Literature Review and Commentary on the Relationship between Inflation and Residents' Consumption Behavior

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Abstract:

As a core indicator of macroeconomic operation, inflation's significance lies in the fact that it directly determines the stable foundation of the macro economy and the baseline of ordinary people's quality of life. Given that its fluctuations are closely tied to both the national economy and individual livelihoods, inflation has not only become a key focus for in-depth academic research but also a core issue that policymakers must prioritize when formulating regulatory strategies. Given that many researchers have conducted in-depth studies on inflation-related issues, this paper, based on existing literature, classifies, summarizes, and comments on inflation-related research from three aspects: first, the influencing factors of inflation formation; second, the impact of inflation on consumption behavior; third, the heterogeneous effects of inflation. The study finds that expected inflation is affected by inflation information, and actual inflation is in turn affected by expected inflation; the impact of inflation on consumption is mainly reflected in total consumption volume, consumption methods, and consumption structure; and the impact effects vary according to the characteristics of different population groups.

Keywords: Inflation; Expected Inflation; Consumption Behavior.

1. Introduction

With the rapid development of society, global inflation is currently showing a general slowdown but remains at a relatively high level, with significant differences among countries. The International Monetary Fund (IMF) projects that the overall global inflation rate will fall to 4.3% in 2025 and 3.6% in 2026 [1]. Although the overall global inflation rate is

expected to decline, the inflation differences among various countries are quite obvious. Countries such as China and Norway experienced negative inflation growth in 2024, with China at -0.7% and Norway at -0.2%; the 2024 inflation rates of countries including Canada (3.0%), Germany (3.1%), and the United Kingdom (4.0%) were close to the world average. However, some countries are facing hyperinflation,

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such as Zimbabwe, whose inflation rate reached 1091.5% in 2024 [2]. The IMF also points out that the U.S. economy is showing signs of stress, including increased inflation risks; it is projected that the U.S. inflation rate will remain above the inflation target at least until 2027 and will continue to face the potential risk of "high inflation and high unemployment" [3]. A survey of U.S. residents shows that more than half of the respondents believe there is a risk of a surge in inflation and unemployment rates in the coming year [3].

The reason for focusing on inflation is that for every country, economic stability-including full employment, balance of payments equilibrium, and price stability—is an indispensable element for achieving long-term economic growth. Inflation is not only closely related to economic indicators such as unemployment rate, but also closely linked to national decisions and policies like fiscal policy and monetary policy [4]. However, improper implementation of these policies can lead to excessively high or low inflation, which affects the stability of currency purchasing power, thereby impacting price levels and ultimately exerting a negative influence on long-term economic growth [5]. For these reasons, researchers in various countries attach importance to and conduct research on inflation issues, aiming to avoid the negative impacts caused by inappropriate inflation, thereby maintaining macroeconomic stability and sustainable growth; safeguarding residents' livelihoods and social equity—such as enhancing the risk resistance capacity of low-income groups and alleviating the social polarization effect caused by inflation; and helping central banks more accurately determine how to effectively implement monetary policies.

Based on the above background, this paper reviews the multi-faceted achievements in the research on the relationship between inflation and residents' consumption behavior, conducts an in-depth study on the impact of inflation on various aspects of residents' consumption behavior, and provides some references for the implementation of future policies. Firstly, it introduces the concepts and definitions relevant to this paper. Secondly, it explores the factors affecting inflation. Then, it introduces the impact of inflation on residents' consumption behavior. Next, it studies the heterogeneous effects of inflation. Finally, it summarizes the impact of inflation on various aspects of residents' consumption and looks forward to future research.

2. Concepts and Theoretical Foundation

2.1 The Concept of Inflation

Expected inflation refers to the inflation that people an-

ticipate will occur in the future. According to the Fisher equation, the real interest rate equals the nominal interest rate minus the expected inflation rate [6]. In other words, the expected inflation rate is defined as the difference between the nominal interest rate and the real interest rate [6]. Actual inflation is the phenomenon where the actual average price level of goods and services in the economy continuously rises, and the actual purchasing power of money continuously declines. It can be measured using the GDP deflator, which is calculated as nominal GDP divided by real GDP multiplied by 100. Generally, an increase in the expected inflation rate leads to a rise in current consumption [6]. In contrast, an increase in actual inflation reduces the purchasing power of money, thereby causing a decline in current consumption.

2.2 Definition of Consumer Behavior

Consumer behavior includes three aspects: total consumption, consumption structure, and consumption methods. Total consumption refers to the total household consumption expenditure (calculated in monetary terms). Consumption structure includes expenditures on durable goods, non-durable goods, and services. Consumption methods involve purchasing on credit or saving disposable income to delay consumption.

