Are Banking Institutions reluctant to realise their losses?

- An Irish perspective

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Abstract

The research examines whether the Irish Banking Institutions have been impacted due to Loss Aversion i.e "the tendency to prefer avoiding losses to acquiring equivalent gains"(The decision lab, 2019). Loss aversion implies that psychologically investors get affected while incurring losses and its more adverse than the happiness investor experiences from a gain. This study looks at the phenomenon of Banking Institutions' loss aversion, which prevents them from issuing new shares to raise capital for running their businesses.

The Secondary method of data collection was adopted to carry forward the research project. The Financial Statement of Irish Banking authorities (Annual Report, 2021) is taken into consideration for a period of three years from 2018 to 2021 in order to analyse the movement in common stock in comparison with the total equity of the company. Three leading Banking institutions of Ireland i.e Allied Irish Bank, Bank of Ireland and Permanent TSB have been studied broadly to understand how the management's decision making process is influenced by the behavioural aspect known as Loss Aversion.

The research expands and investigates the potential influence of loss aversion in Banking Institutions, particularly during crises like Covid 19 pandemic, which may have indirectly impacted the overall performance of the Banks. The analysis outlines methods in which the losses incurred during crises could have been contained by the management via adequate preparation and the sale of the company's ideal shares.

Issuing loans, bonds, or utilizing retained earnings are some of the ways in which banks raise finance to meet crises-related losses, which requires the payment of high fixed interest rates. Instead, the research shows that the issue of shares might be a potential method for controlling or minimizing crisis-related losses. It was observed that the management's reluctance to issue further shares may be a result of the anticipation that the share price would rise in the future.

Submission of Thesis and Dissertation

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Research Students Declaration Form

(Thesis/Author Declaration Form)

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Chapter 1: Introduction

Behavioural finance signifies that people are very sensitive towards losses than the gains. Some experts say that people value losses twice heavily than a potential gain. The phycological effect of loss is so heavy that people tend to delay recognising the loss (Byrne, B. A., & Utkus, W. S. P. ,2013).

1.1 Background

A few theories in behavioural finance and economics suggest that investors make discussions as per the losses or gains associated with the investment plans. This is also stated in the expected-utility theory that the investors while selling the stocks are apprehensive towards the losses that could be incurred, and thus refrain from taking any risks involved with the same. Companies or Institutions need a larger volume of funds for carrying out their operations, meeting their objectives and minimizing the losses. Company's management tends to avoid selling their loss-making stocks in the fear of foregoing future gains associated with the same stocks. This is one way that Loss Aversion can be viewed in the context of Institutions.

Loss-making stocks are those stocks that are held in the company/Institution out of concern that selling them will result in a loss. Loss aversion affects the decision-making process, and thus it is associated with the individual's thinking and the ability to deal with various challenges. As stated in the Alternative Behavioural theory given by Ben-David, I. and Hirshleifer, D. (2012). the behavioural aspect of individual is one of the critical factors that influences the decision to hold on to stocks that could make a loss as compared to the profit making stock. The Alternative Behavioural theory may not be suitable in the case of the organisation that are operating during the recession period as their financial performances may not be predicted due to market volatility. Risk perception plays a major role in the way companies analyse a situation, and accordingly make a decision to either sell the loss-making stocks or to sell the stocks that are performing well. The process of risk analysis varies from one institution to another.

1.2. Purpose

This research paper examines whether the Banking institutions operating in Ireland are loss averse i.e are they are hesitant to offer additional shares that might underperform in the future instead prefer the ones that would make higher gains for the Institution. The reason why Banks

choose to behave in a specific way are examined in this study. It also gives a reader an knowledge about the adverse Impact loss aversion could have on the overall performance of the Banks in Ireland especially during crises.

