

An Analysis of Status Quo Bias and Its Applications in Behavioral Economics

Wenyi Jin^{1,a,*}

¹*School of Finance, Zhejiang University of Finance and Economics, Hangzhou, China, 310000*

a. wenyi.jin@zufe.edu.cn

**corresponding author*

Abstract: Status quo bias is a common psychological bias in decision-making, and this kind of bias is strong enough to impact or bother people's personal lives. So it is quite important to explore more about it. This article, through literature research and case analysis, indicates how the status quo bias comes out in aspects of brain science and how it applies to online medical services and consumer behavior. In conclusion, it was discovered that some signal changes in certain neurons in the brain lure people to accept the current situation. Besides, in terms of medical services, due to previous behavioral habits, people tend to ask for help at a local hospital rather than turn to online medical services. To reduce the status quo bias, service providers can increase the attractiveness of alternative options to the status quo. In terms of consumption, most irrational consumers will choose to ignore the free return policy when they shop. Merchants can take targeted measures, such as offering shipping insurance and significantly improving product quality, to fully explore the status quo bias.

Keywords: behavioral finance, status quo bias, online medical service, free returning policy

1. Introduction

Humans often tend to accept the current situation when they are confronted with complex choices. There are a number of articles that explore and analyze the application of status quo bias. For example, Zhang Xiaofei studied some people's attitudes towards online medical services together with the reasons why the use rate of online medical services is quite low, but he paid more attention to the quality of online medical services and only mentioned the connection between this phenomenon and status quo bias [1]. So does Jiang Hong's research on the free return policy [2]. So the main research topic of this article is status quo bias, and this article is going to figure out why status quo bias is so strong in influencing people's individual behavior, how important it is for individuals to disrupt the status quo, and what people can do to pursue a better outcome as well. Besides, through the literature analysis method and the case analysis method, this article totally mentions two applications of status quo bias in the fields of medical decision-making and free return policy, as mentioned before, and provides suggestions for possible issues at the same time. In addition, ruling out what all parts of society can exactly do to fully use the mechanism of status quo bias and then finally reach a better situation is the main research purpose of this article. Besides, the research results of this article are beneficial for people to recognize the urgency of addressing status quo bias and to help them make better decisions in their future lives.

2. Status Quo Bias and Generation Mechanism

When humans are faced with conflicting situations, they often tend to maintain the current status and are reluctant to take the risks.

2.1. Loss Aversion Bias

The root of the current dilemma lies in people's deep psychological desire to protect themselves from harm. Disrupting the status quo means taking action, and when people take action, they take responsibility, thereby facing criticism and regret. Not surprisingly, humans naturally seek reasons for inaction. In most cases, adhering to the status quo means making safer choices, as it reduces people's psychological risk.

Additionally, according to the "prospect theory", an economics theory developed by researchers Daniel Kahneman and Amos Tversky in 1979, the potential for loss lies in people's minds much more importantly than the potential for gains, and disrupting the status quo always means going to lose something at an uncertain probability [3]. Consequently, people choose to maintain the status to avoid too much pain, it is a self protection mechanism to some extent. For instance, Samuelson and Zeckhauser's research also found that young employees are more likely to register for health insurance plans with better premiums and deductibles, while the older are different and more likely to continue using their original but less cost-effective plans [4]. The older ones may be more concerned with minimizing any possible losses, rather than take risks for uncertain gains. They are aware of their expectations for the current plan, so they are unwilling to take risks on the new plan, although this change may bring economic benefits.

2.2. Sunk Cost

Sunk cost refers to expenses that have occurred in the past but are not relevant to the current decision. From a decision-making perspective, past expenses are only a factor that causes the current state, and the current decision needs to consider potential future expenses and benefits, without considering past expenses. But in the real world, people are not always rational individuals; they just can't ignore the huge costs they have incurred in the past. It is easy to figure out that because people have invested too much into the 'status quo', so even if this investment is not proven effective, they may continue to invest, and this investment will continue to increase sunk costs, forming a cycle that makes people unwilling to change the status quo.

2.3. Neural Mechanism

Compared to accepting, wrongly rejecting the status quo leads to higher levels of regret in behavior. After rejecting errors in this situation, the anterior insula and medial prefrontal cortex show an increase in bleeding oxygen level dependent signals. Based on some researchers' assumptions, similar signal variation patterns predict acceptance of the current situation in subsequent experiments [5]. Especially the possibility of regret may be the driving force behind these two biases, so for the purpose of this study, these two may be seen as a unified structure. The bias of inaction may still arise primarily or only at the level of motor response, and the effort required to take action or change behavior is a significant feature of the asymmetric impact of accepting and rejecting the status quo in erroneous decisions. On the other hand, status quo bias may appear at a more abstract decision-making level, where features such as normality of behavior and perceived causal relationships play a greater role. Future research may address possible differences in the way the brain processes inaction and status bias.

In summary, the emotional and neural biological responses to rejecting the wrong status quo (compared to accepting the wrong status quo) are key factors that lead to the emergence of status quo bias. Research has shown that current rejection errors enhance the response related to errors in the forebrain insula and MPFC, and enhance subjective regret. The observed asymmetry in neural and emotional responses predicts bias towards the current situation in subsequent decisions [6].

3. Applications

3.1. Online Medical Service

With the improvement of living standards and the internet, online medical services are growing in popularity [7]. But the fact is that its average purchase conversion rate is much lower than that of e-commerce.

