

# Loss Aversion's Influence and Application in Marketing and Financial Investment

Shuling Liu

*School of economics, Minzu University of China, Beijing, 100000, China*

**Keywords:** Loss Aversion, Marketing, Financial Investment.

**Abstract:** Loss aversion is a behavioral economics bias which runs through human's behavior. With the development of research about behavioral economics, more and more people get to know loss aversion. Loss aversion has many applications in different areas, but most of times, the effect it makes will be different with what people believe. This paper will be based on the existing paper to summarize and do further research, analyze the application and the impact of loss aversion in the field of marketing and financial investment. Research finds that loss aversion will affects consumer's willingness to consume and causes equity premium. At the same time, different groups have different levels of lose averse. As a result, facing different populations, different kinds of strategies need to be came up with. The outcome of this paper will be able to improve the understanding people have about loss aversion and be good for marketing and financial investment.

## 1 INTRODUCTION

loss aversion is really normal in people's lives, making different in almost every area. With the development of behavior economics, loss aversion steps into more people's vision, people realize that loss aversion exists in every corner of life. As big as buying a house or a car, as small as buying a handful of vegetables, loss aversion exists. loss aversion was first came up and explained by Tversky and Kahneman, they let this concept "loss aversion" get into people's lives; After that, Thaler, Sunstein and other researchers continued to study loss aversion and explored the application and influence of loss aversion. What's more, they also tried to use loss aversion to nudge people into action. How loss aversion affects people's choice in marketing? How loss aversion shine in financial investment and causing equity premium? This paper will examine the application and influence of loss aversion in more detailed way. On this basis, this paper will come up with some advice about how can people in these two fields make use of loss aversion.

## 2 INTRODUCTION OF LOSS AVERSION

loss aversion is a response in which people in a role value loss more than an equivalent amount of gain. When people loss, their intuitive systems find this hard to accept, as a result, they will develop feelings of disgust. In other words, the pain of losing something that belongs to individuals is much deeper than the joy of gaining the same thing. Research shows that losing something makes individuals twice as sad as getting the same thing makes individuals happy (Thaler et al., 2009).

Loss aversion was first came out by Amos Tversky and Daniel Kahneman, it can be explain by famous mug experiment. Give student a mug which worth 5 \$, let another student who does not have mug and the student who has mug to quote on mug, the outcome is that the quoted price from the student who already has a mug tend to be higher than the student who does not. This is because that for those students who had mugs already, they would see the sale of mug as a loss of their own , while for those who did not have the mugs buying the mug would be see as a gain. Because of the endowment effect and loss aversion, the utility to losing one's own thing is much greater than the utility of gaining the same thing, so the quoted prices are different, coming out with loss aversion (Liao & Li, 2018).

### 3 RELATION STATEMENT

#### 3.1 Loss Aversion's Application and Effect in Marketing

In fact, loss aversion has many applications and influence in many areas. In the field of marketing, Businesses and merchants have long recognized the nature of consumer's loss aversion. In addition, many marketing strategies have been developed for the loss business characteristics of consumers, to increase the market share of the enterprise to expand the profit space.

First, loss aversion makes consumers more interested in new products than remanufactured products. When it comes to a new product, buying nothing triggers a loss aversion among loss-averse consumers, which does not happen in the remanufactured goods market. In contrast, loss aversion is conducive to new products to occupy more and larger market shares, promote the development of new products, and is conducive to product upgrading.

Second, there is a diminishing sensitivity trend in the margin of loss aversion. For example, when a person only has 100 \$, losing or gaining 10\$ will have a greater impact on individuals's emotion and behavior. This is because individuals has already taken 100 as his reference point in his subconscious, and he or she will compare it with 100 when there is any change in the amount in the future. As a result, his mood swings and behavior are influenced by this reference point. The number 10 is very close to the reference point of 100, so the mood swing caused by \$10 will be larger. However, if individuals has \$10, 000 and the reference point has changed from 100 to \$10, 000, the difference between \$10 and \$10, 000 is much greater than \$10 and \$100, so the mood swings caused by losing or gaining \$10 will be greatly reduced, and the impact on his behavior will also be reduced. Therefore, consumers will be very sensitive to price fluctuations when buying low-priced products, and they will be more susceptible to loss aversion. When consumers consume high-priced goods, they are less sensitive to fluctuations in the price difference of the same proportion. Therefore, merchants rarely use small-denomination coupons as a discount for the purchase of luxury goods (Liao & Li, 2018).