The Irish Banking system was adversely hit during the Global Financial crisis 2008 and is still unstable. The crises occurred as a result of high volume of mortgages on commercial property provided at low interest rate by the Banks. The system still needs financial support from International Financial service providers to sustain in the country. The study of Loss aversion in the context of Irish Banking system is quite unique. Bank authorities in Ireland before the crises were engaged in aggressive risk taking and faced liquidity issues when affected due to the crisis. An assumption that Banking Institutions in Ireland might tend to follow the strategies of loss aversion which may impact their financial performances and their ability to expand their business. The ability of banks to raise funds is further affected by their reluctance to realize their losses. As seen in the Global Financial Crisis in 2008 (Beck, T., 2014), the performance of the stock market is heavily impacted by that of the Banks. Hence, loss aversion has an indirect effect on the economy and how the stock market operates.

The terms Risk aversion and Loss Aversion are used interchangeably in the sense that companies that follow elaborate Risk Aversion procedures tend to be Loss Averse. (Benartzi, S. and Thaler, R.H. 1995). The Loss aversion is a behavioural aspect in which individuals are emotional/sensitive to face losses compared to the gains. Risk aversion is a phenomenon wherein individuals fear the uncertain consequences. Due to risk averse behaviour loss aversion could impact the thinking of an individual/management.

This analysis also contributes in finding ways to minimize the effect of loss aversion, In doing so, it helps Institution to make sound financial decisions which aids in tackling the fund requirements of the business and hence, helps them deal with various operational based challenges. Furthermore, the behavioural theories and loss aversion processes are being observed to find how the attitude of the people, in particularly the bank management, constantly changes to deal with challenging situations.

The research aim is to primarily assess if the decision-making process is affected by loss aversion in Banking institutions across Ireland. Secondly, the research aims to evaluate how the loss aversion process impacts the overall performance of the Banking institutions.

1.3. Research Objectives

The research objective is to examine how loss aversion impacts Irish banks in situations where Banks hold on to their loss-making stocks instead of selling them. There are various reasons for the banking institutions not to sell their underperforming stocks. Loss aversion could be a critical factor.

Disposition effect suggests that investors are more likely to hold on to stocks that incur losses than those that receive gains(Kaustia,M., 2010). The disposition effect is also examined in the research and this is done to find how the behaviour and the fear of the individuals to not deal with the losses in fact restricts them to make the sale of the loss-making stocks. Additionally, the bias of the management towards holding the company's loss-making stocks and selling profit-making stocks is analysed.

Loss aversion could possibly result in banks and other institutions incurring a higher value of losses which becomes quite challenging to control. Due to market volatility, the stock prices are unpredictable. Therefore, stock prices may require larger durations of time to see a price rise once they drop.

As mentioned in the disposition effect, the holders of the shares choose to hold on to the losing stocks and choose to sell the winning stocks. This is because investors are very sensitive to losses. H Kent Baker and Nofsinger, J.R. (2010). It is also assumed that the sales of the loss-making shares negatively affect the brand name and the value of the company, and this impacts the long-term relationship with the investors.

A major factor in considering whether to sell stocks is how much return investors expect from them. Due to market uncertainty, the possibility of stock price appreciation is also uncertain. A wait for the stock appreciation, especially stocks that are underperforming, will increase the risk of incurring higher losses. Meanwhile, banks could initiate changes to handle challenges relating to fundraising through better planning and implementation. It becomes quite important for improving the returns on the stocks, and to find how the sales of the loss-making stocks can be used for improving the financial positions.

There are chances of losses to increase especially during the financial crises when the management are hesitant to sell shares which are underperforming. This action could impact the overall performance of the banks and lead to poor management and control of losses. During the financial crises, it is highly important to stabilise the financial performance of the company by proper planning and organising.

It can be detrimental to a company's financial performance if the management adopts the attitude of reducing immediate losses rather than working to improve its long term financial position. It reflects that the management is not willing to undertake additional responsibilities to improve the business performance and reduce the operational based challenges faced. The management instead choose to try the existing methods or protocol for the improvement of the performances, rather than performing any additional issue of shares for expanding their operations.

