Anchoring Effect Affect the Decision Making on Stock Market

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ABSTRACT

Although market fluctuations may aid investors in making better trading decisions, psychological variables such as the anchoring effect can also have an impact. The anchoring effect is one of the most effective cognitive heuristics. The impact of the anchoring effect on investor performance and capabilities is studied in behavioural finance, which is important since it discloses the root causes of market insufficiency. Many types of anchors, investors, and the frequency with which these factors arise all affect investment decisions. The fundamental purpose of this study is to see how these characteristics influence stock market decision-making. The stock market and the anchoring effect can be combined. It has the capacity to successfully combine the anchoring effect with the stock market. The researchers discovered that all factors might have a significant impact on decision-making.

Keywords: Anchoring Effect, Stock Market, Decision Making, Cognitive Bias, Individual Difference

1. INTRODUCTION

1.1. What is Anchoring Effect

The anchoring effect is a psychological notion that may be used to a range of situations, including trading. Anchoring has a wide-ranging and significant impact. Individuals are impacted by a certain reference point or "anchor" in their decision-making process, and they tend to make decisions based on the first piece of information they receive, a cognitive bias. Anchoring occurs when a person makes a decision or generates an opinion based mostly on the first few pieces of information they receive (known as "anchors"). After it is produced, this one-of-a-kind reference point has an influence on any subsequent human assessments, parameters, or judgments. Anchoring effects are significant when making decisions involving numerical quantities, such as price. The anchoring effect, according to the case study, is one of the most powerful and well-established biases.

1.2. How does the Anchoring Effect Work

The anchoring effect is a cognitive bias that describes people's tendency to make judgments based on their initial impressions. Anchor sinking is a term used to describe when people use preliminary data to influence future judgments.

1.3. The Anchoring Effect on Decision-Making

The anchoring effect has been researched in a variety of financial disciplines, including horse racing [1], real estate investing [2], and insurance [3]. The performance of the anchoring effect in the stock market is one of the study's main issues. Its influence on people's decision-making is also taken into account. People's financial decisions are influenced by a variety of circumstances. The first and most important step is to select the appropriate anchor. Various anchoring produces different results. This research looks at three different types of anchoring. Speculators may utilise the cost price of equities as an anchor. Investors, on the other hand, frequently misjudge the danger in this situation. Some investors use the stock's prior high point as a reference point. Many studies have looked at the research value as well as the typical 52-week period of high price. For example, George and Hwang [4] use the ratio of a company's current price to its former 52-week high price to examine historical performance and show that

proximity to the 52-week high can predict future stock returns. The current price is also used as an anchor by certain speculators. It is, nonetheless, linked to a number of investors. Second, the various types of investors are critical. Students are affected by the initial price while purchasing a stock. The anchoring effect is substantially weaker for financial market specialists, but even if the sample is limited to more experienced individuals, it still makes statistical and economic sense. Professionals aren't aware of how their expectations are influenced by prior performance. Furthermore, "locking in 52-week highs" has an impact on stock buyers. Finally, the forms of anchoring that take place have a big impact. Local investors are less prone to anchoring bias than investors with extensive experience in the topic. With the exception of 52-week highs, anchors only occur in the stock market for a brief period of time, but the anchoring effect may assist individuals in the long run. Regardless of financial experience, the starting price acts as an anchor. The following topics will be covered in greater depth later.

1.4. The Limitations of the Anchoring Effect

The anchoring effect causes people to make poor decisions in their daily lives. Consumers and investors are bewildered when they observe anchors in situations such as purchasing or stock markets, and they assume they should buy a huge number of units. As a result of the anchoring effect's action, retailers make more money [5]. In this regard, the last section of the paper provides a demonstration of the resolving methodologies as well as a planned follow-up research to adjust in order to give a comprehensive literature evaluation. In this part, the authors provide step-by-step directions for laying up the whole experiment procedure, including research methodology, sample methodologies, and analytic methods.

2. FACTORS OF INFLUENCE ON THE DECISION MAKING ON STOCK MARKET

When making decisions, people are typically affected by the initial piece of information. Then, in reaction to the first data, they make insufficient modifications. The first piece of knowledge is like an anchor falling into the depths of the ocean, anchoring the mind someplace.

