
Inflation-Driven Changes in Consumer Behavior on the Polish Market: A Survey Approach

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Abstract:

Purpose: The aim of this article was to identify the most important changes in Poles' purchasing habits, which were influenced by increased inflation. In addition to the literature review, the results of our own survey research will be presented, which assessed the level of perception of inflation by respondents and analyzed their consumption situation with particular emphasis on changes that occurred under the influence of increased inflation.

Design/Methodology/Approach: The research was conducted at the end of 2023 on a sample of 226 adult Poles. The study was conducted using an online survey. The issue of changes in purchasing habits caused by inflation was analyzed in the context of the following research areas: assessment of respondents' perceptions of inflation, assessment of changes in the situation resulting from the increase in inflation, and eating habits and changes resulting from inflation. Based on the obtained data, detailed result tables were prepared presenting the distribution of respondents' responses.

Findings: As the presented research results show, changes in purchasing habits due to inflation are varied, and their interpretation is ambiguous. It's important to note that price increases haven't been the only factor influencing consumer decisions in recent years. As affluence increases, product quality, brand, and country or region of origin become increasingly important.

Practical Implications: The results of this research can provide important material for developing marketing strategies and social policies aimed at mitigating the negative effects of inflation on society.

Originality/ Value: Inflation has forced consumers to be more cautious and consciously plan their spending, which in turn forces companies to adapt their marketing strategies, offers, and sales channels to meet customer expectations. This, in turn, leads to the search for new supply markets, optimization of production, and implementation of a range of measures aimed at customer retention.

Keywords: Inflation, changes in shopping habits, product categories.

JEL classification: M31, D40, E31, L11.

Paper type: Research article.

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1. Introduction

In recent years, significant changes in purchasing habits have been observed in the markets of many countries, driven, among other things, by increased inflation. The first factor to impact this was the Covid-19 pandemic. Lockdowns and the periods of recovery that followed, along with rapidly changing consumer needs and a production structure that couldn't keep up, provided significant pro-inflationary stimuli.

In February 2022, the war in Ukraine began. This, primarily due to sanctions on the purchase of products from Russia, led to a rise in energy prices and heightened uncertainty about the future supply of key raw materials. This deepened the uncertainty, further contributing to the rise in inflation, as both factors contribute to rising production costs.

Furthermore, spending related to combating global warming and the need to curb consumption is rising. Furthermore, in Poland, there is an unstable political situation and exceptionally strong wage pressure.

The aim of this article was to identify the most important changes in Poles' purchasing habits, which were influenced by increased inflation. In addition to the literature review, the results of our own survey research will be presented, which assessed the level of perception of inflation by respondents and analyzed their consumption situation with particular emphasis on changes that occurred under the influence of increased inflation.

2. Literature Review

Consumer behavior can be described as the totality of decisions made by people during the consumption process and the factors influencing them (Noel, 2009; Hakim *et al.*, 2022). To satisfy their needs, people undertake various actions, which are determined by various factors, which can be divided into five basic groups (Waniowski, Sobotkiewicz, and Daszkiewicz, 2010):

- psychological or internal (needs, motivations, perceptions, learning process, beliefs and attitudes, personality, and life ambitions);
- demographic and economic profile of buyers: age, gender, education, marital and family status, place of residence, profession, economic situation;
- social (family, social class, reference group, opinion leaders, lifestyle);
- cultural (culture, subcultures).
- economic (prices and macroeconomic conditions).

Among economic factors, the inflation rate plays a significant role, affecting consumers' quality of life and financial possibilities. Rising inflation typically leads to changes in purchasing habits, prompting consumers to reduce spending and make

more informed purchasing decisions. Buyers try to rationalize their behavior by purchasing cheaper brands, seeking out cheaper suppliers, and limiting spending on currently unnecessary products (Yuen, Tan, Wong, and Wang, 2022).

In conditions of increased inflation, irrational behavior may also occur, such as accumulating excessive stocks or purchasing prestigious products in order to emphasize one's status (Lussier and Achua, 2022). Moreover, not only the impact of inflation on the level and structure of consumer spending was demonstrated, but also on inflation expectations (Lieb and Schuffels, 2022).