Chapter 2: Literature Review

2.1. Introduction

The Loss aversion concept is analysed through reviewing the previous literature and through contributing ideas to help the future literature. The various theories and behavioural aspects related to loss aversion has been briefly discussed below.

2.2. The Disposition effect

The Prospect Theory is a behavioural model that shows how people or investors value losses and gains differently. The theory signifies that Investors intent to sell a stock which is held for a gain than the stock held for a loss. This aspect of the theory is related to Loss Aversion theory.

Kahneman and Tversky (1979) study on loss aversion states that in behavioural economics investors give due weightage to loss of given amount of return than the gain of the same amount. Through in-depth experimentation it is understood that an individual acts severe both psychologically and emotionally due to incurring losses than an equivalent gain from an investment.

The traditional Expected utility theory given by (Kahneman and Tversky, 1979) provides proof that Investor experiences disutility when she/he incur loss of certain sum and that is witnessed to be much greater than the happiness received with gaining the same sum of money. This results in utility function being steeper for losses than for gains.

It has been found that the value of loss aversion is nearing to 2 from several experiments , which eventually implies that the disutility of losing something is twice as higher as the utility of gaining the same. Also, this theory has found evidence of diminishing sensitivity which implies the value of losses and gains decrease with their size. It comes within the concave utility, that signifies increase in sensitivity towards losses.

Depending on these research Tversky, A. and Kahneman, D. (1992) put forward the value function defined over gains and losses relative to some reference point like the status quo.At different reference levels the slope of the value function changes suddenly, which states that there is definite asymmetry even for small arbitrarily gains and losses.

The idea of Loss aversion developed into a theory known as the Disposition effect which implies that individual prefer to hold losers and sell winners. Therefore, Professor Barber and Odean (1999) collected data from US retail brokerage in order to prove the above theory. It was discovered from the research that Investors were 50% more willing to sell their winning stock than a losing stock, even though US tax regulations have given the option to defer locking in gains for a longer period. This mental behaviour has affected the Investment returns as individual tend to sell winners and hold losses (Byrne, A., Stephen, W. and Utkus, P ,2013).

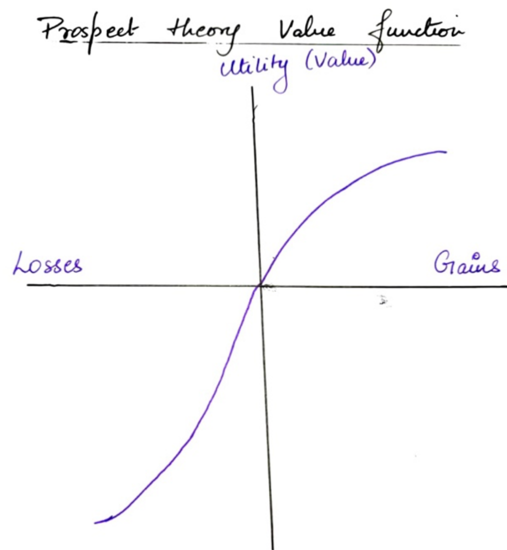


Fig 1: Portfolio theory value function (Odean, T. (1998))

From the diagram(Fig 1) we can observe a steep for losses than for profits that implies that Individuals are risk-averse. While facing gains the value function is concave wherein its convex when facing a loss. Gains and losses are measured from a point called the reference point which is very critical to this value function.

It is understood from previous studies that expected return of stock continues to rationalise its risk. For example, an investor goes to purchase a stock and he believes that the stock would yield an high expected return in order it to rationalize its risk. Suppose, stock performs well so there is stock appreciation then the Investor continue to believe that the reference point is the purchase price, this results in the stock price being more concave, more risk-adverse. It is clear if an Investor lowers his/her expectation on return on stock then they would most likely be selling the stock.

In a scenario where the stock price decreases? The study states that at this point the Investor is willing to keep the stock with him/her even when their expected return witness a downfall adversely lower than what's required for him/her to rationalize the initial purchase. For an investor to make a sale of the stock there should be more decline in the expected return and the investors should believe in fall further in the future.