Tversky and Kahneman [6] found evidence that individuals usually start with a readily available number or reference point and adjust from there when making estimations. While such an approach does not always provide poor findings, studies have shown that individuals seldom adjust their estimations from their starting point, or anchor.

2.1. Types of Anchors

To begin, some speculators use the stock market's cost price as a benchmark. In a study of management graduates, Kaustia, Alho, and Puttonen [7] observed that, independent of investment skill, beginning prices operate as an anchor. Because, as Chavaglia, J. N., Filipe, J. A., and Ramalheiro, B. [8] point out, the brain would likely fail if it tried to process and record all of the information. It's natural for an investor's mind to wander to the price. In order to sell it, the speculators alter the value insufficiently around the cost price. When people observe equities slowly rising, it means they've been growing consistently for several days. They anticipate them to rise again now that they have risen, and they want to buy in huge quantities. The cost price becomes the anchor at this point. When a relevant number is available for numerical prediction, individuals make estimates by starting with a low value and gradually increasing it until the desired outcome is achieved. When a relevant number is available for numerical prediction, individuals make estimates by starting with a low value and gradually increasing it until the desired outcome is achieved. In both cases, adjustments are usually insufficient. Adjustments are often insufficient in both circumstances [9]. On the other hand, speculators overestimated the risk and failed to account for future advantages and hazards. Investors make the error of assuming that their own risk is smaller than that of others when calculating the chances of their goal's success or failure. When purchasing a stock, the stock's value may depreciate in relation to the purchase price. It is now deemed to have dropped in value when compared to the cost price because speculators utilise the cost price as an anchor and overlook its genuine worth. The anchored price is used to inform all speculative decisions.

Second, some conjecture refers to the stock's previous high point. Investors are more inclined to buy shares around record highs than at record lows, according to Grinblatt and Keloharaju [10]. The value of a peak price as an anchor has been established in several research. Investors should pay attention to the Dow Jones Index's 52-week high, according to some study [11]. When investors compare a stock's current value to its maximum value, the drop is more noticeable. They are unconcerned with the item's true worth. In investment psychology, this is referred to as "overconfidence." People have a tendency to be overconfident in their talents, which is known as the overconfidence bias. This happens when decision-making is too optimistic [12], resulting in an overestimation of rewards and an underestimation of costs. Speculators have a high degree of trust in the initial value they choose. All investment decisions must be made in accordance with the beginning value after it has been established. However, 52-week highs and lows are used as the anchor for forecasting future returns, but this method is only useful in the near term. Many speculators overlook the fact that future earnings are subject to significant risk. Despite the fact that various stock markets are now experiencing difficulties, they remain

confident in their ability to regulate stock prices. They also feel that they will be able to control their losses and dangers.

Finally, there's random anchoring. As a result, investors use the most recent price as a benchmark. Recent pricing, according to Baker, Pan, and Wurgler [13], serve as an anchor at the time of appraisal. There is a considerable positive association between the ex-day (last day) price and the cum day (current day) price. The previous month's value is weighted in consensus estimations, and data from the previous month is also used as an anchor. If our intuitive system concludes that a random value or viewpoint is unproblematic, it will be implanted into our awareness and thought, becoming an anchor value that will influence investment decisions. Speculators, on the other hand, do not make enough adjustments to their investment decisions. Speculators who seek information on certain forums, for example, are more likely to be randomly moored. Some investors will debate the stock market's most recent stock price in the forum. Anchoring, on the other hand, is valued differently by different types of investors. According to Campbell and Sharpe [14], only lay investors utilise previous price movements as an anchor.

2.2. Types of Investors

2.2.1. The Influence of People's Skill Level on Decision Making

The stock market's anchoring effect has a significant impact on people's actions and judgments. The anchoring effect, on the other hand, has varying outcomes depending on one's degree of knowledge and expertise. According to Kaustia, Alho, and Puttonen [15], students' long-term stock return forecasts exhibit a significant anchoring effect, which implies that their estimates are influenced by a beginning value. The anchoring effect was statistically and economically significant even when we limited our sample to more experienced professionals.

