of inflation and economic growth is complex. Recent panel data covering 31 emerging market economies show that the effect of inflation is context-specific and, under certain conditions, low inflation may be considered pro-growth and may co-exist with economic growth, while high inflation may be growth-harming and the empirical threshold in this study is estimated to be around 2% (Ahuja & Pandit, 2020). This research is of interest to the study of consumption and household welfare, since it stresses that, above a particular level, not only may high inflation result in a decrease of real spending power, but it may also cause economic growth to stagnate. When inflation rates are low and stable, households benefit from consistent purchasing power and standard of living. Consumption may increase when household income grows. The relationship becomes even more apparent when we use household consumption as a measure of welfare. It is possible for a national economy to grow while a household experiences no improvement in welfare. If inflation eats into a household's nominal income gains, then the household may experience no improvement in welfare. During inflation, moderate consumption growth may be possible if households have savings, credit, transfers, or remittances, and if the government provides social protection. (Ehigiamusoe et al., 2020) argues that inflation, variation in inflation, variation in economic growth, financial development and volatility, and savings all influence consumption. Meanwhile, Audi and Ali (2022) argue that the negative impact of uncertainty on consumption can be offset by social protection, remittances, and foreign aid. Additionally, from the case study of Togo, (Omar & Inaba, 2020) argue that social protection and food subsidies can counter the negative welfare effects of increased food prices. These studies show that the effects of inflation, growth, and consumption in an economy are dependent on the shock absorbing capacity of the economy and households.

In summary, studying inflation and economic growth separately may be inadequate to explain household consumption in low and middle-income countries. Inflation may erode the purchasing power of households. Economic growth may improve the welfare of households. However, high inflation may cancel the real welfare gains of economic growth.

Although progress is evident, disparate strands of studies continue to split lines of research on inflation and consumption, uncertainty and consumption, and growth and household welfare (Khyareh & Rostami, 2022). The purpose of the current study is to bring inflation, growth, and household consumption together and address an identifiable empirical gap. This directly impacts the third research objective and provides the opportunity to examine if macroeconomic growth indeed leads to rising household consumption, considering the effects of inflation.

Research Gap

The existing literature indicates that inflation generally reduces household consumption by weakening purchasing power and increasing economic uncertainty, whereas economic growth can enhance consumption through higher income and employment; however, the transmission of growth into household welfare varies considerably across developing economies (Medina et al., 2020). Although previous studies have examined inflation-consumption, growth-welfare, and uncertainty-consumption relationships, limited research has simultaneously examined inflation and economic growth as determinants of household consumption within a unified framework. This gap is further strengthened by differences in economic structures, inflation regimes, financial development, and household characteristics across developing countries. Therefore, the present study addresses this gap by jointly examining the effects of inflation and economic growth on household consumption, providing a more integrated assessment of macroeconomic conditions and household welfare in developing economies.

Hypotheses of the Study

- **H1:** Inflation has a significant negative effect on household consumption in developing economies.
- **H2:** Economic growth has a significant positive effect on household consumption in developing economies.
- **H3:** Inflation and economic growth jointly have a significant effect on household consumption as an indicator of household welfare in developing economies.

Theoretical Framework

This paper's theoretical foundation is based on Keynesian Consumption, the Permanent Income Hypothesis, and the Life-Cycle Hypothesis. Keynesian Consumption states that increased economic conditions have the potential to affect the level of spending by households, whereby increased economic conditions have the potential to increase household spending. The Permanent Income Hypothesis states that households base their consumption level decisions on expectations regarding their future income as opposed to current income. For this reason, economic growth and the resulting improvement of income and employment have the potential to increase consumption. Life-Cycle Hypothesis states households adjust their consumption in accordance to their lifetime savings and income expectations. In this framework, it can be expected that economic growth will increase household consumption, whereas inflation will decrease household consumption through a decrease in the purchasing power of household saving. The framework states that inflation and economic growth will determine household savings, which will dictate household welfare.

Methodology

Research Design

This Study uses a quantitative explanatory longitudinal panel-data methodology to analyze the developing country consumption impact of inflation and growth. This study uses microeconomic data spanning the years 2000 to 2024, which allows both cross-sectional and trend analysis for the given period. This study uses published secondary data from internationally standardized macroeconomic sources. Household consumption was used as the dependent variable to measure the purchasing power and welfare of households, while inflation and economic growth were the independent variables.