3. Factors Influencing Inflation

3.1 Factors Influencing Expected Inflation

Through a summary and study of previous literature, there are two factors affecting expected inflation: first, whether inflation information is provided; second, the way inflation information is presented.

Olivier Coibion, Yuriy Gorodnichenko, and Michael Weber designed 8 ways of presenting inflation information, conducted a controlled experiment, surveyed 20,000 U.S. households, and tracked changes in their expected inflation and consumption after 3 months and 6 months [7]. The study found that providing statistical information on inflation would affect households' inflation expectations [7].

Another study on Dutch households can also support this view. Olivier Coibion, Dimitris Georgarakos, and others took Dutch households as samples and used a controlled experiment method to study the factors influencing expected inflation. By setting up experimental groups and control groups—some households received the latest information on inflation while others received no relevant information—the experimental results finally concluded that the provision of information would affect households' inflation expectations, although the duration and response intensity were relatively small [8].

The study by Carola Conces Binder, Jeffrey R. Campbell, and Jane M. Ryngaert found that residents' inflation expectations would respond to macroeconomic events such as FOMC meetings, CPI releases, and NFP releases, but the magnitude and direction of the impact varied depending on event characteristics and temporal context [9]. This finding provides insights for monetary policymakers by clearly communicating the macroeconomic implications of data releases, thereby enhancing the ability to guide consumers' expectations.

These three experiments all indicate that providing inflation information, compared with providing no information at all, will change households' inflation expectations. At the same time, the way inflation information is presented will also affect the extent to which such information changes inflation expectations. The influencing factors here include the conciseness and directness of the information content, the credibility of the information source, and the forward-looking nature of the information.

The study by Olivier Coibion, Yuriy Gorodnichenko, and Michael Weber shows that providing simple information about inflation has a more significant impact on households' inflation expectations than providing relatively complex information [7]. This may be because concise and clear information helps individuals understand, thereby producing a more profound effect. Moreover, when central banks directly convey inflation information to the public, it is more persuasive than conveying such information through the media [7]. In other words, regarding inflation information, most people believe that information from official sources is more reliable. Therefore, in order to better shape people's expected inflation, central banks should directly release information related to inflation (such as inflation targets) to the public, rather than relying on methods such as media dissemination [7].

Third, compared with information that only involves past inflation rates, information containing forward-looking content (such as inflation forecasts and inflation targets) has a slight advantage in terms of the sustainability of its impact on inflation expectations [4].

3.2 Factors Influencing Actual Inflation

Expected inflation is one of the important factors affecting actual inflation. The study by David L'opez-Salido and Francesca Loria concluded that long-term expected inflation would have an impact on actual inflation [10]. This may be attributed to workers' wage bargaining behavior. If workers expect long-term inflation to remain at a high level in the future, they will demand wage increases during wage negotiations to offset the decline in currency purchasing power. This will lead to an increase in enterprises' labor costs and a decrease in total supply, which in turn will cause prices to rise.

The study by Merike Kukk, Jan Toczynski, and Christoph

Basten directly points out that there is a positive correlation between expected inflation and actual inflation [11]. The reason is that the inflation risk perceived by households is proportional to their consumption expenditure [11]. An increase in perceived inflation risk also means an increase in expected inflation. Therefore, household expenditure will increase with the rise in expected inflation, which in turn leads to an increase in total demand. When total supply remains unchanged, this will cause the price level to rise, that is, actual inflation to increase.

4. The Impact of Inflation on Household Consumption Behavior

4.1 The Impact of Expected Inflation on Household Consumption Behavior

Previous studies have found that expectations of inflation can alter consumers' total consumption, consumption methods, and consumption structure. First, research by Merike Kukk, Jan Toczynski, and Christoph Basten indicates that in the short term, when individuals perceive an increase in inflation risk, they tend to increase their spending [11]. Perceiving an increase in inflation risk means that households believe the currency will depreciate in the future, i.e., expected inflation is rising. From this, it can be concluded that inflation expectations are positively correlated with personal consumption expenditure. Second, the expected inflation rate is defined as the difference between the nominal interest rate and the real interest rate [6]. Therefore, when the real interest rate remains unchanged, an increase in the expected inflation rate will also lead to a rise in the nominal interest rate. Since credit interest rates are typically linked to nominal interest rates, an increase in the nominal interest rate also means higher credit costs, leading to a reduction in the amount of credit [11]. Furthermore, research by Olivier Coibion, Yuriy Gorodnichenko, and Michael Weber shows that when expected inflation rises, consumers tend to postpone or cancel purchases of large durable goods, while spending on non-durable goods often increases [7]. This may be because consumers associate high inflation with pessimistic employment conditions, leading to concerns about future income and thus cutting spending on durable goods during high inflation periods [7]. Another explanation is that some consumers believe high inflation reduces the purchasing power of money, meaning real wages decline, thereby reducing spending on durable goods [7]. Another survey supports this view. Mary A. Burke and Ali Ozdagli surveyed U.S. households from mid-2009 to the end of 2012 and found that consumer spending on durable goods slightly declined during periods of high expected inflation [6]. Moreover, most durable goods consumption (such as ISSN 2959-6130