Loss-averse consumers will react negatively to price fluctuations and reduce purchase rates, which in turn leads to fewer profit opportunities for merchants. In other words, when prices fluctuate with the fluctuation of costs, more loss-averse consumers will give up consumption, so that it is difficult for

merchants to sell their goods. In addition, since most consumers are loss-averse, merchants will pay attention to this trait to maintain consumers'consumption of the brand by maintaining a relatively stable price, resulting in price stickiness – even when the cost has changed. In other words, in most cases, even though costs are always fluctuating, merchants will choose to keep prices the same for a larger consumer base to avoid consumer loss aversion and obtain more profits (Kim & Lee, 2014).

Additionally, merchants will use consumers'loss aversion traits to promote consumer consumption to increase profits, so that consumers feel that not buying the corresponding goods will cause huge losses, this will promoting the purchase of loss-averse consumers. For example, vehicle insurance sellers will hype up the consequences of car accidents to amplify consumers' emotions about the possible losses caused by car accidents, and enhance consumers' aversion to property losses caused by accidents such as car accidents, and at the same time, merchants will also promote the protection of their insurance for property after car accidents and other accidents, in order to achieve their purpose of selling more vehicle insurance. For another example, the merchant will mark an original price on the label of the product, and give a much lower current price after crossing out the original price, this can stimulate consumers'desire to buy the goods most of times; or use eye-catching fonts to mark price reduction notices such as "daily low price" on the price tag to trigger the loss aversion mechanism of consumers; Alternatively, the merchant may choose to be dissatisfied with the full refund to encourage the consumer to use or own the product for a short time. When a consumer has already used or briefly owned their product, the consumer's mindset is similar to that of the student who owned the mug in the mug experiment mentioned above, regard the product as "their own thing," and this is where loss aversion makes sense. Although some consumers may not choose to buy the item at all when it is in the window, because the item is classified as "their own", loss-averse consumers are less likely to return the item, thus achieving the purpose of promoting purchase.

In this experiment, questionnaires and data analysis were the methods which were used to collect Chinese consumer data by distributing questionnaires on an online platform, and then using SPSS to analyze the data. Among them, 90% of the sample participants were over 24 years old, with a high proportion of males (67. 9%), and the majority of car owners lived in China's developing cities. The results show that the main determinants of consumers'purchase of auto

insurance are protection against financial losses caused by accidents or damages, competitive pricing and protection choices, which reflect the loss aversion. At the same time, although most consumers will use the price as a key reference point when purchasing insurance, the correlation between price factors and purchase decisions is low, and consumers are not easily influenced by the decisions of others (Yang, 2023).

Then, consumers' loss aversion will also affect companies' choice of information disclosure. In view of the fact that consumers have expectations for product quality, and these expectations cannot be unified when the product quality received by consumers does not meet their expectation. The gap between psychology and reality will trigger consumers' loss aversion to product quality, thereby affecting consumers' consumption behavior. Therefore, different merchants in different markets will choose different information disclosures based on different consumer reactions. Generally speaking, for the monopoly market, because there is less competition, the monopoly occupies most of the market share, and consumers have fewer choices, so the loss aversion of consumers has less impact on their profits, and their information disclosure will be relatively small; On the contrary, for high-quality enterprises in the competitive market, the disclosure of information can reduce the loss of users caused by consumer loss aversion, and their subsequent profits are likely to increase, because consumers' loss aversion promotes their information disclosure, so that they can achieve quality differentiation and comparative advantage, so their information disclosure threshold will be higher. For low-quality companies, the profit after the disclosure of information may be reduced, because they may not only lose an advantage in the competition, but also bear the cost of information disclosure, so they often disclose no information or disclose less information which is good for them. For example, some newly opened restaurants choose to offer food samples to customers to reduce customer uncertainty about the quality and taste of the dishes. Or, in the cosmetics industry, companies will launch cosmetics samples, trial packs, etc., to reduce consumer uncertainty; The film industry releases movie trailers. This is no different for software companies. For example, Marketo helps consumers mitigate the impact of loss aversion and make more informed decisions by providing free demos to show potential customers the actual value of their products (Zhang & Li, 2021).