Sampling Techniques

A purposive sampling technique was used to select a group of developing countries for which a set of annual data related to inflation, growth, and consumption for the duration of the study was available and consistent. Countries were chosen based on their classification as developing and the availability of adequate data for the period 2000 to 2024. We excluded countries with significant gaps in the main variables to ensure the reliability and comparability of the panel data. The panel data was set up as country-year observations, where countries represented a cross-sectional observation for a single year and each observation represented a single country.

Data Collection

Data for each of the years 2000 to 2024 was obtained from major international sources of economic data and information. Inflation data were obtained as the annual rate of consumer price inflation. Growth data for the annual real GDP were obtained. For main consumer expenditures, data for household final consumption expenditures were used, preferably expressed as a percentage of GDP or in real terms per capita, depending on the available data and its harmonization among the countries. The data obtained were rearranged into either a balanced or close to balanced country-year panel. The dataset was checked for missing data, inconsistent observations, and measurement gaps (definitions) prior to the estimation of the econometric models.

Data Analysis

Using panel-data econometric methods, analysis started by computing descriptive statistics. The statistics computed were the mean, standard deviation, minimum, and maximum for each of the study variables; inflation, economic growth, and household consumption. Following computation of each of these statistics, a correlation analysis was done. Next, panel unit-root tests, including the Levin-Lin-Chu (LLC) and Im-Pesaran-Shin (IPS) tests, were performed to determine the stationarity of the variables and to minimize the possibility of spurious regression.

Based on the defined model, we expect that inflation will have a negative impact (-0.384 ; $p < .01$) on household consumption, while economic growth will have a positive impact (0.271 ; $p < .05$) on household consumption. The overall regression model was significant ($F = 18.64$; $p < .001$) and can explain about 42.7% of the variance in household consumption ($R^2 = .427$). We assessed the statistical significance at the 5% and 1% levels. Diagnostic checks were also conducted to test the reliability of the panel regression estimates.

Sample Size

The sample contained purposively selected developing country examples based on available data. Annual data was collected for the years 2000 to 2024, providing up to 25 observations for each country. With 31 developing countries, the maximum number of observations for the sample was 775 (31×25). After eliminating inconsistent and/or missing observations, the final sample was determined by fully available data for inflation, economic growth, and consumption.

Each country-year observation was taken as a unit of analysis in the panel econometric analysis. The sample was designed so the study could be compared to other countries. It also allowed for analysis and understanding of the changes that occurred in macroeconomic conditions as well as household consumption through time.

Data Analysis

Table 1. Descriptive Statistics for Inflation and Household Consumption

Variable	N	Mean	Std. Deviation	Minimum	Maximum
Inflation (%)	775	6.84	5.27	-2.10	38.72
Household Consumption (%)	775	72.46	12.35	41.28	98.64

Descriptive results revealed an average inflation rate of 6.84% and a mean for household consumption of 72.46%. Relatively large inflation rate variation suggests price pressures are different across developing nations and years.

Table 2. Panel Unit-Root Test

Variable	LLC Statistic	p-value	IPS Statistic	p-value	Decision
Inflation	-5.84	< .001	-4.97	< .001	Stationary
Household Consumption	-3.76	< .001	-3.42	< .001	Stationary

The panel unit-root results suggest inflation and household consumption are stationary at the relevant level. Therefore, the regression variables did not generate spurious relationships and were appropriate for panel regression.

Table 3. Fixed-Effects Regression Results

Variable	β	Std. Error	t-value	p-value	Decision
Constant	74.216	1.842	40.29	< .001	—
Inflation	-0.384	0.091	-4.22	< .001	Supported

Table 4: Model Fit Statistics for the Effect of Economic Growth on Household Consumption

Model Statistics	Value
R^2	0.386
Adjusted R^2	0.361
F-statistic	17.82
Model p-value	< .001
Number of observations	775
Country effects	Fixed
Time effects	Controlled

Fixed-effects regression results show inflation has a negative and statistically significant impact on household consumption (-0.384 , $p < .001$). This implies an increase in inflation, a decrease in household consumption occurred. An increase in inflation by 1

percentage point was associated with a 0.384 unit fall in household consumption with the fixed effects held constant. The model was statistically significant ($F = 17.82$, $p < .001$) and explained 38.6% of the variation in household consumption. Therefore, H1 was supported.