In a different scenario, an Investor holds two stocks Apple and Ball. Stock Apple is rising and Stock Ball is declining. For instance, if the Investors faces demand for liquidity, keeping other things constant, he/she would be willing to sell the stock Apple because Investors prefer to make a sale of the winning stock rather than the losing stock. In this entire experiment, it is assumed that the investor's reference point are their purchase prices Odean, T.(1998).

Several empirical literatures test the application of prospect theory to investments. Barber, B.M., Lee, Y.-T., Liu, Y.-J. and Odean, T. (2007) analyse the trading activity for five years from 1995 to 1999. The report findings states that the Taiwan investors are twice as likely to sell winners over losers. 84% of the Taiwan Investors are reluctant to realise their losses. Investors such as individual investors, dealers and corporations are more hesitant to accept losses whereas mutual fund and foreign investors who account to only 5 % of entire Taiwan Investors are not. Of the 3.1 million individual investors in the Taiwan Stock Exchange 55% (1.7 million) are women and rest are men (45%). In contrast, male population in Taiwan is 51%. This discovery created a buzz in the society.. Interesting fact about women in Taiwan is that they buy and sell stocks after shopping. The findings demonstrated that the men realise the losses and gains at a faster rate whereas women are consistent. Odean (1998) perform a analyses on the trades of 10,000 accounts received from a large discount brokerage for the year 1987 to 1993 and finds that Investors are about twice as likely to sell a stock if they are holding that stock for a gain rather than a loss by keeping aside factors such as taxes, rebalancing or any transaction cost. Furthermore, Barber and Odean(1999) reassures the result by collecting data from the same brokerage firm but for the year 1991-1996 and analyses different accounts.

Australian retail investors follow the disposition effect by selling their holdings after a period of good returns and by buying fewer assets after a period of negative returns. After analysing the stock transactions of all Finns for almost two years ending in January 1997, Grinblatt and Keloharju (2001) found that Finnish investors were less inclined to sell a stock held for a financial loss. They employ logit regressions to show this pattern among five types of investors (households, nonfinancial enterprises, financial and insurance firms, and governmental and nonprofit entities) in aggregate (weighting each transaction equally).

Institutional investors and their loss-averse preferences, and whether or not these preferences are influenced in their investment decisions, thanks to Andriy Bodnaruk and Andrei Simonov's paper, "Loss-Averse Preferences, Performance, and Career Success of Institutional Investors."

Bodnaruk,A. and Simonov, A.(2016). They provided concrete evidence of its impacts on mutual fund managers' portfolio decisions, performance, and career outcomes using individual-level, survey-based estimations of loss aversion. For the purpose of the study, Swedish mutual fund managers (n=194) were asked to fill out a questionnaire. In all, 69 people (36% of the sample) filled out the survey. The analysis of those who haven't answered revealed that they would behave similarly. There are no statistical or economic differences between the two samples along any of the comparison criteria, as shown by the descriptive statistics presented in the study. The outcome of the investigation was to find out the degree of loss aversion by the investors. These loss aversion estimates are then connected to the sampled managers' portfolio characteristics and the mutual funds' returns. The research demonstrate that managers with higher loss aversion have a bigger propensity to restrict the downside potential of their portfolios, raise the riskiness of their portfolios, and have a stronger disposition effect in reaction to subpar interim performance. Additionally, they found that managers who are extremely risk conservative have shorter careers in the asset management sector and provide worse risk-adjusted returns. The findings also reveal that managers with a strong dislike to losing tend to provide subpar outcomes. Investors presumably back actively managed funds on the assumption that their managers possess greater investing skills. These results have major consequences for the mutual fund sector. Personal attitude/behaviour of managers towards facing risk would directly affect the decision making quality and performance and does not balance out due to the incentive provided by the organisation.