cars and housing) relies heavily on credit support (e.g., car loans, mortgages). When interest rates rise, such consumption naturally decreases [12].

4.2 The Impact of Actual Inflation on Household Consumption Behavior

Previous studies have shown that actual inflation affects total consumption. Research by Antonio Paradiso, Paolo Casadio, and B. Bhaskara Rao indicates that high actual inflation reduces consumption expenditure [12]. The reason is that high inflation dampens consumer confidence, leading households to increase their savings rate [12]. When disposable income remains unchanged, an increase in savings implies a decrease in consumption expenditure. Conversely, low actual inflation can also increase consumption expenditure. Since actual inflation is positively correlated with the nominal interest rate, a decline in longterm interest rates may lead some households to reduce home equity and use the freed-up cash for consumption [12]. Specifically, if a household originally had a mortgage interest rate of 5% and long-term interest rates fall to 3%, the household could negotiate with the bank to adjust the existing loan interest rate, thereby reducing monthly payments, or additionally extract home equity to obtain more disposable funds for daily consumption or durable goods purchases.

5. Heterogeneous Effects of Inflation

5.1 Impact of Expected Inflation on Different Population Groups

According to previous studies, expected inflation exerts different impacts on groups with different income and wealth levels, different educational attainments, and different thinking patterns. Contrary to the findings of earlier studies, groups with high income or high wealth respond more strongly to expected inflation than those with low income or low wealth. The research by Olivier Coibion, Dimitris Georgarakos, et al. shows that when expected inflation rises, groups with high wealth or high asset liquidity experience a significantly larger decline in the purchase of durable goods than groups with low wealth or low asset liquidity [8]. Educational attainment also affects the role of expected inflation in consumers' consumption. The study by Burke, Mary A. and Ozdagli, Ali reveals that when the level of expected inflation is high, people with higher educational attainment consume more durable goods [6]. The research by Olivier Coibion, Dimitris Georgarakos, et al. also points out that people who tend to think rationally tend to reduce consumption when facing high inflation [8]. This may be because rational people are good at analysis and thinking: high inflation is often accompanied by instability in the economic environment—for example, enterprises may see reduced profits due to soaring costs, which in turn leads to layoffs and salary cuts. Therefore, rational people will worry about whether their future income can keep up with rising prices, and thus tend to reduce consumption to cope with potential income fluctuations. Moreover, high inflation usually triggers central banks to raise interest rates to reduce total demand, which will push up borrowing costs. Rational people will reduce debt-based consumption in advance to avoid heavier interest burdens. In short, out of consideration for future expectations and risks in various aspects, rational people are more inclined to hold funds in the form of "inflation-resistant assets" or retain liquidity to deal with future risks, rather than using them for consumption.

5.2 Impact of Actual Inflation on Different Population Groups

According to previous studies, actual inflation has different impacts on people with different income levels and financial conditions. The impacts mainly include two aspects: first, the perceived actual inflation; second, the stimulating effect of actual inflation on consumption. The study by Miguel Ampudia, Michael Ehrmann, and Georg Strasser used panel data to study households in the euro area and concluded that actual inflation is unevenly distributed among households with different incomes; high-income households are less sensitive to monetary policy than low-income households [13]. This is because low-income households spend more on necessities with large price fluctuations, while high-income households spend more on goods with strong price stickiness [13]. Another study can also support this view. The research by Merike Kukk, Jan Toczynski, and Christoph Basten, conducted in the context of Estonia, concluded that low-income groups and elderly groups tend to experience higher inflation when prices rise, and are exposed to lower inflation when inflation is negative [11]. The reasons why low-income groups are more significantly impacted by actual inflation are twofold: first, their consumption basket leads to a higher actual inflation rate; second, their liquidity constraints are stronger, resulting in a more obvious decline in actual consumption capacity [11]. In other words, under the same monetary policy, theoretically, the degree of inflation caused in a certain region should be the same. However, due to differences in household income, the goods they consume are also different, so the actual inflation perceived by different households varies. The study by Merike Kukk, Jan Toczynski, and Christoph Basten also drew a conclusion: the stimulating effect of actual inflation on consumption varies with household financial conditions [11]. Households with more liquid assets respond more strongly to inflation because they can support additional consumption by using savings or increasing borrowing [11]. In contrast, households with liquidity constraints or excessive debt show a weaker consumption response. The reason is that it is difficult for them to advance consumption through savings or borrowing; they may even reduce expenditure because inflation erodes their actual income [11].