Because of the anchoring effect in the stock market, how individuals create stock market return expectations has gotten a lot of attention. However, little is known about how financial professionals set their expectations for returns. Financial advisors and other financial market experts play a critical role in matching financial products with individual investors, and their return expectations can have a big influence on their customers' asset allocation decisions. The influence of anchoring bias linked to anticipated profits per share (FEPS) on forecast errors, earnings surprises, stock returns, and stock splits was investigated by Ling Cen, Gilles Hilary, and K. C. John Wei [16]. They discovered that analysts generated optimistic (pessimistic) projections when a company's FEPS was below (above) the industry median.

The anchoring effect has a greater influence on students and certain non-professionals. The beginning value has an impact on their long-term stock returns forecasts. The anchoring effect is substantially smaller for financial experts.

Financial market experts' estimates of long-term potential stock returns have a huge anchoring effect. Anchoring is the most dependable self-estimated or expressly provided digital stock market return anchor. Expertise may significantly minimise behavioral bias. According to tests of the classic anchoring effect applied to stock market return forecasts, the influence obtained by students is several times more than that accomplished by professionals. There was no extra decrease in the anchoring effect when the exams were conditioned on the specialists' expertise. The findings came from a survey of persons with more employment experience or who worked in positions that needed more competence.

Financial market professionals may not have constant return expectations. In real-life contacts with customers, they may react differently. They have access to a variety of relevant data, information sources, and analytical tools. As a result, it's likely that utilising these resources will produce a variety of outcomes. Long-term stock market return expectations are a critical aspect in the financial industry, and professionals are more likely to know the answers than to begin asking new clients for information. Situational aspects in a client's contact may have an impact on the appraisal work they undertake. Recent outcomes, for example, might serve as an anchor, leading inadvertent extrapolation to predict future returns based on a large number of data points. As a result, there may be discrepancies in recommendations.

2.2.2. The Role of Foreign Investors in Stock Market Anchoring Tendency

Major shareholders in emerging economies are foreign investors. Experiments show that when favourable shocks arise, investors are hesitant to modify their beliefs higher if prices are already near their 52-week average high, and vice versa [17]. More than a third of the market value in Taiwan is controlled by foreign institutional investors, and their stock investments have produced exceptional returns. Foreign institutional investors' momentum behaviour has been found to be influenced by previous foreign ownership (anchor) (anchor) [18]. When there is a considerable quantity of foreign ownership, foreign investors' momentum increases.

Furthermore, for enterprises with strong foreign ownership, the positive relationship between prices near 52-week highs and PEAD evaporates, showing that foreign investors reduce the anchoring effect of 52-week highs. The role of specialised foreign agencies in minimising the breadth of PEAD induced by anchoring bias has been critical. Post-earnings drift affects several

countries, including South Korea. Related researchers employ anchoring bias to explain PEAD in the Korean market [19]. Investors' perceptions of earnings news are influenced by whether stocks are at 52-week highs, therefore good earnings news will be disregarded if prices are near peaks. According to the data, PEAD was significant when stocks with positive outcomes were near 52-week highs. Furthermore, in the stock market, overly optimistic forecasts are far more common. Furthermore, shares trading far below their 52-week highs are more likely to have overly optimistic expectations. Finally, prior of the results, individual buying pressure was focused on shares that were trading well below their 52-week highs. According to Ma, Whidbee, and Zhang [20]., investors are less likely to buy up (push down) a stock's 52-week high if it happened lately (distantly), hence these stocks are undervalued (overvalued) and will create bigger (lower) returns in the future.

These researchers discovered that knowledgeable international investors are less subject to cognitive biases like "locking in 52-week highs" when formulating earnings expectations, resulting in fewer market oddities.

2.3. Types of Ways of Anchor Occurring

2.3.1. Professional Investors are Less Prone to be Biased by Anchoring Effect than Native Investors

They undertake many tests within two subject pools, according to Kaustia.et.al. [21], to further analyse and assess the effect of degree of competency. The majority of the attendees were professionals and students. Aside from that, seasoned professionals are those who have worked in the stock market for more than two years.