Even though these research shows that investors who own individual stocks tend to be loss averse, there is still some disagreement about whether investors in mutual funds are reluctant to sell funds that aren't doing well.

Jiang, J., Shrider, D.G., Ting, H. and Wu, Y. (2020). This paper researches about 300,000 Chinese mutual fund investor account. The data is procured from a Chinese Company which manages five open-end equity as part of a single fund family. In China, investors are allowed to buy mutual funds from the commercial bank but are restricted to procure individual stocks. Investors need a brokerage account with a stock exchange or investment bank in order to trade equities. China has comparatively less investment bank branches compared to commercial banks. The sample was analysed using the cox regression model. Firstly, the profit position and then the loss position was observed. After retrieving the data from all the five account it was found that loss aversion existed strongly as investors are more likely to sell the winning asset

quicker than the loosing asset. The results also show that experienced investors are less worried about taking a loss.

Ben-David and Hirshleifer (2011) suggest two main reasons for large gains or losses on stock to affect investor trading positions. These are:

- The investor believes the duration of the stock has been running on the market means that there is a high possibility that the stock performance may improve with time. As a result, the investor purchases more stock even though they have suffered a loss in order to achieve future gains if the stock performs well in due course.
- The investor changes their original analysis and chooses to sell stock after facing losses and buy stock during gains.

This suggests that investors react with increased trading (either buying or selling) when a significant difference is seen in the stock price. However, there are instances where individuals revise their trading strategies due to change in beliefs. Since changes in beliefs cannot always be rational, this may result in large amounts of trading.

"The decision to hold or to sell an investment should depend only on the matching between personal risk preferences and the risk characteristics of the investment" (Ploner, 2017). Utility maximisation and constant absolute risk aversion and Disposition effect both showcase different outlooks to investor reactions to gains and losses, Utility Maximisation suggests that the investor does not make any changes and continues to hold the stock irrespective of whether a gain or loss is earned. However, Disposition effect suggests that investors are more likely to hold on to stocks that incur losses than those that receive gains. (Ploner, 2017). The two instances can be compared to that of rolling a die. In the case of Utility Maximisation, there is no difference in investor tendency to hold stock if each die roll results in a gain or loss. In the case of Disposition effect, if the first die roll results in loss, then the investor is more likely to hold on to the investment than if the die roll results in gain.

Ploner's (2017) study strongly suggested the existence of a disposition effect on the condition that investor choices were made in sequential order. He found that volatility in investor holding their stocks is generally found when losses are incurred. However, he found that when investors have planned their choices, they are less likely to hold on to their stocks when faced with losses,

which is the reverse disposition effect. He further noted that the behaviour of losers significantly results in change in trading patterns while the behaviour of winners causes little to no change in trading patterns. A major difference he added is that investors that make decisions sequentially often know the outcome of their investment before choosing to hold on to the stocks while investors that make planned decisions are in the dark about the performance and therefore have to anticipate how the stock will perform. This difference can result in a difference in self confidence among the investors, which can further significantly affect investment decisions.

2.2 .(i) Disposition impact on the Investor's thinking

Investors usually rethink about selling the losing stocks, as compared to the winning stocks (Bareber et al., 2007). This occurs at the time of deciding to sell the long and the short term stocks and making right decision for improving their existing position is quite important.

The disposition effect is witnessed in both the long and the short term investment plan of the stocks, but however there is a higher impact on the stocks that are being held for a long-term. The major reasons for holding the losses is with the expectation that the share price would increase in the future, wherein the future is unpredictable.

The cost of handling the losses of the underperforming stocks can sometime be a major challenge for companies/ institution as stated by (Ben-David and Hirshleifer, 2012).. The fear of losing value which eventually leads to averting the losses could be due to overconfidence of the Institution. As they are ready to wait until the appreciation of the stock price.

Sellers of the shares assume that the sale price can raise in value and this confidence in fact leads to stock stagnation, which then impacts the economic growth and developmental process that is needed for the country. There is a possibility that the prices might decline further instead of rising and by this time the loss handling cost would have increased which becomes difficult to control.