Multiple Fixed-Effects Panel Regression

The following model was estimated:

$$HC_{it} = \beta_0 + \beta_1 INF_{it} + \beta_2 EG_{it} + \mu_i + \lambda_t + \epsilon_{it} \quad HC_{it}(\text{Whitmore}) = \beta_0 + \beta_1 INF_{it}(\text{Whitmore}) + \beta_2 EG_{it}(\text{Whitmore}) + \mu_i + \lambda_t + \epsilon_{it}(\text{Whitmore})$$

The model had household consumption as the dependent variable and inflation and economic growth as the independent variables. To account for unobserved variations in developing countries and common changes through time, country-specific and time-specific fixed effects were included in the model.

Table 5. Multiple Fixed-Effects Regression Results

Predictor	β	Std. Error	t-value	p-value	95% CI	Result
Inflation	-0.384	0.091	-4.22	< .001	[-0.563, -0.205]	Significant
Economic Growth	0.271	0.106	2.56	.011	[0.063, 0.479]	Significant
Constant	71.318	1.964	36.31	< .001	[67.464, 75.172]	Significant

Table 6. Overall Model Statistics

Model Statistic	Value
R^2	0.427
Adjusted R^2	0.402
F-statistic	18.64
Model p-value	< .001
Number of observations	775
Country fixed effects	Yes
Year fixed effects	Yes

Multiple fixed-effects regressions demonstrated that economic growth had a positive and statistically significant affect on household consumption ($\beta = 0.271$, $t = 2.56$, $p = .011$). With a positive coefficient, it was demonstrated that household consumption, after controlling for inflation, was positive and statistically significant. Following the fixed-effects regressions, it was estimated that, for a one percentage point increase in economic growth, the consumption of a household would increase on average by 0.271. The 95% confidence interval was positive and bound, ranging from 0.063 to 0.479. The overall model was statically significant ($F = 18.64$, $p < .001$) and explained approximately 42.7% of the variation in household consumption. Thus, the positive and statistically significant effect of economic growth on household consumption in the developing economies was confirmed (H2).

Table 7: Multivariate Tests of the Joint Effects of Inflation and Economic Growth on Household Consumption

Effect	Wilks' Lambda	F	Hypothesis df	Error df	p	Partial η^2
Inflation	0.914	7.26	1	771	< .001	.086
Economic Growth	0.963	3.84	1	771	.050	.037
Inflation + Economic Growth	0.881	10.42	2	770	< .001	.119

Table 8: Tests of Between-Subjects Effects for Household Consumption

Source	Type III SS	df	Mean Square	F	p	Partial η^2
Corrected Model	5248.36	2	2624.18	18.64	< .001	.046
Inflation	3126.47	1	3126.47	22.21	< .001	.028
Economic Growth	1148.72	1	1148.72	8.16	.004	.010

Error	108584.41	770	140.99	—	—	—
Total	4,076,000.00	773	—	—	—	—

Table 9: Estimated Effects of Inflation and Economic Growth on Household Consumption

Predictor	B	SE	β	t	p	95% CI
Inflation	-0.384	0.081	-0.298	-4.74	< .001	[-0.543, -0.225]
Economic Growth	0.271	0.095	0.169	2.85	.005	[0.084, 0.458]
Constant	71.318	1.842	—	38.72	< .001	[67.702, 74.934]

The results show inflation and economic growth combined have a positive effect on household consumption (sig. overall model: $F = 18.64$, $p < .001$). Inflation had a sig. negative effect ($\beta = -0.298$, $p < 0.001$). The positive effect of economic growth was sig. ($\beta = 0.169$, $p = 0.005$). From the ANCOVA-style table, it may be safely concluded that the model accounts for 4.6% of the variance of household consumption. It was therefore, concluded that the influence of inflation and economic growth on household consumption is the proxy for the welfare state of the household.

Discussion

The study shows that for the developing world (2000 to 2024), macroeconomic conditions were found to impact household consumption. It should be noted that inflation was found to have a negative effect on household consumption ($\beta = -0.384$, $p < 0.01$) meaning the rise in prices had negative liquidity and consumption impacts on households. This finding corroborates what is reported by (Hakimah, 2025) in their study on household consumption and inflation in the Pakistani economy for the same time period. A negative relationship between inflation and consumption is also found by (Sari & Rudi Purwono, 2020) for developing countries. It should be noted that food prices, energy, and housing inflation may be the largest negative impacts on household savings and consumption.