Inflation in Poland increased significantly between 2021 and 2023. The increase in prices of consumer goods and services in 2021 compared to the previous year was 5.1%, in 2022 – 14.4%, and in 2023 – 11.4%. As a result, this led to a reduction in the scale of consumption by reducing the quantity of goods and services purchased and limiting or eliminating the purchase of specific services (e.g., related to culture, entertainment, tourism). Based on research conducted in 2023 among young consumers in Poland, it was found that (Szczepańska, 2024):

- due to inflation, consumers have modified their purchasing behavior.
- the way they spend money has changed: young people are buying less, looking for the lowest prices or substitutes for their favorite products.
- both purchasing decisions and budget management have become subordinated to the principle of rationality, which is reflected in a greater awareness of one's own needs, seeking information about market offers, planning purchases, and using apps that facilitate finding price promotions.
- young consumers report using products for as long as possible, despite the appearance of newer models on the market.

In the same year, a study of a representative nationwide sample of 1123 adult working Poles showed that³:

- over half of adult Poles have reduced purchases in the following categories: home furnishings and electronics, cultural activities, relaxation/rest, sports, beauty services, hairdressing, massages, clothing/footwear.
- inflation has changed the importance most Poles assign to individual criteria when choosing durable goods. These changes are similar for cheaper and more expensive products.
- as a result of inflation, most Poles have changed the way they make purchasing decisions for both cheaper and more expensive durable goods. It is clear that decisions are made less spontaneously by most Poles today, following more in-depth analysis.

³<https://zdrowiefinansowe.pl/analizy-raporty/jak-inflacja-zmienila-zachowania-konsumenckie-polek-i-polakow/>.

- one in five adult Poles has had to reduce medical and education expenses as a result of inflation.
- most Poles declare that changes in their consumer behavior will persist until inflation declines.

The research results presented here indicate a tendency to limit purchases and make more thoughtful decisions in various product categories during periods of rising product prices.

Increased inflation causes the value of money to decline and the cost of living to rise. Public sector employees, retirees, and pensioners are particularly affected by this. They are the quickest to modify their purchasing behavior (e.g., reducing the frequency of purchases and stocking up on larger amounts).

Furthermore, some consumers are even developing new consumption practices (Koos, Vihalemm, and Keller, 2017). Under the influence of inflation, consumers are more frugal and responsible, but also more demanding, as they seek out cheaper alternatives to previously purchased, more expensive products. They learn faster and are more restrictive in their spending, devoting more time to price analysis and extending the purchasing process for durable products.

However, an economic crisis changes the behavior of individual buyers only slightly, unless they feel directly threatened by the crisis and its consequences (Frątcza-Rudnicka, 2009).

Rising inflation is a direct experience that influences changes in consumer purchasing habits. Research conducted by the PwC advisory group in 2024, following a period of rising inflation, shows that consumers perceive inflation as the greatest threat (66%), and it has the greatest impact on consumer spending decisions. When making purchasing choices, consumers are primarily guided by financial considerations, followed by health concerns (44%), and finally by climate issues (25%)⁴.

3. Research Methodology

The research was conducted at the end of 2023 on a sample of 226 adult Poles. The issue of changes in purchasing habits due to inflationary processes seemed significant both due to the particular importance of prices in consumer choices and the exceptional scale of inflationary processes in 2022 and 2023⁵.

⁴<https://www.pwc.pl/pl/media/2024/2024-06-27-dla-polskiego-konsumenta-liczy-sie-przedewszystkim-cena.html>.

⁵The inflation rate was the highest in the 21st century, reaching 18.4% year-on-year in February 2023, the highest rate since December 1996.

The research was conducted using an online survey. A link to the survey was provided to respondents. The issue of changes in purchasing habits due to inflation was analyzed in the context of the following research areas:

- assessment of respondents' perceptions of inflation,
- assessment of changes in the situation resulting from increased inflation,
- dietary habits and changes resulting from inflation.

Data collected from the survey was automatically summarized and grouped according to respondent responses. Detailed result tables were prepared based on this data, presenting the distribution of respondent responses. The most frequently selected responses and any correlations between various variables were identified.

Conclusions were drawn from the collected data. The results of this research can provide important material for developing marketing strategies and social policies aimed at mitigating the negative effects of inflation on society.