Eysenbach et al. utilized various searching and analyzing literature on the quality of online medical services, and it was found that 70% of the research results prove that there are quality issues with online medical information, and only 9% of the results have a positive evaluation of its quality [1]. Saad et al. conducted a study on people's behavior by accessing medical information. Through statistical analysis of the Malaysian population's access to mobile healthcare, it was found that only 45% of elderly people use the internet to access medical services. Due to the lower trust of elderly people in medical information from the internet, they are more inclined to seek help from traditional clinics [8].

In this case, the status quo is that people are used to going to the traditional hospital for help and trust the doctor's advice more. So when it comes to physical assistance, people, especially the old generation, prefer to go to the local clinics or hospitals instead of visiting the new online medical service, and they prefer to trust the previous diagnosis that doctors gave rather than the online advice they found later by themselves. It is mainly due to the previous behavioral habits people had and the sunk cost and uncertainty of the quality of the online medical service that would occur when they switched to online medical care.

Therefore, the mechanism is clear, then how can the relevant institution use the status quo bias to improve the low using rate of online medical services? Firstly, what the service providers can do to reduce the status quo bias is to grow the temptation of the alternative choice against the status quo, that is to increase the attractiveness of online service, by establishing different marketing models for different categories of potential customers, setting a connection between traditional medical services and online medical services so that their sunk costs can be transferred, and conducting extensive publicity to increase awareness and raise awareness of alternative medical services [7]. Besides, for the technology provider, it is plausible to fully improve the user experience by understanding user intentions and concerns, such as privacy protection, when designing web pages. The communication channel providers should focus more on channel timeliness and ease of use [7].

3.2. Free Returning Policy

In recent years, the business and academic communities have increasingly recognized the important impact of customer irrational behavior on business decision-making. Among these irrational behaviors, customers' status preferences have the deepest impact on the free returning policy [2].

Free returning is that the merchants on the online shopping platform agree to the customer's return for any reason within a certain period of time, usually seven days after receiving the product. But in reality, after purchasing a product, unless the consumers are particularly dissatisfied with the product, they will choose to maintain the status quo of owning the product rather than return it. That is ignoring the free returning strategy faced by the merchant, and indeed some researches have shown that there is a large number of customers who are too lazy to return due to the status quo bias [2].

But why would the status quo bias appear in this case? Jiang et al. did research on it. They conducted a model study on the influence of status quo bias on the strategy of unreasonable return. He set the return benchmark as A , set the value of products in the minds of customers is V , and set the return cost and return price for customers as C_0 and r respectively. Then the customer's return condition can be expressed as $V \leq A$. For rational customers, the return benchmark A_1 is $r - c_0$; for irrational customers, the return benchmark A_2 is $r - c_0 - I$; So $A_1 < A_2$ [9]. In other words, customers who are more inert have more stringent return conditions. That means lazy consumers always think that the cost of returning the product is bigger than the acceptance of a not-so-satisfactory result.

Apparently, such bias is not so good for irrational consumers but surprisingly good for merchants. The merchants can therefore take some targeted measures to fully exploit the status quo bias. For instance, online businessmen can increase the attractiveness of product protection by giving away shipping insurance, substantially improving product quality, and avoiding some low-level defects. In this way, merchants can increase sales while reducing returns, which also means cutting operational costs.

4. Discussion

Status quo bias minimizes the risks associated with change, but it can also lead to people missing out on potential benefits that may outweigh the risks. And it is reasonable that we are not inclined to take the risk of disrupting the status quo because we are too afraid of the potential outcome to be a damage.

As is said by Grace M. Hopper, "The most damaging phrase in the language is 'We've always done it this way'." Clearly, it is not right to give up a substantial benefit for a slight loss, and to some extent, giving up a huge potential outcome also means you are facing the loss, just in a different way [10]. For instance, if people are always too scared to try a new medicine, even if it turns out to be a fantastic treat, then their health situation, especially for the sick, will not improve for a long time because they are sticking to the old medicine, and as it is known to all, long-term consumption of the same medication can easily lead to drug tolerance, which could affect the therapeutic effect of the medication. However, what people also have to admit is that in some certain industries or companies, maintaining the status quo is good enough. Just like Moutai in the Baijiu industry, it is scarce and influential enough that any form of innovation that breaks the status quo is like gilding the lily. But this truth is only discovered after trying. The result may not be so satisfying, but at least it has been tried and there will be no regret any longer. Consequently, keeping the status quo can not always have a satisfied impact as people expected. Indeed whether it can bring a positive result or not is related to your particular situation.

5. Conclusion

This article mainly analyzes the definition and importance of the status quo bias in behavioral finance, including its applications in areas like online medical services and free return policies, as well as its academic study and relevant solution. Additionally, this article finds out that in the attribution of loss aversion bias and sunk cost, status quo bias happens very widely in people's daily lives. In the area of brain science, the paper indicates that some parts of people's brains attract people to accept the status quo, and that's why many people find that disrupting the status quo bias is not so easy. The author also mentions that because of people's previous behavioral habits, they tend to ask for help from local hospitals rather than turn to online medical services, and when most irrational consumers shop, they will choose to ignore the merchants' free return policy. Since status quo bias causes people to miss potential benefits that may exceed risks as mentioned before, the author discussed the relevant solutions to fully use and solve the status quo bias in the end. Service providers can make alternative solutions to the status quo more enticing in order to lessen the status quo bias.

When it comes to consumption, the majority of irrational shoppers will decide to disregard the free return policy. To completely examine the status quo bias, retailers should take focused actions like providing shipping insurance and vastly enhancing product quality. The current research is mainly based on existing literature and experimental results, and future research will combine relevant data for certain experimental analyses to conduct more in-depth discussions.

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