

# ***Endowment Effect: Applying to Marketing, Stock, and Management***

**Siyue Kong<sup>1,a,\*</sup>**

<sup>1</sup>*Ulink College of Shanghai, Shanghai, China, 200000*

*a. 3493446092@qq.com*

*\*corresponding author*

**Abstract:** This paper mainly focuses on the endowment effect and uses qualitative analysis and literature review to discuss and explain the endowment effect, and analyze the application of the endowment effect in sales, stock, and management. Through these three applications, we can have a good understanding of how the endowment effect works in our lives, which unconsciously influences a lot of our decisions. For some people, such as investors, the endowment effect influences them to make more correct and rational decisions. This paper also mentions some ways to suppress the endowment effect when making decisions. So in short, the endowment effect is a very common emotional bias, which will be explained in the following article.

**Keywords:** the endowment effect, application, marketing, management, stock

## **1. Introduction**

According to theories from behavioral science, finance, sociology, economics, decision science, and psychology, behavioral economics examines the psychological traits of financial market participants (decision makers) in financial market behaviors. It also examines investor decision-making and how it affects asset pricing. So the endowment effect is one of those things in behavioral economics. The endowment effect refers to the fact that once an individual owns a certain item, his evaluation of the value of the item is much higher than before [1]. The "loss aversion" theory in behavioral economics, which postulates that a given amount of loss lowers people's utility more than a similar amount of gain raises it, can explain this phenomena. The consideration of "avoiding injury" is therefore much more important than the consideration of "pursuing profit," and the balance of interests in the decision-making process is out of balance. People frequently ask for too high a price when selling items because they are afraid of losing money. The endowment effect drives this result. This paper mainly explains the endowment effect and puts forward three examples of the endowment effect in life.

## **2. Explaining the Endowment Effect**

The consistent disparities between buying and selling prices that have been noted so frequently in previous research can be explained in part by the endowment effect. When it comes to maintaining a wetland environment that is suitable for wild ducks, Hammaek and Brown once discovered that duck hunters were willing to pay an average of \$247 per person[2]. However, if they were to stop hunting

wild ducks in this wetland, their compensation would be as high as \$1044 per person. The endowment effect's presence will cause psychological prices among buyers and sellers to deviate, which will impact market efficiency.

The following group of experiments conducted by Knetsch, in 1990 has well observed the influence of the endowment effect[3].

44 college students participated in the experiment, with half of them being randomly chosen. They were each handed a token and a handbook that said that the token they had belonged to had a value of US \$x. (the value of x varies from person to person). These can be redeemed after the experiment. The transaction circumstances will decide the purchase and sale prices when the token is traded. Ask the student who receives the token to specify their desired selling price between \$0 and \$8.75. The students who did not receive the voucher were similarly given a value that varies from person to person and questioned regarding how much they would be ready to pay for a voucher. The experimenter will then compile their prices, determine the market clearing price and the tradeable amount right away, and publish the results as soon as they are ready. According to the prices they enter, experiment participants can conduct actual transactions. Three times the experiment was conducted. We conducted three rounds of token trading before switching to physical trade experiments using cups and pens in place of the tokens. The transactional guidelines are repeatedly used and unaltered[3].

The markets for tokens and consumer products have fundamentally distinct types of transactions. Both buyers and sellers in the token market anticipate paying about the same prices. The three tests show that the actual volume to predicted volume ratio ( $V/V$ ) is 1.0. Thus, the  $V/V$  ratios of the cup and pen markets are 0.20 and 0.41, respectively, although the median quoted selling price in both markets might be more than twice the purchase price. The trading volume of the two consumer products marketplaces did not increase even when the transactions were repeated, showing that the participants had not learned to agree on a price at which to buy and sell in order to promote market efficiency[3].

On the other hand, the token market is booming with activity. Consider the distinction between tokens and consumer products to understand why: A token's value is predetermined and very precise, yet consumer items may have unclear value according to consumer preferences, making it challenging for customers to assign a specific monetary value to a good. As a result, there won't be an endowment effect, unlike when purchasing stocks, when consumers purchase items at a higher price for resale as opposed to personal use[3].

The aforementioned trials have incontrovertibly demonstrated the presence of the endowment effect: once people acquire something for consumption, their value for it increases noticeably. In essence, the current findings show that the endowment effect can endure in actual market environments. Nonetheless, such irrational behavior frequently results in a decrease in market efficiency, and this phenomena won't go away as traders gain more trading experience[3].

### **3. Applications of the Endowment Effect**

The endowment effect is very common in our lives, but people are not very aware of it. The endowment effect has been affecting us most of the time in people's life.

#### **3.1. Selling**

Starbucks is known for writing their consumers' names on their coffee cups. Most people may think it's just to keep from picking up the wrong cup, but subconsciously, when consumers see their name on the cup, they will mentally think that the item belongs to them, consumers' satisfaction with Starbucks may subconsciously be improved, which also makes it more likely for them to buy

Starbucks next time. The endowment effect drives this result. In this selling and buying process, the endowment effect drives this outcome[4].