In marketing, consumers' loss aversion motivates merchants to maintain price stickiness and exaggerate

losses, which also causes different information disclosure situations for different companies under different conditions. These applications start in different directions, changing the way consumers spend while also bringing benefits to the business.

However, not every merchant's strategy for consumer loss aversion will yield the desired results. This is because in addition to loss aversion, other factors such as cognitive needs also have an impact on consumers. Although most consumers are loss-averse, their cognitive needs will be different, and cognitive needs reflect the different ways they think about different things. Researchers divide the way of thinking into two circuits, one central and one peripheral. Consumers who are accustomed to thinking in a central way are more inclined to think deeply, and are classified as consumers with high cognitive needs (high NFC consumers), who are not easily teased by the superficial "tricks" of merchants, and only stay in verbal marketing methods not only fail to attract them, but may also damage their trust in merchants. When the audience is a loss-averse consumer with high NFC, the signal marketing of merchants not only fails to promote consumption, but backfires and loses business credit; Consumers who are accustomed to using peripheral routes to think often only rely on superficial clues, which are called low-cognitive demand consumers (low-NFC consumers), which is also destined for superficial marketing tricks that can stimulate their consumption without affecting their business credit.

Therefore, when merchants conduct marketing, their strategies are often affected by factors other than loss aversion, so merchants cannot only depend on the loss aversion characteristics of consumers when making marketing decisions. However, the impact of different factors and loss aversion on marketing methods and consumer behavior is still uncertain, and these are really worthy to be studied in the future (Cacioppo et al., 1986).

### 3.2 Loss Aversion's Effect in Financial Investment

loss aversion also has a strong impact on the financial investment. For instance, whether or not investors choose to enter the stock market, they are actually affected by loss aversion. Due to the high volatility and risk of stocks, investors who are sensitive to losses are more likely to choose not to enter the stock investment market in order to avoid losses. In addition, compared with traditional economics, the loss aversion theory breaks through the assumption of "rational people" and provides more reasonable and

further explanations for many economic phenomena (Yang, 2019).

For example, the phenomenon of equity premium, which could not be explained by traditional financial theories, has been solved with the help of loss aversion theory. Equity premium refers to the additional return on equity investment over return on risk-free assets, determined by comparing return on equity investment with return on risk-free assets. Risk-free assets often refer to investment instruments with very low default risk, such as treasury bonds, and their returns are relatively stable. However, due to the high volatility of stocks, equity premiums can also fluctuate, which has an impact on the financial investment market. What's more, because there are many influencing factors of such fluctuations, the influencing factors of equity premium fluctuations are very worthy of research. Since 1926, the annualized real return on equities has been about 7%, while the real return on Treasuries has been less than 1%, and the gap between the two is too great to be explained by traditional investment risk aversion theory. The explanation of loss aversion theory is reasonable and understandable.

In fact, investors are short-sighted in the investment process, compared with long term investment, their attention is more focused on the short-term. Moreover, because investors will be affected by loss aversion, investors will have short-sighted loss aversion when investing. In other words, when investors invest, they will pay more attention to short-term gains and losses than to long-term benefits. Every time an investor evaluates an investment product, it will be affected by its own short-sighted loss aversion, so the more often an investor evaluates an investment product, the more his decision-making will be affected by short-sighted loss aversion. Although stocks are risky and volatile, they have higher returns in the short term. Therefore, when the frequency of evaluations increases, that is, the evaluation period decreases, the more attractive stocks become to investors with a high degree of short-sighted risk aversion, and more such investors will choose to invest in stocks, so the equity premium will rise. On the opposite, it will decrease. For example, the study found that when the evaluation period was 2 years, 5 years, 10 years and 20 years, the equity premium decreased to 4.65%, 3.0%, 2.0% and 1.4% respectively. The study strongly proves that short-sighted loss aversion is an important factor affecting equity premium (Benartzi & Thaler, 1995).

Through experiments found that although loss aversion is widespread, there are many influencing factors for loss aversion in different populations

under different circumstances. For example, the degree of expected and actual loss aversion is different, and the degree of loss aversion among investors of different ages and genders is also different.

