Extended AbstractPlease do not add your name or affiliation

Paper/Poster Title	How worse off are consumers in Ghana due to the
	recent price inflation?

Abstract prepared for presentation at the 98th Annual Conference of The Agricultural Economics Society will be held at The University of Edinburgh, UK, 18th - 20th March 2024.

Abstract 200 words max

The goal of the present study is to estimate the impact of the consumer price inflation between January and September 2023 on the demand for 10 aggregate commodities in Ghana. The study relied on the Ghana Living Standard Survey data for 2018 which covers all expenses made by the household within the last 30 days of the sampling period. The lack of prices in the Living Standard Survey dataset presents a major challenge for empirical work. The study circumvented this limitation by following the seminal work of Castellón et al. (2015) to impute Stone-Lewbel (S-L) prices. Both SL prices and expenditure shares were used to estimate an Exact Affine Stone Index demand system for Ghana. The results revealed that Transportation, Communication, Recreation, entertainment and cultural services, and Education are luxury goods. Increases in transportation cost had the least impact on consumer welfare whilst the general rise in prices for all commodities had astronomical effect on consumers, especially the demand for medical care and health. Rural households were least affected by the rise in transport cost when compared with urban dwellers. Despite the significant impact of the recent price increases, there are no price or income support systems in Ghana to help consumer to maintain their wellbeing. Social and economic policies aimed at easing the effects of the price inflation should be considered by government.

Keywords	Demand analysis; EASI demand system; Inflation; Welfare analysis, CPI				
JEL Code	D120 Consumer Economics: Empirical Analysis				
	see: www.aeaweb.org/jel/guide/jel.php?class=Q)				
Introduction		100 – 250 words			

Recently there has been a significant increase in the prices of goods and services due to global phenomena such as Covid-19, Russia-Ukraine invasion. According to Arndt et al. (2023) the war in Ukraine has significant impact on food, fuel, and fertilizer prices. As the price level increases, each unit of currency buys fewer goods and services. Price inflation is a major concern in many countries due to its adverse effects on economic growth, social stability, and overall well-being (Blanchard, 2021; International Monetary Fund, 2021; Mankiw, 2020). Developing countries have experienced higher inflation rates than developed countries in recent years (World Bank, 2021). Many countries in sub-Saharan Africa including Ghana were expected to face high inflation rates due to uncontrollable domestic factors such as rising food and



energy prices, and high levels of public debt (Bolhuis & Kovacs, 2022). Despite the numerous discussions on the implications of inflation to consumers and economic growth, studies quantifying the recent consumer price inflation on household demand and welfare using novel approaches are lacking in Ghana. To the best of the authors' knowledge, this is the first empirical study estimating a complete demand system for Ghana.

Methodology 100 – 250 words

The paper estimates the welfare effect of the increases in consumer price inflation between January and September 2023 across 9 commodity aggregates in Ghana using the 2018 living standard survey data. An EASI demand system was estimated using total expenditure and Stone-Lewbel prices generated following Castellón et al. (2015). Simulations were based on the growth in the consumer price indices for selected specific commodity aggregates as well as all commodities.

Results | 100 – 250 words

All own-price and expenditure elasticities were significant at the 1 per cent level. The Transportation, Communication, Recreation, entertainment and cultural services, and Education are luxury commodities. Increases in transportation cost only has the least impact on consumer welfare whilst the general rise in prices for all commodities between January and September 2023 had astronomical effect on consumers, especially the demand for medical care and health. Rural households were least affected by the rise in transport cost when compared with urban dwellers. The general price increase led to about 10 per cent reduction in the demand for education and 25 per cent reduction in food and non-alcoholic beverages demand. The welfare estimate suggest that consumer would require about twice the expenditure in January to consume the same amount of goods in September.

Discussion and Conclusion

100 - 250 words

The results about the impact of consumer price inflation shows a gloomy picture for household demand in Ghana. The significant fall in the demand for food and non-alcoholic beverages raises concerns for food and nutrition security in the country. However, there are no price and income support policies in Ghana to help consumers to deal with the current price increases. In addition, the significant fall in the demand for medical care and health resonant with the high price elasticity of demand. This situation raises concern about affordability of health care in Ghana especially among the poor. Finally, the general rise in prices require about 80 per cent increase in the total initial budget to meet current expenses. This is unprecedented and requires urgent policy support. The cost-of-living crisis will be felt hardest by lower income households and those in urban areas. Policies targeted at these groups of households is necessary and should be timely.



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