People's strong feedback about their names represents the person's overall self-identity. As pointed out by Itzkowitz, both apparel and names help people set the stage for the beginning of self-identity development[5]. The vast personal information conveyed by the name, including family information, history, and self-esteem level, has become the most powerful symbol of self-symbol. Kettle and Häubl show that in a specific consumption environment, the act of signing can elicit a person's social identity[6]. For example, if a person signs his or her identity as an athlete at a sporting goods shoe store, his or her athlete identity will be activated. In addition, when a consumer signed a name before visiting a shoe store, the consumer will try on more shoes, thereby increasing the consumer's purchase probability. This research shows that names are powerful representations of a person's self[6].

Moreover, when a student who was taught to successfully recall their name was more likely to comply when asked to buy a .25¢ cookie for a fundraiser, students whose names were forgotten or whose names were not mentioned were less likely to participate [6].

Thus, Starbucks employees are exploiting the endowment effect for their business activities by leaving our customer's marks (name or nickname) on the cup. This behavior imparts a sense of self-identity to consumers, leading to increased customer satisfaction and retention. This also provides the basis for Starbucks' business development.

### 3.2. Stock

In the stock market, the endowment effect means that investors may irrationally overvalue assets simply because they own certain assets, and also irrationally undervalue them because they do not own assets[7].

Once an investor buys a stock, the buyer may immediately have a certain liking for the company they chooses, and is more likely to have feelings for this object. If the stock rises, the buyer will not choose to sell it in the first time, but will assume that the stock is in good condition, and deepen their confidence in the stock. As the stock price continues to fluctuate, shareholder will continue to reduce their willingness to sell. Even if there is a 5% loss, most people still choose to delay selling. They are always stick to their original decision, that the stock is superior to its competition and are hesitant to sell. They assign an abnormally higher value on the stock since gain has a more significant impact than loss.

Since investors cannot objectively value stocks, they maintain objectivity in developing their trading strategies and trading processes. Therefore, investors need to learn how to invest correctly and rationally. There are usually two ways, the first is to consider the opportunity cost. This method rationally analyzes relevant information based on helping investors understand the existence of the endowment effect. The second way is to emphasize psychological ownership, further reducing people's unnecessary emotional attachment to the projects they invest in[7].

To sum it up, the ability to avoid the endowment effect can be the difference between failure and success.

The endowment effect, though, does not always work. In the bid and ask quotes put forth by traders on the Australian Stock Exchange (ASX), Furche & Johnstone discovered evidence that is consistent with the endowment effect[8]. For small-value orders compared to large-value orders, asks are consistently more distant from the market than bids. The endowment effect is far more noticeable in retail trading than in institutional trading, which is consistent with the claim that less experienced investors are more susceptible to its effects. The endowment effect has more negative effects on stock market efficiency for liquidity than for price discovery because it doesn't affect all traders or investors in the same way. The endowment effect must not have an impact on at least some traders (perhaps just one) on the sell side for accurate price discovery to occur. Nonetheless, there are economic

justifications for believing that price discovery works best in markets with lots of liquidity. The endowment effect decreases market liquidity and depth. A few knowledgeable purchasers who are aware of the stock's "real value" won't all be able to purchase it at that price if many sellers have an upwardly skewed expectation of the price they should be able to obtain for their shares. Alternately, they will pay hefty transaction charges, which can make them want to stop trading. The time it takes for traders to buy sufficiently significant volumes of stock at the present "actual" stock price, rather than the average time or number of trades needed for correct price discovery, reduces market efficiency.

### 3.3. Management

The endowment effect is also applied in company management to improve employee loyalty. Using the endowment effect in a workplace aims to increase staff retention by enhancing their sense of happiness and belonging. There are some examples applied in the real life, such as providing training, stock equity incentives, giving trust and praise, a good working atmosphere, and psychological contact. All of this has had some effect on retaining staff.

**The stock equity incentives.** Liu points out that when the item is owned, a node's evaluation of a project's value is greater than when it is not owned, which further influences the node's value evaluation strategy[9]. due to the endowment effect in behavioral economics. Firms stimulate their employees by using share bonuses in their daily lives, and this endowment effect also motivates employees to stay loyal. To evaluate the Reverse Combinatorial Auction Based Endowment Effect (RCBEE) incentive mechanism, Liu builds a mapping relationship between it and Mobile Crowd Sensing (MCS)[9].