The distribution of participants showed in following diagram.

Table 1 distribution of participants
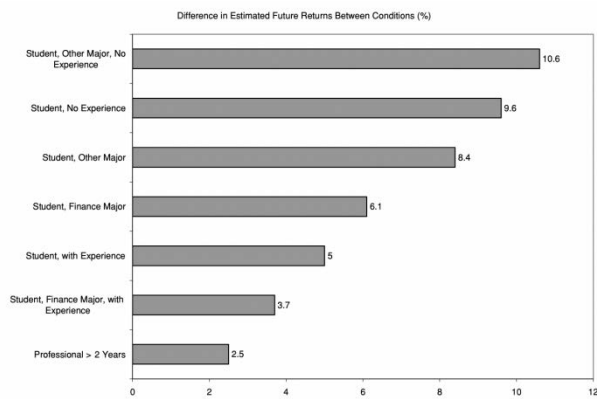
Source: Kaustia, M., Alho, E., & Puttonen, V. (2008)

The researcher kept the true objective of this laboratory experiment a secret, so all of the volunteers entered the classroom with no idea what was going on. Participants were provided detailed instructions on how

to complete the questionnaires at the outset. They didn't realise it at the time, but they could only answer such questions by intuition and debate with others. Then they went through a series of steps till the experiment was completed.

There was a strong anchoring effect in stock return forecasts of investor and non-investor students, according to the results of this experiment for a student sample. This indicates that for students with no prior investment experience, there is a significant anchoring effect. The sample difference between mean stock return projections in the high and low modes is 9.57 percent (t=9.50, p<0.01), and students with investing experience show a substantial anchoring effect (5.01 percent=4.56, p<0.01), however the size is nearly half that of non-investors. (The following statistics4 were shown)

Table 2 difference between professionals and students (with investing experience& no investing experience) in good and bad condition

	good	bad	difference
professionals	7.84(N=36)	7.40(N=41)	0.44 (0.50)
experienced Students	9.61(N=20)	8.97(N=9)	0.64 (0.44)
Non-experience students	9.63(N=19)	8.79(N=25)	0.84 (0.61)

Source: Kaustia, M., Alho, E., & Puttonen, V. (2008)

2.3.2. anchoring effect occurred in stock market only happen in short term. In t he long term, investors can earn profit through it. (Except 52-week high)

Anchoring effect occurred in various scenarios, as the author indicated, in addition to the perspective of investors' past experiences with investment.

According to George & Hwang [22], the 52-week high has also been utilised as a robust metric for anchoring effect since previous knowledge was included in current pricing and future prediction is dependent on the past set of information.

As seen in the graph below, future market returns increase when the current stock index is near its 52-week high and distant from past highs. As a result, the market's prospects increased over time. Furthermore, regardless of their degree of expertise or experience, investors may benefit from such momentum. When the data is closest to P52w=Pmax, investors tend to use only one anchor and ignore the historical high, according to this graph. Short-term news (closeness to 52-week high) is likely to be underreacted to, whereas long-term news is likely to be

overreacted to in some way (nearness to historical high). As a result, over time, investors may be able to spot the use of two anchors and profit from it.

Table 3 change of market return along the time period

Horizon	Past returns	X52w	XHH	It	Dt	R^2
Daily KSE-100	.10*	.02*	- .00*	.01*	.02*	0.012
	-5.06	-2.34	(-3.47)	-1.55	-1.18	
Daily KSE-30	.09*	.00*	- .00*	.00***	0.001	0.012
	-4.83	-2.4	(-2.34)	-1.51	(-1.16)	
Weekly KSE-100	0.05	.00*	- .00*	.03***	.00**	0.016
	(-1.21)	-3.4	(-4.60)	-1.51	-1.79	
Weekly KSE-30	0	.00*	- .00*	0.05	0	0.013
	(-1.16)	-3.07	(-3.85)	(-1.462)	(-1.218)	
Monthly KSE-100	0.01	.00*	- .00*	.09**	.00**	0.083
	(- .282)	-3.55	(-4.14)	-1.64	-1.92	
Monthly KSE-30	0	.00*	- .00*	.05***	.00**	0.074
	(- .24)	-2.9	(-3.92)	-1.57	-1.64	
QuartrlyKSE-100	-0.13	.00*	- .00*	.00**	.00*	0.154
	(- .84)	(-4.442)	(-4.69)	(-1.82)	(-2.026)	
QuartrlyKSE-30	-0.17	.00*	- .00*	.08***	.00**	0.137
	(- .63)	-4.04	(-4.16)*	-1.55	-1.87	
Yearly KSE-100	.79**	.00**	- .00*	0.47	0	0.798
	-1.94	-2.04	(-3.39)	(- .96)	(-1.46)	
Yearly KSE-30	0.2	.00**	- .00*	0.39	0	0.587
	(1.77)**	-1.86	(-3.05)	(- .702)	(-1.29)	