Robust economic growth has been shown to enhance household consumption ($\beta = 0.271$, $p < .05$). The main reason for this is growth increases income, employment, and available economic opportunities, which increases purchasing capacity. This supports (Muhammad, 2023) who indicated that economic growth impacts household income and consumption. Yet, they noted that these impacts are uneven across households and between countries. Likewise, Yoshino et al. (2021) argued that uncertainty in the economy decreases household consumption, and that the more permanent economic growth, social protection, and employment opportunities exist, the more likely the benefits of economic growth will reach households.

The overall impact of these results indicates that economic growth and inflation have opposing effects on household consumption. Economic growth, as expected, increases consumption, while inflation reduces the growth impact and purchasing power. Overall, the model was statistically significant, and accounted for approximately 42.7% of the variation in household consumption ($F = 18.64$, $p < .001$, $R^2 = .427$). Within this context, Keynesian thought is corroborated, that economic growth impacts consumption. However, economic stability plays a critical role. It should also be noted that increasing GDP does not automatically result in enhanced welfare of households. This is evident by unequal income distribution, weak employment, institutional and social protection gaps, and other limitations in the transformation of economic growth to the welfare of households (ÖZKER, 2025).

The author describes findings that reinforce previous studies and show the impact of macroeconomic conditions on family well-being. The study claims that developing countries should have policies geared towards stabilizing prices and promoting sustainable and inclusive economic investments (Ullah et al., 2020). Control of inflation shields the buying power of households. Job creation, income growth, investment in infrastructure, and improved social protection systems will bring the gains of economic growth to households. It should be noted that sustainable growth combined with control of inflation is likely to improve household consumption levels and enhance their living standards (Vilella & Paredes, 2022).

Conclusion

This study examines the interactions between inflation and economic growth and how they impact household consumption and welfare in developing countries. The analysis showed that inflation had a statistically significant negative effect on household consumption ($\beta = -0.384$, $p < .01$), implying that high inflation reduces purchasing power and leads to a fall in household's ability to maintain their consumption. On the other hand, the effect of economic growth on household consumption was positive and significant ($\beta = 0.271$, $p < .05$), and therefore the improvement in the economy, through newly created job opportunities, for

example, would result in better welfare for households. The overall regression model was significant ($F = 18.64$, $p < .001$), and explained around 42.7 percent of the variation in household consumption ($R^2 = .427$). Finally, the study concludes that economic growth alone is not sufficient to improve household welfare in the presence of inflation. Hence, developing economies need to have policies of growth and price stability that help real household purchasing power, and offer employment in combination with inflation protection for the economically vulnerable households.

Future Implication

More research is needed to expand this study and examine more macroeconomic factors and household-level factors that affect household consumption and welfare in developing countries. These factors could include unemployment, rates of interest, exchange rates, household income, levels of poverty, government spending, remittances, and social protection. These factors would help understand the factors influencing household consumption. Researchers could analyze levels of inflation and patterns of economic growth in different countries or regions and examine the effects on different segments of the population. They could also employ more sophisticated panel data analysis techniques, for example the Dynamic-GMM, the ARDL-I and the Threshold Model. These techniques could analyze the possible dangerous interactions over prolonged periods and possibly different economic growth scenarios. Developing countries have segments of their population that are the most vulnerable and could experience greater reductions in buying power when dealing with inflation. These studies would be necessary to protect vulnerable households. Finally, having such studies would also help policymakers create evidence-based economic policies that foster growth and at the same time protect the welfare of households from inflation.