6. Conclusion

This paper systematically reviews and critiques research on the relationship between inflation and household consumption behavior, analyzing from macro patterns to micro-level heterogeneity, layer by layer, the factors influencing the formation of inflation, the impact of inflation on consumption decisions, and behavioral differences among various groups under inflation shocks. The study finds that the relationship between inflation and household consumption exhibits multiple characteristics and is influenced by various factors. Its impact is not only reflected in fluctuations in total consumption but also reveals complex mechanisms through expectation transmission, changes in consumption structure, and group heterogeneity. The specific research conclusions are fivefold: First, the provision of inflation information and the manner in which it is presented affect households' expected inflation. Second, expected inflation influences actual inflation. Third, expected inflation affects total consumption, consumption methods, and consumption structure. Fourth, actual inflation affects total consumption. Finally, the impact of inflation on consumers varies from person to person, with key influencing factors including income, wealth, and education level.

Research confirms that inflation has a profound impact on consumption decisions, and the authority and presentation of inflation information are crucial in shaping households' inflation expectations, which in turn are an important factor influencing actual inflation. Therefore, to avoid the negative effects of excessively high or low inflation and ensure stable economic growth, on the one hand, accurate inflation data should be released officially rather than by non-authoritative media and institutions. On the other hand, consideration should be given to the differential impacts that the same policies may have on different groups. Given that existing studies have found that the effects of one-time information interventions are short-lived, future research could examine whether regularly and repeatedly conveying authoritative inflation information can form long-term stable expected inflation, and how to avoid the

diminishing effects caused by "information fatigue."

References

- [1] Gub. IMF: The overall global inflation rate is projected to fall to 4.3% in 2025 and 3.6% in 2026.2025-04-22.2025-9-14 https://guba.eastmoney.com/news,cjpl,1542603902.html
- [2] World Bank Group. Inflation Measured by the GDP Deflator (Annual Inflation Rate). 2024. https://data.worldbank.org.cn/indicator/NY.GDP.DEFL.KD.ZG.
- [3] Huitong Collection.2025-09-12.2025-9-14. US economic alarm sounds! The IMF warns of increasing inflation risks. Is a Federal Reserve rate cut a foregone conclusion? https://news.fx678.com/202509120908282069.shtml.
- [4] Hao X, Guo Y. Study on the Coordination Effect of Monetary Policy and Fiscal Policy: From the Perspective of the Price Puzzle. World Economic Papers, 2025, (01): 46-63.
- [5] Xiao Z. Negative Price, Negative Value, Negative Growth, and Negative Distribution: An Analysis of Economic Explanations and Internal Logic. Journal of Zhejiang Gongshang University, 2024, (06): 112-123.
- [6] Burke MA, & Ozdagli A. Household inflation expectations and consumer spending: evidence from panel data. Review of Economics and Statistics, 2020, 105(4): 948-961.
- [7] Coibion O, Gorodnichenko Y, & Weber M. Monetary policy communications and their effects on household inflation expectations. Journal of Political Economy, 2019, 130(6): 1537-1584.
- [8] Coibion O, Georgarakos D, Gorodnichenko Y, & Van Rooij M. How does consumption respond to news about inflation? Field evidence from a randomized control trial. American Economic Journal: Macroeconomics, 2019, 15(3): 109-152.
- [9] Binder C C, Campbell J R, & Ryngaert JM. Consumer inflation expectations: Daily dynamics. Journal of Monetary Economics, 2024, 145: 103613.
- [10] Lopez-Salido D, & Loria F. Inflation at risk. Journal of Monetary Economics, 2020, 145: 103570.
- [11] JKukk M, Toczynski J, & Basten C. Beyond the headline: How personal exposure to inflation shapes the financial choices of households. Journal of Monetary Economics, 2025, 103800.
- [12] Paradiso A, Casadio P, & Rao BB. US inflation and consumption: A long-term perspective with a level shift. Economic Modelling, 2012, 29(5): 1837-1849.
- [13] Ampudia M, Ehrmann M, & Strasser G. Shopping behavior and the effect of monetary policy on inflation heterogeneity along the income distribution. Journal of Monetary Economics, 2024, 148: 103618.