In fact, the researchers found that there is a gap between the expected loss aversion and the actual loss aversion, and the degree of loss aversion in the actual experience is greatly reduced. In the study, most of the subjects' judgments about expected loss aversion came from their subjective emotional judgments, and their loss aversion coefficient was about 2. Therefore, how is the loss aversion coefficient calculated? For instance, a person who loses \$100 gets very frustrated. If he or she is as depressed as he is about picking up \$200 on the road, individuals have a loss aversion factor of 2. Although subjects made predictions about themselves, subjective emotional judgments did not fully predict their judgments in real decisions, and may even be overestimated. In practice, the loss aversion coefficient of the subjects is about 1.2, and the comparison of the two data strongly points out that the subjects have errors in their emotional predictions. In other words, the researchers found that people were more likely to be averse to loss when they were only expecting it. In addition, because the expected loss aversion level tends to be higher than it actually is, investors who exhibit a high level of loss aversion in anticipation tend to choose a low-risk portfolio, although investors with a high level of expected loss aversion feel similar to those with a low level of expected loss aversion in the final investment process.

Of course, the researchers also tested the robustness of the experiment. In this experiment, although the selected group of direct brokerage clients of Barclays Brokerage, who were active in trading and had a high portfolio value, did not fit the general population profile, they were really fitted with the investor profile. Given that the target group of the study itself is the investment population, the results of the experiment can be trusted; similarly, although there was a previous hypothesis that the experimental results might be influenced by risk aversion, that is, the phenomenon that people choose to avoid because they hate risk, the robustness test also shows that the experimental results do not match the risk aversion hypothesis, and the use of loss aversion to explain it is a more reasonable choice to exclude the interference of risk aversion in the experimental conclusions (Merkle, 2020).

In addition to this, age and gender also affect the level of loss aversion of different investors, which in turn affects their final decision-making. In the

experiment, the researchers selected 450 investors from northern India, divided into two age groups, 25-40 years old and 41-55 years old, with subjects whose occupations are related to finance, business and education, with a total of 357 men and 93 women. According to the selection of the sample, it is not difficult to find that the sample range is small, and the results may be affected by regional factors at the same time, and further research is still needed in future studies to improve the accuracy of the conclusions.

In this experiment, the researchers found that investors in elder groups were more likely to be loss-averse than those in younger groups, which is why they chose portfolios with lower risk. Researchers speculate that this may be due to the fact that older investors have less time to recover from their losses than younger investors, and that most older investors have limited income. In other words, older investors are less able to afford losses than younger investors. This makes the investment risk of older investors less risky than that of younger investors.

In addition, gender is also one of the factors influencing loss aversion. Research shows that women are more likely than men to loss aversion, which is why female investors are more conservative in their investment choices than male investors (Arora & Kumari, 2015).

However, due to the limitations of the sample selected in this study, such as the concentration in northern India, the significant imbalance in the proportion of men and women in the participants, and the limited scope of occupation, further research is still needed in this research direction.

## 4 DISCUSSION AND SUGGESTION

From the merchant's side, the merchant should be more "sincere" in the marketing process. While loss aversion is evident among consumers, it does not mean that all marketing will work as it be expected. In the study of Cacioppo. , et al. (1986), consumers were divided into two categories according to their cognitive needs. Consumers who tend to think deeply, that is, consumers who take the central route to think deeply about content are high-NFC consumers; The ones who use the peripherals to rely on simple clues to think are low-NFC consumers. Studies have shown that signal marketing that merely stays on the marketing discourse can only stimulate low-NFC consumer consumption, while high-NFC consumers are indifferent (Cacioppo et al., 1986).

In other words, no real discount, no consumption from high NFC person.

However, in this literature, the subjects were undergraduate marketing students, and the width and breadth of the test population were limited, and it was impossible to rule out the influence of some factors on this experiment, such as the education level factor may affect the effect of stimulating consumer consumption.

In addition, in view of the different responses of loss-averse consumers to new and remanufactured products, different businesses should adopt different marketing strategies for different types of markets. Loss-averse consumers are more likely to buy new products than remanufactured products, and buying nothing triggers loss aversion to loss-averse consumers. Consumers who are averse to the loss of remanufactured goods react in the opposite way (Liao & Wang, 2020).

Therefore, a market with more loss-averse consumers is conducive to merchants launching more new products and increasing the market share of new products; Markets with more loss-neutral consumers are more conducive to the sale of remanufactured goods.