Source: Kaustia, M., Alho, E., & Puttonen, V. (2008)

2.3.3. initial price act as an anchor irrespective of the investment experience

According to Kaustia et al. [23], they proved this statement in their third experiment by offering convincing proof.

In their third trial, they intended to test if semantic priming is a weaker anchoring and adjustment activator than numerical anchors. The 186 participants were likewise divided into two groups: 111 professionals and 75 students with less experience. They must pick a case from a list of countries and calculate the results. The statistics are shown in Table 3. According to the study, variations in mean stock return estimations in two modes follow the basic anchoring effect's predictions for both groups. In favourable modes, experienced participants are 0.55 percent higher and students are 0.78 percent higher, however the differences are not statistically significant.

3.CONCLUSION

The anchoring effect on the stock market is investigated in this research. It focuses on the elements that impact decision-making. The sorts of anchors, the types of investors, and the appearance of the anchor are the three primary considerations.

To begin, the performance of the anchoring effect in the stock market is typically separated into three categories. First and foremost, some speculators utilise the cost price of equities as a reference point. Then, in order to sell it, the speculators alter the value inadequately around the cost price. Second, some speculators utilise the stock's prior peak price as an anchor. It is easy to be overconfident in the past and misjudge the risk at this moment. Finally, there's random anchoring. As a result, investors use the most recent price as an anchor. Only the lay investor, however, uses historical price swings as an anchor.

Second, the anchoring effect has different effects on stock investors with different levels of experience and geographical regions. Students are more likely to be swayed by the stock's cost price or maximum value due to their lack of financial knowledge. For financial market specialists, estimating long-term future stock returns has a strong anchoring effect, although knowledge may greatly reduce behavioural bias. In the stock market, cognitive biases like "locking in 52-week highs" influence investor decisions, although experienced foreign investors are less prone to them when creating earnings expectations, reducing market anomalies.

Third, native investors with less investment experience are more likely to change their decisions due to the stock market's anchoring effect, whereas experienced investors are less biased because they have access to a variety of information sources and analysis tools, so they will get a different answer than non-professionals; the market is affected over time based on the 52-week high. The different levels of expertise that an investor learned would not be factored into the determinants in this way; instead, both students and professionals believe that their stock return projections are predictable independent of their experience and rely on the basic anchoring effect.

This article focused on the classification of anchoring effect, the many repercussions it has on decision-makers in a variety of disciplines, and how anchoring effect occurred in numerous settings. However, it just displays the anchoring effect's overall potential and does not offer a practical remedy to the negative repercussions it creates. That is, when the anchoring effect happens, most investors will forget about their long-term goals and instead be relieved whn the anchor comes to mind, especially in the stock market. In terms of the negative consequences, this research does not provide any effective solutions.

In a future study, the authors intend to see if the anchoring effect can be optimised in a variety of economic disciplines, notably in the stock market. The experiment will be carried out in the field, allowing participants to act more naturally and thereby increasing the validity of the findings. Aside from that, the researchers will use random selection to find about 100 volunteers from various jobs and educational backgrounds in order to boost representativeness and improve generality. The research might be done in a number of ways, with the final results from dependent variables being compared. The data collection includes both quantitative and qualitative data, which helps to increase the validity of the outcome.

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