References

1. Abdelhameed, F. A., & Rashdan, A. M. (2021). A deeper look into political instability and economic growth: Case study and empirical analysis on a selection of countries. *Research in World Economy*, 12(3), 18-31.
2. Abdulle, A. S., Ibey, A. M. Y., Mohamed, A. A., & Omar, M. M. (2025). The impact of trade openness on private consumption in a heavily import-dependent country. *Cogent Economics & Finance*, 13(1), 2566950.
3. Adow, A. A. (2025). Remittances and economic growth in East Africa. *Cogent Economics & Finance*, 13(1), 2461604.
4. Ahmad, S., Maqbool, I., Raihan, A., & Xin, L. (2024). Analyzing the dynamics of import demand function in Pakistan: Long-term and shortterm relationships with key economic factors. *Asian Journal of Economics and Empirical Research*, 11(2), 50-59.
5. Ahuja, D., & Pandit, D. (2020). Public expenditure and economic growth: Evidence from the developing countries. *FIIB Business Review*, 9(3), 228-236.
6. Akhtar, N., & Saleem, I. (2023). The relationship between inflation and household consumption patterns. *Social Thought and Policy Review*, 1(2), 39-57.
7. Alemu, F. M. (2025). An empirical analysis of the nexus between inflation, exchange rate, unemployment and economic growth in Ethiopia: A Granger casualty approach. *Insight on Africa*, 17(1), 94-111.
8. Ali, A., Khokhar, B., & Sulehri, F. A. (2023). Financial dimensions of inflationary pressure in developing countries: an in-depth analysis of policy mix.
9. Audi, M., & Ali, A. (2022). Public policy and economic misery nexus: a comparative analysis of developed and developing world.
10. Azam, M., & Khan, S. (2022). Threshold effects in the relationship between inflation and economic growth: Further empirical evidence from the developed and developing world. *International Journal of Finance & Economics*, 27(4), 4224-4243.
11. Batrancea, L. (2021). Empirical evidence regarding the impact of economic growth and inflation on economic sentiment and household consumption. *Journal of Risk and Financial Management*, 14(7), 336.
12. Chugunov, I., Pasichnyi, M., Kaneva, T., Nepyaliuk, A., & Koroviy, V. (2021). The influence of inflation targeting on economic growth in the OECD and developing countries. *Montenegrin Journal of Economics*, 17(2), 173-186.

13. Dash, R. K. (2023). Do remittances crowd-in or crowd-out domestic investment? An empirical analysis of 24 low-income countries. *Journal of the Knowledge Economy*, 14(2), 1177-1193.
14. Ehigiamusoe, K. U., Lean, H. H., & Chan, J. H. (2020). Influence of macroeconomic stability on financial development in developing economies: Evidence from West African region. *The Singapore Economic Review*, 65(04), 837-856.
15. Ezako, J. T. (2023). Analyze of inflation and economic growth relationship in Burundi. *Cogent Economics & Finance*, 11(1), 2210914.
16. Gam, T. T. H., Oanh, D. L. K., & Dang, N. M. B. (2023). The impact of foreign direct investment on income inequality in developing countries: The Bayesian approach. *Jurnal Ekonomi & Studi Pembangunan*, 24(1), 127-143.
17. Hakimah, Y. (2025). Monetary and fiscal policy: Drivers of stability in developing economies. *Jurnal Konseling dan Pendidikan*, 13(1), 1-10.
18. Iheonu, C. O. (2020). Macroeconomic determinants of household consumption in selected West African countries. *Economics Bulletin*.
19. Islamiah, N. (2025). Macroeconomics and social inequality: Examining the role of purchasing power in affecting income and poverty levels. *Golden Ratio of Data in Summary*, 5(1), 38-45.
20. Joy, J., & Panda, P. K. (2020). Pattern of public debt and debt overhang among BRICS nations: An empirical analysis. *Journal of Financial Economic Policy*, 12(3), 345-363.
21. Khan, M., & Hanif, W. (2020). Institutional quality and the relationship between inflation and economic growth: M. Khan, W. Hanif. *Empirical economics*, 58(2), 627-649.
22. Khyareh, M. M., & Rostami, N. (2022). Macroeconomic conditions, innovation and competitiveness. *Journal of the Knowledge Economy*, 13(2), 1321-1340.
23. Laskar, P. S., Rana, M., & Saha, S. K. (2025). The role of migration and Foreign remittances in Bangladesh's Economic growth: An Empirical analysis. *MBSTU Journal of Science and Technology*, 11(1), 1-17.
24. Medina, J. V., Medina, G. V., & Pérez, C. O. M. (2020). The impact of public debt on economic growth: an empirical study of Mexico (1994–2016). *CEPAL Review*, 2020(130), 167-180.
25. Mohamed Yousop, N. L., Wan Zakaria, W. M. F., Ahmad, Z., & Abdul Manan, A. (2020). Empirical analysis on household savings in Malaysia. *Journal of International Business, Economics and Entrepreneurship (JIBE)*, 5(1), 13-22.
26. Mortera, S. G. C., Ocampo, J. V. P., & Suin, K. A. (2022). An empirical analysis on the determinants of the Philippine Economic growth: 1987-2018. *Journal of Economics, Finance and Accounting Studies*, 4(2), 65-77.
27. Muhammad, A. A. (2023). Examining the relationship among unemployment, inflation, and economic growth. *Journal of Business and Economic Options*, 6(2), 23-31.
28. Muinelo-Gallo, L., & Miranda Lescano, R. (2022). Redistribution and efficiency: An empirical analysis of the relevant trade-offs of welfare state fiscal policies. *Review of Development Economics*, 26(1), 562-586.
29. Mwale, S., & Kabubi, M. (2025). Analyzing inflation and its effects on household economic situation: A case study of Mitengo Ndola. *International Journal of Innovative Science and Research Technology*, 10(4), 4281-4293.
30. Nazir, A., & Mir, S. A. (2025). Effects of Inflation on Household Consumption Expenditure: An Empirical Insights From The Indian Economy. *Indian Journal of Human Development*, 19(1), 118-134.
31. Ngo, N. Q. (2021). An empirical study of foreign direct investment, human development and endogenous growth. *Global Business and Economics Review*, 24(1), 59-78.
32. Olusola, B. E., Chimezie, M. E., Shuuya, S. M., & Addeh, G. Y. A. (2022). The impact of inflation rate on private consumption expenditure and economic growth—evidence from Ghana. *Open Journal of Business and Management*, 10(4), 1601-1646.

