

# *Analysis of Consumer Decision-making from the Perspective of Anchoring Effect*

Xiaobo Zhou<sup>1,a,\*</sup>

<sup>1</sup> Xi'an Shi Tieyi High School, Xi'an, Shaanxi, 710054, China  
a. 700210652@stu.sqxy.edu.cn

\*corresponding author

**Abstract:** The anchoring effect is a kind of heuristic deviation. When people make judgments about someone or something, they are easily dominated by the first impression or the first information, which is like an anchor sinking into the sea to fix people's thoughts somewhere. This paper analyses the fluctuation of inflation rate, the reduction of interest rate, and the change of COVID-19 policy in China in recent years. Consumers' price preferences are anchored by past prices, which prevents them from accurately predicting future price changes. If consumers believe that prices will remain the same in the future, they will use the current price as a benchmark for future prices, and they will base their consumption decisions on this price. However, if the price changes in the future, consumers will be priced wrong, so they will make wrong consumption decisions. Because of the anchoring effect, people have impulsive consumption, retaliatory consumption, and conservative consumption. In order to reduce the negative impact of the anchoring effect on the economy, this paper suggests that people should be fully aware of the market price, make reasonable expectations of inflation, avoid impulse consumption and retaliatory consumption.

**Keywords:** inflation, anchoring effect, COVID-19, interest rate

## 1. Introduction

Inflation has always been one of the important research fields of economics. From the perspective of the development of human history, serious inflation will have a great negative impact on the people's lives, especially the occurrence of hyperinflation or hyperinflation, while affecting the people's lives, may cause damage to the government's credibility, and even trigger political pressure and protest marches. Since 1990, the global price level has remained low. However, as global inflation has been climbing up in recent years, in order to control the price level and slow down the rate of price rise, the national government has adopted a tightening monetary policy to control the money supply so as to achieve the goal of stable and effective inflation control.

Facing uncertainty in the future, economic actors often make corresponding economic decisions based on the prediction of future inflation, such as investment, consumption, pricing. It is found that under the influence of rising inflation expectations, enterprises need to hold more "operating" working capital to improve their performance [1]. Therefore, the macro-level inflation expectations formed from this micro-level prediction have an impact on the future inflation trend that cannot be ignored.

The relationship between inflation and economic growth was first discovered in the study about monetary policy in 1973 [2]. This study is under the assumption of rational expectation, found that if the government implemented the inflation policy that the public had not expected, the economy could achieve short-term prosperity. However, if the government used this way to stimulate the economy for a long time, the impact of inflation on the economy would gradually disappear. Additionally, if the inflation implemented by the government has been predicted by the public in advance, then the impact of inflation policy on the economy will be invalid in the short term or in the long term. Based the economic growth model, it is found that capital stock and labor increment have a significant positive effect on economic growth, while inflation has significant negative effect [3]. Therefore, maintaining low inflation is beneficial to economic growth. Using monthly data, scholars have empirically analyses the relationship between inflation and economic growth [4]. The study found that inflation has a significant adverse effect on economic growth, that is, inflation will have a destructive effect on economic growth. However, some other researchers have found a positive impact of the price growth rate through the impulse response function, which first promoted economic growth, but then turned into a side effect, which means that the short-term rise of prices will stimulate production and thus increase the economic growth rate, but the continuous rise of prices will inhibit effective demand and hinder economic growth [5].

The most basic method to measure inflation is the consumer price index, which is a statistical indicator reflecting the trend and range of changes in the price level of a group of representative goods and services, and reflects the price level paid by consumers with retail sales or consumer consumption as the weight. According to international practice, when the growth rate continuously exceeds 3%, it means that inflation has occurred [6]. It is an important reference object for macroeconomic decision-making and provides a scientific basis for the government to analyse and formulate monetary policy, fiscal policy, price policy and conduct national economic accounting. As the reflected price level and trend are the main objectives of macroeconomic regulation and control of governments, they naturally become one of the important indicators to measure the effectiveness and efficiency of government fiscal and monetary policies.

When people make judgments about someone or something, they are easily dominated by the first impression or the first information, which is like an anchor sinking into the sea to fix people's thoughts somewhere. Anchoring effect, also known as anchor sinking effect, is a common phenomenon of estimation bias, which mainly exists in uncertain situations. The existence of anchoring effect was first verified through the "lucky wheel" experiment in 1974, in which scholars evaluated the relationship between the initial value and the estimated number [7].