4. Results of the Study

The study was conducted at a time when the inflation rate was declining, yet prices for many product groups continued to rise significantly. Therefore, respondents were initially asked for their subjective assessment of the impact of inflation on their personal circumstances.

As shown in Table 1, nearly two-thirds of respondents considered these effects significant, and over a quarter considered them moderate. A small number of respondents considered inflation to have a weak impact on their consumption decisions. This once again confirms that price increases are immediately noticeable to buyers of various product groups and directly influence their purchasing decisions.

Table 1. *Assessment of respondents' perception of inflation*

Respondents' indications	Value	Value in %
strong	143	63
weak	18	8
medium	64	28
hard to say	1	0
Sum of responses	226	100

Source: *Own study.*

Increased inflation typically triggers changes in buyer behavior, especially when the inflation rate is significantly higher and when this increase follows a prolonged period of low price stability. This was the case in Poland between 2021 and 2023.

In the main part of the study, a 5-point Likert scale was used, which made it possible to precisely illustrate the respondents' feelings (Table 2).

Table 2. Respondents' attitudes towards statements regarding the assessment of the change in the situation due to increased inflation

Respondents' indications	1	2	3	4	5
Due to increased inflation, I have significantly changed my consumption habits	29 13%	33 15%	36 16%	84 37%	44 19%
Inflation has caused me to give up some purchases	32 14%	33 15%	21 9%	78 35%	62 27%
Due to inflation, I buy fewer groceries than before	37 16%	35 15%	30 13%	73 32%	51 23%
I use services less often than before	33 15%	34 15%	35 15%	70 31%	54 24%
I'm more interested in product prices than before	28 12%	16 7%	10 4%	56 25%	116 51%
I'm more actively looking for promotions	24 11%	25 11%	26 12%	63 28%	87 38%
I currently place more importance on price than quality	49 22%	68 30%	37 16%	52 23%	17 8%
In the current climate, price is more important to me than brand	35 15%	36 16%	50 22%	63 28%	40 18%
I can give up my favorite brand if I can find a cheaper alternative	31 14%	35 15%	36 16%	67 30%	55 24%
I eat out less often than before at bars, restaurants, and fast food joints	34 15%	31 14%	27 12%	56 25%	75 33%
I use catering less often than before	46 20%	16 7%	40 18%	41 18%	80 35%
I pay attention to the ingredients in products and try to buy healthier options	24 11%	25 11%	43 19%	66 29%	66 29%
Due to inflation, I'm forced to change my vacation plans	43 19%	39 17%	48 21%	45 20%	49 22%

Note: 1 – I strongly disagree, 2 – I rather disagree, 3 – It's hard to say, 4 – I rather agree, 5 – I completely agree.

Source: Own study.

First, respondents were asked about changes in consumption habits due to inflation. Over half of respondents agreed that they had changed their consumption habits in the face of increased inflation (although twice as many chose "tend to agree" rather than "strongly agree"), while a further 16% had no opinion. The scale of these changes should be assessed as very significant, considering that while prices are a

key factor in consumer choice, consumption habits are also rooted in emotions and are influenced by many other factors (Solomon, 2006)⁶.

A study on emerging markets has shown that buyers are significantly changing their habits due to inflation, which is primarily expressed by a focus on basic goods that are crucial for everyday functioning at the expense of a decline in the purchase of luxury goods and non-essential services (Audty and Meyer, 2024). Other studies have also shown that inflation directly affects purchasing power, but also causes buyers' decisions to become more rational, and most buyers pay attention primarily to prices and the quality of products (Wiercioch, 2024).

Nearly two-thirds of respondents admitted that inflation had forced them to cancel some purchases. This is confirmed by the results of a May 2023 survey of 1,123 adult Poles, which showed that over half of adult Poles have reduced their purchases of durable goods and services, with only 5-7% buying more than in the period before the inflation increase (regardless of product category)⁷. In this survey, 55% agreed or tended to agree with the statement that they are currently buying fewer groceries and using services less frequently.

In this survey, 55% agreed or tended to agree with the statement that they now buy fewer food products and use services less often.

Food prices are a significant barrier, especially for those with lower incomes (Żurek, 2023). More affluent individuals, on the other hand, are less stable in their choices for a different reason. Namely, they can afford to make mistakes when making consumption choices (Lusk, 2019).

