The Effect of Inflation on Sustainable Spending Patterns: Evidence from Hungary

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Abstract: This study examines how inflation influences sustainable consumption behavior in Hungary. Using macroeconomic data and survey insights, it explores the dual impact of inflation—its ability to hinder eco-friendly purchases, while fostering resourcefulness and minimalism. Findings indicate that although cost concerns reduce support for sustainable brands, behavioral adaptations such as reduced consumption and local sourcing align with sustainability goals.

Keywords: Inflation, Sustainable Consumption, Consumer Behavior, Hungary, Economic Impact

1 Introduction

Sustainable consumption is defined as the use of goods and services in ways that minimize environmental, social, and economic harm while meeting current needs without compromising those of future generations [1]. This includes reducing waste, using resources efficiently, and supporting ethical production practices. However, economic instability, particularly inflation, can disrupt such behaviors. Inflation, characterized by rising prices and declining purchasing power, has both positive and negative effects on consumer behavior. While it may deter the purchase of costlier sustainable products, it may also encourage minimalism, energy efficiency, and a preference for local products [2]. Hungary's recent inflationary trends provide a useful case for examining these dynamics. This paper investigates how inflation affects sustainable consumption patterns in Hungary, exploring shifts in consumer behavior, motivations, and the balance between economic constraints and ecological responsibility.

2 Methods

A mixed-methods approach was used combining macroeconomic data from the Hungarian Central Statistical Office (KSH) and TradingEconomics with survey responses collected from 115 Hungarian residents (58.3% male, 41.7% female; 47% urban; 46% with higher education) regarding consumption habits over a 12-month period. The survey assessed changes in purchasing behavior, environmental considerations, and attitudes toward sustainable products. Responses were rated on a 5-point Likert scale and analyzed to identify trends related to inflation and sustainability. Energy data from the Hungarian Energy and Public Utility Regulatory Authority (MEKH) was also analyzed.

3 Results

3.1 Inflation and Consumer Trends

Hungary has experienced sustained inflationary pressures between 2019 and 2023, peaking in late 2022 and early 2023 (Figure 1).

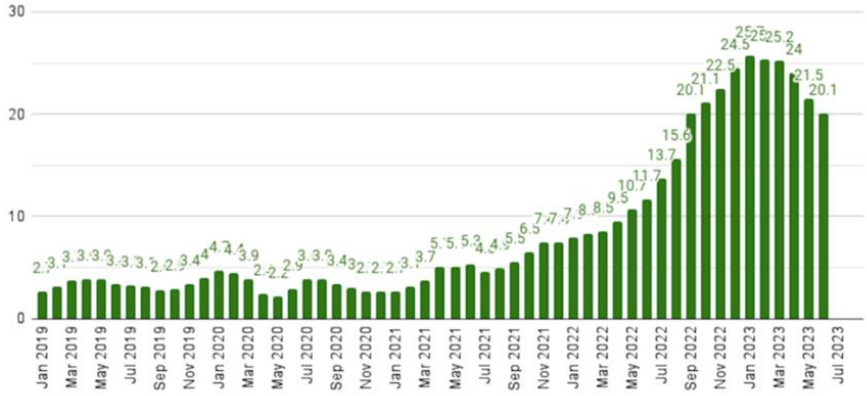

Figure 1
Hungary Inflation % y/y between 2019 and 2023 Source: Hungarian Central Bank

As prices sky-rocketed, retail sales declined, especially in the non-essential and luxury segments [3] (Figure 2). Consumers prioritized affordability over brand value or environmental considerations, reflecting a drop in demand for high-cost sustainable goods. While affordability concerns led to decreased support for ethical

brands, consumers displayed increased price sensitivity and engaged in minimalist practices.

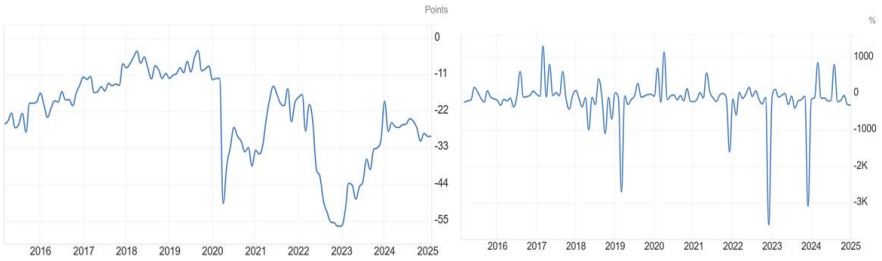

Figure 2

Consumer Confidence and Retail Sales MoM in Hungary between 2016 and 2025 Source: tradingeconomics

New energy use regulation was introduced in August 2022. These regulatory changes have also led to a 27% increase in renewable energy usage and a 5.6% decline in fossil-based consumption [4] (Figure 3).