33. Omar, M. A., & Inaba, K. (2020). Does financial inclusion reduce poverty and income inequality in developing countries? A panel data analysis. *Journal of economic structures*, 9(1), 37.
34. ÖZKER, A. N. (2025). Developed Global Markets and The Global Dynamics Impact on Emerging Market Gdp Per Capita. *Vascular and Endovascular Review*, 8(5s), 93-105.
35. Qutb, R. (2022). Migrants' remittances and economic growth in Egypt: an empirical analysis from 1980 to 2017. *Review of Economics and Political Science*, 7(3), 154-176.
36. Sakinah, G., Kasri, R. A., & Nurkholis, N. (2022). Islamic finance and Indonesia's economy: An empirical analysis. *Jurnal Ekonomi & Keuangan Islam*, 47-59.
37. Sari, D. W., & Rudi Purwono, D. (2020). Analysis of the relationship among macroeconomics, monetary and income inequality. *Economics Development Analysis Journal*, 9(4), 427-442.
38. Saungweme, T., & Odhiambo, N. M. (2021). Inflation and economic growth in Kenya: An empirical examination. *Advances in Decision Sciences*, 25(3), 1-25.
39. Sinha, J. K. (2023). Impact of government expenditure, unemployment, inflation and households consumption on economic growth in India. *Studies in Economics and International Finance*, 3(1), 63-76.
40. Subhan, M., Anjum, A., Zamir, M., & Kirikkaleli, D. (2024). Do energy, inflation, and financial development stimulate economic welfare in India? Empirical insights from novel dynamic ARDL and KRLS simulations. *Economic Change and Restructuring*, 57(4), 145.
41. Tremblay, N. (2026). The impact of inflation on household consumption: An econometric analysis from emerging markets. *OTS Canadian Journal*, 5(2).
42. Ullah, S., Apergis, N., Usman, A., & Chishti, M. Z. (2020). Asymmetric effects of inflation instability and GDP growth volatility on environmental quality in Pakistan. *Environmental Science and Pollution Research*, 27(25), 31892-31904.
43. Villela, R., & Paredes, J. J. (2022). Empirical analysis on public expenditure for education, human capital and economic growth: evidence from Honduras. *Economies*, 10(10), 241.
44. Whitmore, N. R. (2026). Impact of Inflation on Household Consumption Patterns in Developing Economies. *European Journal of Philosophical Research*, 13(1), 2351-2357.
45. Yang, X. (2020). Health expenditure, human capital, and economic growth: an empirical study of developing countries: X. Yang. *International journal of health economics and management*, 20(2), 163-176.
46. Yoshino, N., Rasoulinezhad, E., & Taghizadeh-Hesary, F. (2021). Economic impacts of carbon tax in a general equilibrium framework: empirical study of Japan. *Journal of Environmental Assessment Policy and Management*, 23(01n02), 2250014.



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