This is supported by research conducted in North America, which found that low-income households experience the greatest reduction in food spending (Taylor, 2022). Other studies have confirmed that low-income households are almost twice as sensitive to increased inflation as non-low-income households (Cavallo, 2024).

It's no surprise, then, that over two-thirds of respondents expressed greater interest in product prices than before, while only a quarter disagreed with this statement. It's clear that rising prices encourage buyers to search for price information more intensively than they would otherwise.

Much earlier, it was demonstrated that buyers' knowledge of prices is limited due to the limited communication channels and the perceptual capabilities of potential customers. Therefore, buyers typically do not remember exact prices, but rather assign them to a specific category (e.g., expensive or cheap products) (Zeithmal,

⁶(see pages 25 and following).

⁷<https://zdrowiefinansowe.pl/analizy-raporty/jak-inflacja-zmienila-zachowania-konsumenckie-polek-i-polakow/>.

1988). Buyers' knowledge of prices is only one of many areas of knowledge about the products they intend to purchase, but it is important enough that it can become the basis for inferences about other product characteristics (Lawson and Bhagat, 2002). The intensity of price information search depends largely on economic conditions. It is therefore not surprising that it increases with falling real income levels, i.e., during inflation.

The intensification of inflation also leads to a tendency to more objectively seek out promotions, meaning opportunities to purchase at a lower price or to buy larger quantities in a single transaction.

At the same time, however, over half of respondents disagreed with the opinion that they currently place more importance on price than quality. This may mean that price increases in recent years have not been significant enough to encourage consumers to treat price as the primary factor influencing their consumption choices.

On the other hand, it's worth remembering that price's importance decreases with increasing affluence, while the role of quality increases, and even periodic, excessive price increases cannot disrupt this general pattern.

Respondents' opinions, however, differ slightly regarding the statement that price currently matters more than brand. Slightly more respondents agreed with this statement than opposed it, though the margin was relatively small. However, the tendency to seek out cheaper alternatives to brand-name products also occurs during periods of price stability and intensifies when prices rise more rapidly.

In our study, 54% of respondents declared their willingness to give up their favorite brand if a cheaper equivalent can be found. This is difficult to interpret unambiguously, as brand loyalty varies greatly depending on the product group, and the assessment of the price-to-brand relationship is almost never clear-cut.

One pattern, noted long ago, is the evolution of private labels toward mid-range quality, which makes them a direct alternative to renowned traditional brands (Burt, 2000). Combining moderate pricing with an attempt to create a decent level of quality can become a source of success for private labels and lead to a shift in buyer preferences (Rondan - Cataluna, Navarro - Garcia, and Phau, 2006).

The next two issues concerned changes in food service habits. Slightly more than half of respondents agreed with the statement that they were less likely to eat out in bars, restaurants, fast food outlets, and catering services.

Considering Poles' strong preference for eating out and having ready-made meals delivered to their homes, this change is significant. Previous research has shown that food service expenditure is steadily increasing, although the rate of growth depends on household size, location, and job type (Gutkowska and Piekut, 2016).

A significant increase in inflation occurred during the COVID-19 pandemic. This has become a significant factor in stimulating health-promoting behaviors. It's no surprise, then, that 58% of respondents stated that they are now trying to buy healthier products, paying more attention to their ingredients.

Numerous studies have shown that a significant portion of the population has made positive changes to their consumption habits due to the pandemic⁸.

The intensification of inflationary processes, although preceded by various symptoms, comes as a surprise to consumers. Therefore, many behaviors are spontaneous in nature, and attitudes formed during this period may not be lasting. Therefore, it is difficult to clearly identify the factors that most significantly influenced changes in purchasing habits.

Tables 3 and 4 present changes in the level of purchases of key food and non-food product groups compared to the pre-inflation period. While the results are similar for different food product groups, they differ significantly for non-food products.