Anchoring effect is not only found in daily applications related to numbers, but also applicable in a large variety of situations [8]. The new information in the judgment decision will be covered by the initial value. The research results in 2001 show that the anchor values come from different sources, resulting in different anchor values, and are divided into external anchors and internal anchors according to their origins [9]. On this basis, the internal anchor effect and external anchor effect with internal anchor and external anchor as the core are proposed, and the internal and external anchor effect is an integral part of the anchoring effect.

The anchoring rule is very useful, but it may lead to systematic deviation [10]. Later, it was regarded as a research method of "inspiration and deviation" about human judgment. These deviations come from the interaction between the intuitive thinking system and the rational thinking system, and can play a role in boosting specific behaviors. In the case of behavioral economics, researchers integrate psychology into traditional economic theoretical assumptions in order to constantly revise the assumptions, and the traditional theoretical basis will eventually be integrated with irrational factors [11].

China's inflation has always been a persistent problem because of consumers' sensitivity to price changes and their impact on consumption decisions. Anchoring effect is an economic concept, which means that consumers' price preferences are "anchored" by a benchmark price, making them unable to correctly estimate the changes in the new price. This paper will use the anchoring effect in behavioral economics to analyze the inflation situation in China and the psychological account behind the consumption decisions made by Chinese people. This study suggests that consumers ought to make reasonable expectations for inflation, keep an open mind, and conduct sufficient research on market prices.

## **2. Analyzing the Anchoring Effect in China's Inflation**

### **2.1. China's CPI**

In recent years, China's inflation rate has been relatively stable and generally showing a slow upward trend. According to the data released by the National Bureau of Statistics, China's consumer price index (CPI) increased by 2.1% in 2018, which is at a low level and slightly higher than that in 2017. In 2019, the CPI increased by 2.9% year-on-year, the highest in nearly six years. Affected by factors such as swine fever, pork prices rose by 97% year-on-year, becoming one of the main factors driving the rise in CPI. The new crown epidemic in 2020 has caused a lot of impact on the Chinese economy.

Against this background, the People's Bank of China has adopted a number of policy measures to maintain a stable and flexible monetary policy, maintain a reasonable and stable liquidity, and adopt measures such as central bank re-lending and re-discounting, support the resumption of work and production of small, medium and micro enterprises, and maintain economic stability. According to the data released by the National Bureau of Statistics, the CPI rose by 2.5% year-on-year in 2020. Affected by the epidemic, prices fluctuated greatly at the beginning of the year. However, as the epidemic was gradually brought under control, the price index rebounded steadily and showed a steady growth throughout the year. In the first half of 2021, the CPI rose by 1.1% year-on-year, the lowest point in recent years. From the second half of the year, the increase in CPI was at a relatively high level, mainly due to the influence of factors such as international bulk agricultural product prices and oil prices.

### **2.2. Recent Interest Rate Policy**

China's interest rate policy is mainly regulated by the central bank. Since 2004, China has implemented a market-based interest rate system, and the central bank can adjust inter-bank lending rates and benchmark deposit rates through market-based operations. In addition, the central bank has also formulated the LPR (Loan Quoted Rate) policy to guide the lending rates of commercial banks. In recent years, the central bank has adopted a policy of cutting interest rates to promote economic growth and ease financial pressure. In August 2019, the central bank lowered LPR by 5 basis points to 5.15%; in May 2020, it cut interest rates again by 5 basis points to 4.85%. On December 20, 2022, the People's Bank of China authorized the National Interbank Funding Center to announce that the LPR will continue to decrease: the 1-year LPR is 3.65%, and the 5-year LPR is 4.3%. Interest rate policy has an important impact on the economy. First, the interest rate policy directly affects the supply and demand relationship in the money market, thereby affecting the lending behavior of commercial banks and enterprises. Secondly, interest rate policy is also an important factor affecting the capital market and exchange rate market. If the central bank adopts a policy of lowering interest rates, investors may feel that asset prices will rise, and the capital market will also show a positive trend; on the contrary, if the central bank adopts a policy of raising interest rates, it may cause economic downturn risks and the exchange rate may also be under pressure.