In addition, disclosing product information is also a good marketing strategy. Disclosure of product information can make most consumers have psychological expectations for the product, and clearly know the quality, material, color and other product information of the product they are facing, so as to reduce the impact of loss aversion on the purchase rate of the customer base.

For financial investors, especially stock investors, it is a good idea to extend the evaluation period of the stocks they invest in to reduce the impact of their short-term loss aversion, given that frequently evaluating the stocks they invest in will be more likely to induce short-term loss aversion and lead to decision-making errors. In addition, when most investors are able to minimize the impact of their short-term loss aversion, equity premiums will be mitigated and stock market volatility will be less alarming (Benartzi & Thaler, 1995).

In addition, because people tend to overestimate their loss aversion in their estimates, it is a good advice for investors with high sensitivity to loss aversion to reduce their loss aversion rather than constantly waiting and seeing. When they actually practice, they will find that their loss aversion is not as severe as they imagined, and their loss aversion is not so high (Merkle, 2020).

For investor teams, it is a good idea to seek diversity in the age of the team. Because older

investors tend to be more loss-averse, and younger investors are the opposite, decisions that are concentrated on the older end of the team may be too cautious. Conversely, if the overall team members are too young, the decision may be too aggressive, and the diversity of the team's age can achieve a balance and reduce the impact of loss aversion bias on the investment team's decision-making (Arora & Kumari, 2015).

## 5 CONCLUSION

This paper examines the application and impact of loss aversion in the field of marketing and the impact in the field of finance. In the field of marketing, consumers' consumption behavior will be affected by loss aversion, and the methods of disclosing information, stabilizing prices, and highlighting the losses caused by non-purchase can promote consumers' purchases. In addition, consumers with different levels of NFC will respond differently to merchants' loss aversion strategies, and the higher the NFC level, the higher the requirements for loss authenticity. In the financial field, loss aversion can explain the phenomenon of equity premium, and people's self-expected loss aversion is often higher than the loss aversion in their actual situation. In addition, the older the investor is more sensitive to loss aversion due to the decline in loss bearing capacity and resilience. In the field of marketing, businesses can use methods such as disclosure information to stimulate consumers' loss aversion and make profits, but they must also pay attention to the authenticity of the activity; In the field of financial investment, investors can reduce the impact of short-sighted loss aversion on investment decisions by reducing the number of evaluations, and can also reduce the impact of loss aversion on decision-making by enriching the age diversity of the investor team. It helps to improve people's awareness of loss aversion, and also improves people's ability to use loss aversion.

## REFERENCES

- B. F. Liao, B. Y. Li, A marketing strategy in a closed - loop supply chain with loss - averse consumers, *Math. Probl. Eng.* 2018(1), 2560153 (2018)
- B. F. Liao, B. Z. Wang, Impact of consumer loss aversion on operations in the context of remanufacturing, *Complexity* 2020(1), 3065819 (2020)
- C. Merkle, Financial loss aversion illusion, *Rev. Finance* 24(2), 381-413 (2020)
- J. T. Cacioppo, R. E. Petty, C. F. Kao, R. Rodriguez, Central and peripheral routes to persuasion: An individual difference perspective, *J. Pers. Soc. Psychol.* 51(5), 1032 (1986)
- J. Zhang, K. J. Li, Quality disclosure under consumer loss aversion, *Manag. Sci.* 67(8), 5052-5069 (2021)
- L. Yang, Loss aversion in financial markets, *J. Mech. Inst. Des.* 4(1), 119-137 (2019)
- M. Arora, S. Kumari, Risk taking in financial decisions as a function of age, gender: Mediating role of loss aversion and regret, *Int. J. Appl. Psychol.* 5(4), 83-89 (2015)
- M. Yang, What is the influence of loss aversion and reference points on the decision-making behavior of Chinese consumers concerning participating in car insurance sales?, *Open J. Bus. Manag.* 11(06), 2811-2823 (2023)
- R. H. Thaler, C. R. Sunstein, *Nudge: Improving decisions about health, wealth, and happiness*, Rev. and expanded ed, New York, NY: Penguin (2009)
- S. Benartzi, R. H. Thaler, Myopic loss aversion and the equity premium puzzle, *Q. J. Econ.* 110(1), 73-92 (1995)
- S. H. Kim, J. Lee, Firm behavior under consumer loss aversion, *Seoul J. Econ.* 27, 171-186 (2014)