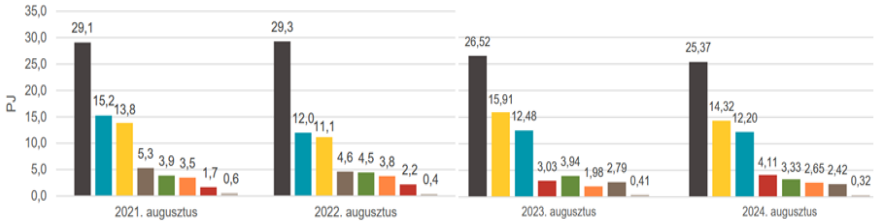

Figure 3

Primary Energy Consumption Change (PJ) between August of 2021 and 2024 Source: MEKH
Color code: Black- Petroleum, Blue- Natural gas, Yellow- Nuclear, Green- Renewable, Red-Solar, Orange-Electricity, Brown- Coal

3.2 Dual Impact of Inflation on Sustainability

Negative Outcomes:

Eco-friendly goods, often priced higher, saw a decrease in demand. Consumers changed to lower-cost alternatives, thus undermining ethical brands and sustainability-focused initiatives.

Positive Outcomes:

Consumers adopted minimalist behaviors by buying fewer items and and an increased interest in product repairs. Due to the new energy-use regulations consumtion decreased and many have shifted to renewable energy sources [4].

Local product consumption increased, partially due to price sensitivity and to supply-chain disruptions favoring nearby sourcing. Food waste has also declined [5] (Figure 4).

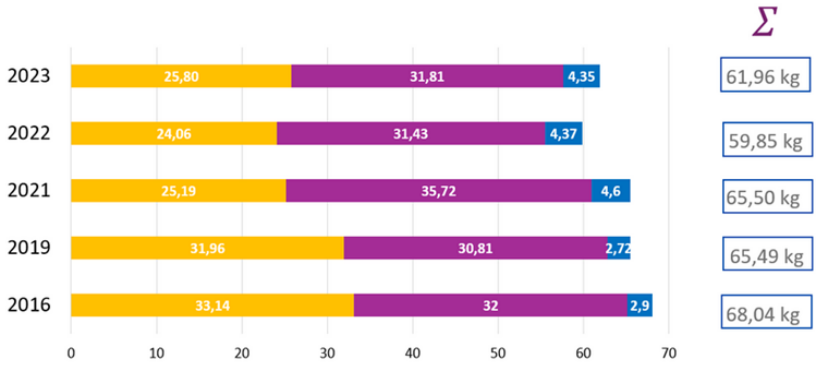

Figure 4

Food Waste in Hungarian Housholds (Kg) between August of 2016 and 2023 Source: maradeknelkul

Color code: Yellow-Avoidable, Purple-Unavoidalble, Blue-Possibly Avoidable

3.3 Consumer Behavior Insights from Survey Data

Survey responses suggest a marked shift toward a more price-conscious behavior. Most respondents reported regularly checking prices and avoiding unnecessary purchases. Interest in non-essential and environmentally friendly products has decreased compared with previous year (Figures 5 and 6).

Figure 5

How true the following statements were for you in the previous year compared to this year?

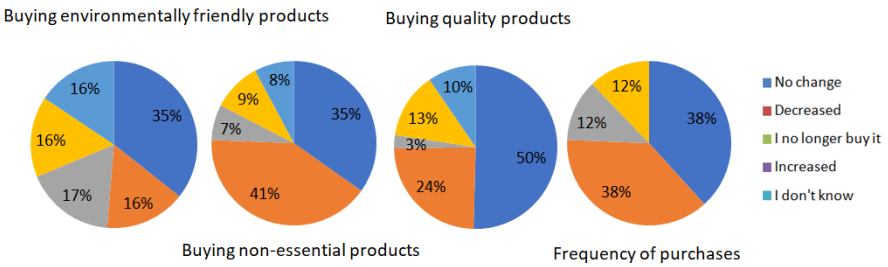

Figure 6

Compared to last year, how much have the following habits changed for you?

Although 80% of respondents experienced income increases, inflation eroded real purchasing power, altering consumption habits. This finding is in line with similar surveys conducted during the same time period [5]. There is a clear distinction between consumer awareness of sustainability and their capacity to act on it. This is a known representation of the affordability-action gap [6]. The survey responses confirmed heightened awareness (Figure 6), but reduced purchasing power as a key limitation.

Average	SD
How important is it for you that a product is recyclable?	
2.79	1.0962
How important is it to you that the food you buy comes from sustainable sources?	
3.12	1.2150
How important is it to you that the packaging of a product is recyclable?	
3.05	1.2899

*on a scale of 1 to 5

Figure 7

Importance of buying sustainable products

Conclusion and Recommendations

Inflation presents a complex challenge for sustainable consumption. In Hungary, inflation has led many consumers to abandon eco-friendly products and services in favor of affordability. At the same time, it also encouraged behaviors that are in line with sustainability, such as reduced consumption, energy efficiency, and support for local goods. These adaptive behaviors suggest that even in times of economic stress, sustainable values can endure albeit in altered forms, and higher prices can in fact reinforce certain sustainable practices. Understanding these dual dynamics is critical for creating resilient sustainability strategies that can withstand economic fluctuations. Such strategies could include:

- subsidies or tax reductions for sustainable goods,
- encouraging local supply chains and cooperatives through microfinancing,
- popularizing community-based initiatives and second-hand markets,
- promoting repair and reuse programs.

Limitations and Further Research

This study is limited by the relatively small sample size of survey respondents and its focus on urban populations. Further research could include longitudinal studies across different income groups and regions, and explore how policy tools can mitigate the trade-offs between inflation and sustainable behavior.

References

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