With the design and characterization of endowment assets, endowment bonuses, holding durations, and contribution criteria, the test, which was inspired by equity incentives, incorporates the endowment impact into the conventional MCS incentive mechanism. Endowment cultivation, endowment reinforcement, and endowment triggering are the three stages that make up the entire process, and each stage has associated formulae and algorithms. Theorems and simulation experiments are used to examine the effectiveness and logic of RCBEE. The experiment demonstrates that, in contrast to the MRC mechanism, social welfare increases with the inclusion of the endowment effect while the cost of payment decreases. This experimental outcome demonstrates the endowment effect's usefulness[9].

**The co-determination.** Management rights give the employer the right to determine, through the management prerogatives it has, all terms and conditions not previously established by contract or regulation. As a result, employers may place a high value on management right. The employee, on the other hand, is unlikely to value it highly because he or she has not been granted this right. Therefore this management right always remains with the employer and is controlled by the employer.

It follows that the default preference for managerial rights, whether by the employer or the employee, depends to a large extent on the environment. The employer will regard the right to manage more highly, covet it more fervently, and protect it more vehemently as a result of the endowment effect.

In general, shared decision-making improves company performance in two crucial ways[9]. It first offers a forum for the discussion and sharing of ideas. Managers can get employees' support for decisions by outlining their decision-making processes. Also, employees can use this platform to share their thoughts, ideas, and comments. Second, participating in shared decision-making gives managers and staff members the chance to forge stronger, more productive connections.

Whether management opposition to co-determination is efficient and thus reasonable in terms of the Coase Theorem is seriously questioned by both theory and evidence. In light of this, new econometric research on Germany has connected works councils particularly to a range of favorable organizational outcomes, including fewer staff turnover, improved productivity, and higher profitability [10]. Most crucially, works councils generally have a beneficial impact on earnings across sizable samples of businesses [11]. Although some prior research found a link between managerial opinions and profitability that was in fact negative, Mueller relates such findings to the use of data on managerial opinions or impressions and demonstrates that the link is, in fact, positive [10] using actual profit data. Moreover, Müller and Stegmaier identified a number of factors that are compatible with the endowment effect for management opposition to works councils in Germany, including entrepreneurial freedom and short-termism [10].

#### 4. Conclusion

This paper mainly discusses the explanation and application of the endowment effect. In the explanation, the existence of the endowment effect is well realized through experiments. This paper discusses three applications of the endowment effect in selling, stock, and management. In selling, we mentioned the example of Starbucks' waiters putting consumers' names on their cups, which is a great way to increase purchasing rate and repeat customer rates. And, how controlling the endowment effect in stock is the key to the success of investors, who need to overcome psychological irrationality. In management, the manager will use the determinant effect on retaining staff and apply some methods such as co-determinant on enhancing the endowment effect on employees' hearts. In summary, the endowment effect is very common in our lives. It is an emotional bias that causes us to raise the value of what belongs to us. There's nothing good or bad about the endowment effect, and if you find it confusing to make rational choices, it's a good idea to understand how it works.

#### Reference

- [1] Andreas Furche (2006), *Evidence of the Endowment Effect in Stock Market Order Placement*, P151-152
- [2] Hammak, J., & Brown Jr, G. M. (1974). *Waterfowl and wetlands: toward bioeconomic analysis*. Resources for the Future. Inc., Washington, DC, USA.
- [3] Knetsch, J.L. (1990), *Experimental Tests of the Endowment Effect and the Coase Theorem*, " *Journal of Political Economy* 98, P1329-1336, P1342-1343
- [4] Rank-Christman, T. (2016). " *Hello my name is...": marketplace (mis) identification and consumption response* (Doctoral dissertation, Rutgers University-Graduate School-Newark).
- [5] Itzkowitz, J. (2020), *A Classroom Experience to Introduce Behavioral Finance and the Endowment Effect*, P5
- [6] Kettle, K. L., & Häubl, G. (2011). *The signature effect: Signing influences consumption-related behavior by priming self-identity*. *Journal of Consumer Research*, 38(3), 474-489.
- [7] *The Endowment Effect, Management study guide*, accessed on February 22, 2023. <https://www.managementstudyguide.com/endowment-effect.htm>
- [8] Furche, A., & Johnstone, D. (2006). *Evidence of the endowment effect in stock market order placement*. *The Journal of Behavioral Finance*, 7(3), 145-154.
- [9] Liu, J., Huang, S., Wang, W., Li, D., & Deng, X. (2021). *An incentive mechanism based on endowment effect facing social welfare in Crowdsensing*. *Peer-to-Peer Networking and Applications*, 14(6), 3929-3945.
- [10] Müller, S., & Stegmaier, J. (2020). *Why is there resistance to works councils in Germany? An economic perspective*. *Economic and Industrial Democracy*, 41(3), 540-561.
- [11] Harcourt, M., Gall, G., Wilkinson, A., Croucher, R., & Lam, H. (2020). *Using the endowment effect to explain managerial resistance towards codetermination: Implications for employment relations from the German case*. *Human Resource Management Journal*, 30(1), 149-163