### 2.3. Policies Related to COVID-19

The Chinese government has decided to fully relax the epidemic prevention and control measures from December 7, 2022. This is the first time since the outbreak of the epidemic in January 2020 that mainland China has fully relaxed its epidemic prevention and control measures. First of all, the withdrawal of epidemic prevention and control measures will make social production and life more convenient, and various enterprises and businesses can operate and arrange more flexibly. Secondly, the cancellation of the epidemic prevention and control policy will also support the recovery of tourism, catering, cultural entertainment and other industries, and play a role in promoting economic development. At the same time, the comprehensive liberalization of policies also means that people should enhance their personal self-protection awareness and awareness of prevention and control. Epidemic prevention and control are no longer under the sole control of the government, and the people should bravely shoulder the responsibility and obligation of epidemic prevention and control. Finally, the implementation of the liberalization policy for epidemic prevention and control will attract more foreigners to work, live and travel in China, providing favorable conditions for the promotion and dissemination of Chinese culture. In short, the comprehensive liberalization of epidemic prevention and control measures is an important decision for China to promote epidemic prevention and control and economic recovery. It will have a positive impact on the broad masses of the people and various fields, and further strengthen China's role in global epidemic prevention and control.

### 2.4. The Role of Anchoring Effect

In China, consumers' price preferences are anchored by past prices, which makes them unable to accurately predict future price changes. If consumers believe that prices will remain the same in the future, they will use the current price as a benchmark for future prices, and they will base their consumption decisions on this price. However, if the price changes in the future, consumers will be priced wrong, so they will make wrong consumption decisions. In addition, the anchoring effect will also lead to inflation in China. If consumers expect prices to remain the same in the future, they will use current prices as a benchmark for future prices, which will cause them to buy more goods, causing prices to rise. This is the main reason for inflation in China. When the inflation rate rises, consumers worry about rising prices, so they buy goods in advance to ensure that their prices will not be affected by the inflation rate. This is the so-called anchoring effect, which means that consumers will buy goods ahead of time because they are worried about rising prices. Consequently, when inflation rises, consumers spend more. On the other hand, when the inflation rate falls, consumers worry about falling prices, so they wait for prices to fall before buying goods to get a better price. This is known as the anchoring effect, where consumers wait to buy something out of fear of falling prices. Therefore, when the inflation rate falls, consumers will spend less, which is the consumption decision trend in China.

In economics, the interest rate is an important reference point when people decide whether to spend, invest, or borrow because it is the most fundamental determinant of money supply and demand. Therefore, if there is a change in interest rates, people's consumption behavior may be affected by the anchoring effect. Interest rates in China have shown a downward trend in recent years. In this case, the anchoring effect may have an impact on people's consumption habits. Low interest rates make people more willing to borrow and spend. Generally speaking, lower interest rates will help reduce the cost of borrowing for businesses and individuals, while also increasing willingness to spend. When people find that real interest rates are falling, they use low interest rates as a reference point and are more willing to borrow and spend. Second, lowering interest rates not only helps to reduce the cost of borrowing, but it is also inflationary, which can lead to the

perception that prices will rise in the future and the expectation that interest rates will rise. In this case, people tend to spend in advance to get better prices and a better buying experience. Third, when interest rates fall, people often see lower yields as a reference point, making deposit rates very unfavorable and possibly even negative. In order to achieve a higher return on investment, people may reduce their savings and give up deposits, and instead invest in high-risk assets such as stocks and funds. This could lead to people saving less and spending more, further stimulating economic growth. In general, the decline in interest rates may affect people's consumption behavior through the anchoring effect. As people see low interest rates as a point of reference, they may be more willing to borrow, spend earlier, and save less. This has important implications for economic stability and growth.

Facing COVID-19 epidemic and the lockdown policy, people's consumption behavior is obviously affected by the anchoring effect. First of all, the new crown epidemic has had an impact on people's consumption psychology. The severity of the epidemic, people's fear of the epidemic, and the epidemic information released by the government have all become factors that people consider when making consumption decisions. For example, in the early days of the outbreak, people's demand for masks generally increased sharply, causing some merchants to seize goods to speculate on prices. Therefore, when the epidemic is under initial control and prices stabilize again, people tend to use the previous prices of food and masks as a reference point, and frantically hoard goods when prices are low, in order to deal with the risk of another serious epidemic. Secondly, the changes in the consumption environment brought about by the lockdown policy have also affected people's consumption psychology by the anchoring effect. The group consumption policy issued by the government will support people to concentrate consumption in specific places, thereby driving the recovery of related industries. This policy allows people to reduce personal risks through specific rewards or discounts, and is more willing to spend in places such as business districts encouraged by the policy. Merchants that adopt epidemic management measures, such as strengthening hygiene management and launching new online services, can also win the favor of consumers.

## 2.5. Suggestions

The anchoring effect will lead to a lot of irrational consumption decisions in daily lives, which may produce economic effects such as inflation. How to avoid the anchoring effect and make rational consumption decisions is very important.

