

The Literature Review About Present Bias

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ABSTRACT

Although the existence of present bias and its impact on decision-making has been widely discussed, the researches are still fragmented. The fields of existing researches are not completed, and the results are sometimes controversial. This article will introduce the testing of present bias in various fields related to life. The results show that present bias in all fields studied is related to self-control and impatience, but other reasons are not known. Therefore, this paper will summarize the existing researches and provide some ideas for the following research.

Keywords: *Present bias, Decision-making, Impatience, Self-control.*

1. INTRODUCTION

In behavioral economics, present bias is a frequently mentioned bias, which has a great impact on individual life decision-making. At present, many studies have discussed the existence and reasons of present bias. However, the research on the existing fields is limited, and the search for the reasons is not complete. Therefore, this article will use the literature research method to summarize the relevant research in various fields of life, analyze the existing conclusions and put forward the future research direction according to the research gap. This literature study is conducive to the subsequent mining of the factors causing present bias and leads to some future research directions.

Present bias, also known as status quo bias, refers to a phenomenon in which individuals tend to do nothing and maintain current or previous decisions when making decisions[1]. Because present bias is ubiquitous in public life, this literature research mainly focuses on various fields of individual life decision-making. The following is an overview of research in different fields and how to make long-term decisions to avoid falling into the "Present Bias".

2. EXPERIMENTS AND SUMMARY

2.1. Spending or Saving

When making consumption or saving decisions, consumers often make choices that are not conducive to long-term interests. Sometimes saving is more in line

with long-term interests, and consumers choose consumption[2]. According to O'Donoghue and Matthew Rabin, many people think that consumption is the current preference and return, but saving is the future return, so people will prefer consumption, and now consumption makes you unable to get the future return. That's why when looking for literature, present bias is related to opportunity cost[3]. At the same time, Gruber and Köszegi show that the type of consumer goods will affect the degree of present bias[4].

In previous studies, it is theoretically believed that "gain and loss" is one of the causes of present bias, that is, giving up the current result is painful and a feeling of deprivation, which will lead to impulse and impatience, but it has not been fully verified[5]. At the same time, this theory does not explain why delayed behavior is so painful. Therefore Daniel Bartels, Oleg Urminsky and Shane Frederick have done relevant research[6]. They believe that delaying consumption will make consumers feel less control over the results, so they fall into the present bias trap[6].

To explore the impact of self-control on present bias, Daniel Bartels, Oleg Urminsky and Shane Frederick introduced native and sophisticated, which represent the group with weak self-control and sophisticated represents the group with strong self-control[6]. Research shows that native does not think that the current choice will have an impact on the future, so the reason for the instant bias is that native decision-making groups have no vision, do not know the impact of the current choice on the future, and do not know that their future preferences are likely to change, but at present, they only consider their present.

But the research also shows that, in contrast to naive, sophisticated are less affected by present bias.

But O'Donoghue and Matthew Rabin found that sometimes sophisticated people spend too much[3]. Sometimes they choose to save without immediate bias. That's because when they face things they know they can't control once they consume, such as drugs, they won't choose consumption at all[3]. At this time, they choose not to consume as a method of self-control.

2.2. Spending during Unemployment

A highly present-biased family with limited liquidity does have a sharp decline in spending when the household is exhausted, but the payment is a little decline in spending before it is exhausted. On the contrary, non-present-biased families who lose their jobs are restrained in spending before they are exhausted[7].

2.3. Saving for Retirement

The stronger the degree of personal present bias, the less regular contributions to the pension fund, and the greater the share of total assets invested in housing[8]. Laibson proposed that present-biased individuals will invest in less liquid assets[8].

Gopi Shan Goda, Matthew Levy, e.g. also found that present bias was associated with lower savings[9]. They find that experience supports impatient people to invest most of their assets in illiquid instruments, especially home equity, as a saving tool[9].

Although present bias has a proportional impact on retirement savings at different savings levels, its prediction ability will not change due to personal income. Regardless of savings capacity, efforts to reduce the impact of present bias may effectively increase personal savings[9].

2.4. Job Search

Della Vigna and Paserman studied present bias in the context of job hunting and described how to gain recognition through a combination of a person's efforts to find a job (heavily affected by current biases) and a person's retention salary for job opportunities (mainly affected by long-term discounts)[10].

Impatient people are more likely to have present bias. They have lower search intensity and lower retention salary. The impact of this bias on the exit rate depends on the relative strength of two opposite forces: lower search means lower exit rate, and lower retention wage means higher exit rate[10].

Those people with a present bias for finding a job is inconsistent with the time: they find too little today, because they mistakenly expect to find more jobs

tomorrow, so the proportion of biased people in the unemployed will increase over time[7].