Table 3. *Eating habits and changes due to inflation*

Food category	Daily consumption				Change from pre-inflation period		
	No consumption	Less than 100 g	Between 100 and 300 g	More than 300 g	Currently consuming more	Currently consuming less	No change
Fruits	28	84	106	7	149	60	17
Vegetables	41	58	119	4	156	46	23
Fish and seafood	11	118	18	77	120	97	7
Meat and cold cuts	26	77	109	12	142	74	8
Dairy products	30	63	120	12	159	48	15
Alcohol	12	63	11	138	162	51	8

Source: *Own study.*

As shown in Table 3, most respondents admit to consuming more food products compared to the pre-inflation period. Further, more in-depth research would be necessary to precisely identify the causes of this phenomenon.

However, it can be assumed that since inflation causes a decline in purchasing power, and in the case of food products, people will try to maintain their previous eating habits, they will buy fewer products for the same amount of money.

⁸See, for example, the works of A. Olearczyk, B. Walewska-Zielecka and E. Van der Werf, M. Busch, M. Jong, R. Hoenders.

Therefore, an increase in spending may give the impression of buying more food products, which may consequently translate into the impression of increased consumption.

Table 4. *Changes in other consumption habits due to inflation*

Food category	Change from pre-inflation period		
	Currently consuming more	Currently consuming less	No change
Medicines and medical supplies	10	36	179
Clothing and shoes	14	128	83
Consumer electronics and household appliances	8	106	111
Purchases of goods and services related to leisure activities	8	128	89
Educational services	16	70	140

Source: *Own study.*

The responses regarding different groups of non-food products are more diverse. In this case, there is a clear reduction in spending on items whose purchase can be postponed and spent in future periods without significant detriment to current consumption (clothing and shoes, consumer electronics and household appliances, and leisure products).

Respondents' responses regarding educational services are somewhat different, as carrying forward these may prove somewhat more difficult. The rationality in buyers' behavior is most evident in the purchase of medicines and medical supplies, where as many as 80% of respondents indicated they are buying the same amount as in the pre-inflation period.

5. Conclusions

As the presented research results show, changes in purchasing habits influenced by inflation are varied, and their interpretation is ambiguous. It should be noted that price increases have not been the only factor influencing consumer decisions in recent years. With increasing affluence, product quality, brand, and country or region of origin are becoming increasingly important.

The current persistently elevated inflation in Poland may be caused by rising production costs and pressure on wage increases, further disruptions in the supply market related to the unstable international situation, and, particularly with regard to food products, seasonal fluctuations. Therefore, it is difficult to expect stabilization in Polish buyers' purchasing habits in the near future.

Moreover, high prices for energy and energy resources are driving up business operating costs, which in turn could lead to further inflationary pressures.

Furthermore, international economic and political uncertainty is driving cautious spending by both consumers and businesses.

Consequently, consumers may reduce spending on durable and luxury goods, focusing on basic everyday items. Forecasts also indicate a trend toward increased frugality and cautious spending in the near future, which could impact the dynamics of the retail market and its development prospects.

References:

- Audty, A., Meyer, L. 2024. Analyzing the Effects of Inflation on Consumer Purchasing Behavior in Emerging Markets. *International Journal of Economics, Commerce, and Management*, 1(2), pp. 21-23. doi: 10.62951/ijecm.v1i2.312.
- Burt, S. 2000. The strategic role of retail brands in British grocery retailing. *European Journal of Marketing*, 34(8), pp. 875-890. doi: 10.1108/03090560010331351.
- Cavallo, A. 2024. Inflation with Covid Consumption Baskets. *IMF Economic Review*, Vol. 72, pp. 902-917. <https://doi.org/10.1057/s41308-023-00213-y>.
- Frątczak-Rudnicka, B. 2009. Konsumenci w gorszych czasach (cz. I). *Marketing w Praktyce*, Vol 4, pp. 63-65.
- Gutkowska, K., Piekut, M. 2016. Korzystanie z usług gastronomicznych przez Polaków. *Polityki Europejskie, Finanse i Marketing*, 16(65), pp. 15-24. doi: 10.22630/PEFIM.2016.16.65.2.
- Hakim, A., Hachicha, N., Thalassinou, E.I. 2022. The International Spillover Among Sectors and the Interconnectedness to the Global Inflation Cycle. Available at SSRN 4058031. <https://www.pwc.pl/pl/media/2024/2024-06-27-dla-polskiego-konsumenta-liczy-sie-przedewszystkim-cena.html>.
- <https://zdrowiefinansowe.pl/analizy-raporty/jak-inflacja-zmienila-zachowania-konsumentow-polek-i-polakow/>.
- Koos, S., Vihalemm, T. Keller, M. 2017. Coping with crises: Consumption and social resilience on markets. *International Journal of Consumer Studies*, 41(4), pp. 363-370. <https://doi.org/10.1111/ijcs.12374>.
- Lawson, R., Bhagat, P.S. 2002. The role of price knowledge in consumer product knowledge structure. *Psychology & Marketing*, 19(6), pp. 551-568. doi:10.1002/mar.10024.
- Lieb, L., Schuffels, J. 2022. Inflation expectations and consumer spending: the role of household balance sheets. *Empirical Economics*, 63(5), pp. 2479-2512. doi: 10.1007/s00181-022-02222-8.
- Lusk, J.L. 2019. Income and (Ir) Rational Food Choice. *Journal of Economic Behavior and Organization*, Vol. 166, pp. 630-645. doi: 10.1016/j.jebo.2019.08.005.
- Lussier, R.N., Achua, C.H.F. 2022. *Leadership: Theory Application & Skill Development*. Sage.
- Noel, H. 2009. *Basic marketing 01: Consumer behavior*. AVA Publishing SA. doi: 10.5040/9781350088825.
- Olearczyk, A., Walewska-Zielecka, B. 2021. Wpływ pandemii COVID-19 na wybrane obszary zdrowia, stylu życia i samopoczucia pracowników w Polsce. In: Nowak, W., Szalotka, K. *Zdrowie i style życia. Ekonomiczne, społeczne i zdrowotne skutki pandemii*, Wrocław, Prace Naukowe Wydziału Prawa, Administracji i Ekonomii Uniwersytetu Wrocławskiego.

- Rondan-Cataluna, F.J, Navarro-Garcia, A., Phau, I. 2006. The influence of price and brand loyalty on store brands versus national brands. *The International Review of Retail, Distribution and Consumer Research*, 16(4), pp. 433-452.
doi:10.1080/09593960600844236.
- Solomon, M.R. 2006. *Zachorowania i zwyczaje konsumentów*. Wydawnictwo Helion, Gliwice.
- Szczepańska, M. 2024. Postawy młodych konsumentów w obliczu inflacji po pandemii COVID-19. *UR Journal of Humanities and Social Sciences*, 31(2), pp. 131-146.
<https://doi.org/10.15584/johass.2024.2.7>.
- Taylor, L.D. 2022. Analysis of impacts of inflation on the distribution of household consumption expenditures. *Canadian Journal of Agricultural Economics*, 70(3), pp. 239-258. <https://doi.org/10.1111/cjag.12315>.
- Waniowski, P., Sobotkiewicz, D., Daszkiewicz, M. 2010. *Marketing. Teoria i Przykłady*, Warszawa.
- Werf, E., Busch, M., Jong, M., Hoenders, R. 2021. Lifestyle changes during the first wave of the COVID-19 pandemic: A cross-sectional survey in the Netherlands. *BMC Public Health*, 21(1), 1226. doi: 10.1186/s12889-021-11264-z.
- Wiercioch, M. 2024. Impact of inflation on purchasing decisions of residents of selected polish voivodeships. *Journal of Finance and Financial Law*, 3(43), pp. 23-39.
<https://doi.org/10.18778/2391-6478.3.43.02>.
- Zeithaml, V. 1988. Consumer perceptions of price, quality and value: a means-end model and synthesis of evidence. *Journal of Marketin*, 52(3), pp. 2-22.
- Żurek, J. 2023. Wpływ wybranych determinant ekonomicznych, demograficznych i kulturowych na zachowania żywieniowe konsumentów. *Nierówności Społeczne a Wzrost Gospodarczy*, Vol. 73, pp. 166-180. doi: 10.34659/eis.2024.90.3.704.
- Yuen, K.F, Tan, L.S, Wong, D.Y, Wang, X. 2022. Social Determinants of Panic Buying Behavior amidst COVID-19 Pandemic: The Role of Perceived Scarcity and Anticipated Regret. *Journal of Retailing and Consumer Services*, Vol. 66.
<https://doi.org/10.1016/j.jretconser.2022.102948>.