First, consumers should understand the existence of anchoring effects and their impact on decision-making. Only by being aware of this influence can it be possible to avoid being influenced by it. Second, consumers can do a thorough study of the market price before buying a certain commodity. Obtain price information through multiple channels and choose a relatively reasonable price range. Thirdly, consumers should try to avoid fixing on a certain price, such as only seeing the product is priced at a higher price, and not trying other brands or other stores, which will be more susceptible to the anchoring effect. Consumers should keep an open mind and try to avoid preconceived judgments. Compare prices across multiple stores of similar products and people may find incredible deals. Moreover, consumers can try to look at things from different perspectives, for example, budget managers are more concerned about the effectiveness of goods, which is not a cost-effective thing now. Therefore, they are unlikely to be attracted by the price. The last but not least, consumers can avoid anchoring by changing their shopping habits. For example, avoid shopping during discounts as much as possible, or keep a clear head and not be attracted by the price of the product.

### 3. Conclusion

The anchoring effect means that people use a reference point as the starting point for decision-making and make judgments about the impact of this reference point. This psychological phenomenon often occurs in the economic field, and plays an important role in the decision-making that affects prices and income expectations, and can affect people's consumption behavior, investment decisions, market expectations, etc. The purpose of this article is to explore how the anchoring effect affects consumer decision-making and mental accounts when external factors change. This article analyses China's inflation rate fluctuations, interest rate cuts, and changes in the new COVID-19 policy in recent years. Due to the impact of the anchoring effect, people have produced impulsive consumption, retaliatory consumption, and conservative consumption behavior. Through the detailed elaboration of the negative impact of the anchoring effect on the economy, people should avoid the influence of the anchoring effect when making consumption decisions in daily life, such as conducting sufficient research on market prices before purchasing a certain product, and making a decision on inflation. It is reasonable to expect that consumers should keep an open mind and try to avoid preconceived judgments.

There are limitations in the data in this article, and the CPI is used as the standard in the part of measuring inflation. First of all, CPI can only reflect the price changes of some consumer goods and services, but cannot fully reflect the rise and fall of all products. Secondly, the CPI cannot accurately reflect the living costs of different social groups. People in different regions and age groups have different demands for consumer goods and services. Therefore, the CPI cannot accurately reflect the consumption levels and living costs of different groups of people. In addition, when calculating the CPI index, there are still some limitations in methods and data collection. For example, the CPI is calculated by means of household surveys and sample surveys, after collecting data and then calculating the average, but the quantity and quality of samples collected will affect the accuracy of the CPI index. In addition, the CPI index also involves some statistical correction and adjustment methods, which may also affect the reliability and accuracy of the CPI index.

### References

- [1] Ma Lizheng. *Inflation Expectations and Enterprise Working Capital Structure*. *South Journal* (08), 21-25. (2019).
- [2] Lucas RE. *Some International Evidence on Output-Inflation Tradeoffs*, *American Economic Review*: 326-334 (1973)
- [3] Zhou Xudong, Chen Bin, Zhang Bing, *On the relationship between inflation and economic growth [J]*. *Journal of Renmin University of China*, (3): 11-17. (1999).
- [4] Liu Jinqun, Xie Weidong. *Dynamic correlation between China's economic growth and inflation*. *World Economy* (06), 48-57. (2003).
- [5] Zhang Mingjiu & Pan Hui. *The relationship between inflation, money supply and economic growth in China*. *Statistics and Decision Making* (17), 124-129. (2020).
- [6] Wang Kai & Ni Jianjun.: *The index to measure inflation: CPI*. *Contemporary World* (09), 49-51. (2007).
- [7] Tversky A, Kahneman D. *Judgment under uncertainty:heuristics and biases*. *Science*. 185 (4157): 1124-1131 (1974).
- [8] Li Bin, Xu Fuming, Zhang Junwei, Liu Tengfei, Jiang Duo & Deng Zijuan. *Influence of Intrinsic and Extrinsic Anchoring on the Anchoring Effect and Its Dual Processing Mechanism*. *Psychological Science* (01), 171-176. (2012).
- [9] Shenghao Gao, Feng Cao, Robert (Chi-Wing) Fok. *The anchoring effect of underwriters' proposed price ranges on institutional investors' bid prices in IPO auctions: Evidence from China*. Elsevier Inc. (2019)
- [10] Thaler, R. H., & Sunstein, C. R. : *Nudge*. Penguin (2009)
- [11] Luo Ruili. . *Exploration on Audit Risk Assessment and Countermeasures of Related Party Transactions Based on Anchoring Effect* (Master's Thesis, Jiangxi University of Finance and Economics). (2021)