2.5. Health

In some areas of health, although many empirical studies have shown the benefits of health guidelines, many people with these diseases do not follow these guidelines. And both some economic (e.g., Ikeda et al. 2016; Sloan et al. 2014; Fang and Wang 2015; Cavagnaro et al. 2016) and psychological research (e.g., Bickel et al. 1999) identified that in some health applications, the utility of participating in specific activities accumulate first, such as smoking, excessive drinking and opioids use[11] [12] [13] [14] [15]. The cost of these behaviors, that is, bad results, usually occur downstream. In contrast, for those who follow the guidelines for chronic diseases, costs are generated first and benefits are accumulated later. In other words, the disadvantages of smoking and drinking now, that is, the cost, will appear in the downstream future, but if you abide by health care guidelines now, you will loss utility. Unhappiness is a cost, so we have the prejudice of having fun in time, present bias.

When doing research in health-related fields, also consider native and sophisticated. From the results, O'Donoghue and Matthew Rabin inferred that maturity will help you when understanding future misconduct will increase your perceived cost of current misconduct and encourage you to behave appropriately now[3]. Maturity hurts when you know that future misconduct will reduce the perceived cost of current misconduct. Because when the cost is imminent, you tend to procrastinate. If you realize that you will procrastinate in the future, you will feel that the cost of procrastination now is higher. Therefore, when the cost is imminent, sophistication will be helpful. When the rewards are immediate, you tend to take action. If you know you will have surgery in the future, you will feel that the cost of surgery is lower now. Therefore, sophistication hurts when the rewards are immediate.

O'Donoghue and Matthew Rabin also show that sophistication may help the person who wants to quit drug addiction[3]. A naive person may repeatedly postpone quitting smoking, thinking that he will quit smoking tomorrow. In contrast, when a person is convinced that he will eventually become addicted, sophistication may cause harm.

So why do different experiments in different fields have different results regarding the degree of present bias? First, preferences are measured in different environments. There is evidence that discount rates vary in the areas of finance, environment and health[16] [17]. Second, the elicitation method, whether to state the preference method or reveal the preference method, may affect the results. Inferring people's preferences from observed

behavior is a way to reveal preferences. Bleichrodt et al. directly asked their survey respondents or experimental participants to state their preference for one choice rather than another, that is, the stated preference method[18]. The difference in heuristic methods may also lead to the difference in sample size. The research using revealed preference has a larger sample than the research using stated preference. Thirdly, econometric methodologies differ among studies. Fourth, populations on which preference parameters are measured differ. For example, obese persons are more likely to be diagnosed with diabetes, and obese persons have different preferences from those who have normal weight[19].

2.6. How to make long-term decisions

The more patient it is, the less likely it is to fall into the bias present trap. Therefore, increasing patience helps to make decisions conducive to the long-term. Bartels, Urminsky, and Frederick demonstrate that the degree of patience is related to the individual's awareness of intertemporal risk and the degree of concern for their own future[20]. At the same time, Lee, Malkoc, and Rucker found that consumers' impatience can be attributed at least in part to consumers' feeling that they cannot control their decisions, so they believe that giving individual control can reduce their impatience[21].

Munich and Leboeuf found that when individuals are given to complete a task at a specific time point, it is easier to fall into the present bias than when they are given to complete the task at a certain time period[22]. The urgency of time will affect whether individuals consider long-term interests when making decisions. Therefore, if people want to guide individuals to make decisions in line with long-term interests, we need to give individuals relatively sufficient thinking time.

3. CONCLUSION

Because the predecessors basically did not divide the population into different groups for experiments and research, and did not explore whether the characteristics of different populations have any impact on the degree of their present bias. Only after the research results came out, it was found that the present bias was different for different groups in some fields, but there was no specific research on which characteristics caused the difference. In other words, there are only results and no reasons have been explored. Therefore, the research direction discussed in the future can be people of different genders, different ages or different occupations. Is there any tendency and consistency in the degree of present bias within each group? Is there any difference in the degree of present bias among different groups? If so, what are the reasons.

Although studies have shown that Asians are less likely to fall into present bias than Westerners, no specific

reasons have been studied. At the same time, this is a large scope in Asia and the west, and the scope of follow-up research can be narrowed. For example, study whether the different cultures of western countries such as Britain, France and Germany will also lead to different degrees of present bias. If so, what are the factors? Then researchers can do cross-cultural experiments. For example, let a group of subjects Asians who live in western countries for one year, and do the present bias test at the time points of one month, three months, half a year and one year to see whether the results are different. Will the possibility of falling into present bias for the test group be influenced by the local culture? And if so, what is the trend of influence?

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