2.3. Past performance

(Barber, Odean, Strahilevitz 2004) According to their study the trading data of a big discount brokerage (n=66,465) and a large retail brokerage (n=665,533), investors are twice as likely to

repurchase a stock they sold in the prior year if the transaction was profitable. Since the investors do not get outsized gains on the previously winning equities they reinvest in, it is unclear what is motivating this behaviour. This pattern of action is not tax motivated, since it is seen in both tax-deferred and taxable accounts. The report also observes a pattern that investors are much more likely to buy back a stock they sold in the past year if its price has gone down since they sold it than if it has gone up. This only happens with stocks that were previously sold for a profit. Investors stay away from stocks that were previously sold for a loss, even if the price of the stock has gone up since then. Buying back stocks that have gone down since they were sold may be a way to learn by comparing what actually happened to what might have happened. People often compare what happened in real life to counterfactuals, which are mental simulations of what could have happened (Kahneman and Tversky 1982).

Researchers have recently looked at how investors decide which stocks to buy and which ones to sell. Most investors find it difficult to consider all the aspects before making a purchase, so they jump into the ones that have caught their eye (Barber B.M, Health, C. and Odean, T. 2003). For instance, it has been shown that investors are more willing to purchase equities that are mentioned in the media. Investors are also more inclined to think about stocks they have owned in the past year than about stocks they haven't owned in the past year. So, it's not surprising that investors tend to buy back stocks they've previously owned and sold, as well as stocks they still own but haven't sold, at much higher rates than they buy back stocks they've never owned before.

(Barber, Odean, Strahilevitz 2004) demonstrates the likelihood that an investor will buy back a stock depends on whether the stock was sold for a loss or a profit before and whether the price of the stock has gone up or down since the last time the investor sold it. The study also show that the difference between the current stock price and the average purchase price affects the likelihood that an investor will buy more shares. To prove the same, Researchers perform tests to see if the investors are profiting when they buy back stocks that have lost value since they were sold, style-adjusted portfolio returns after stocks are bought at prices lower than when they were sold. The regression intercept, or alpha, was negative for both discount and retail investors, but this is not always the case. Then they interpreted that these investor's performance for sure cannot improve when they buy back stocks whose prices have gone down since they last sold them. Further analyses assess style-adjusted portfolio returns after buying shares of companies already held at prices lower than the initial purchase price to see whether

investors are making money by buying equities that have decreased in value. The regression intercept (alpha) is negative for both large and retail investors, albeit this is consistently true only for the largest discount broker. Therefore, report do not find any evidence that these investors' performance improves as a result of buying more shares of equities that have declined in value. Their justification are rational and in line with prior psychological studies. Repurchasing equities after they've dropped in price makes logical emotional sense to investors. When investors do this, they feel good about making choices that lead to better results than what could have been. Investors who repurchase at higher prices, on the other hand, feel bad because they know they could have easily done better. And one of the most basic instincts humans have is to stay away from things that have hurt them in the past. So, it makes emotional sense that investors want to buy stocks that have done well for them in the past and avoid stocks that have hurt them in the past.

2.4 Alternative Behavioural theory

Investor's hold losses not only because they are reluctant to lose money but also because they are overconfident (Mullainathan, S. and Thaler, R.H, 2000). and may expect the loosing stock to rise more than the wining stock by end of the day. Emotional values and factors trigger the decision-making process, especially when there are funds involved in the same. A fear of losing the funds or facing some sort of uncertain losses could motivate them to make the irrational decisions. Behavioural aspect was explored in the Barber and Odean (1999) report which introduced fact about human behaviour i.e Overconfidence. Investors believe that their losers will outperform their current winner in the near future contributes to the disposition effect. To back up this claim, Dhar and Zhu (2006) provide evidence that the disposition impact is more pronounced for less experienced investors. Investors are more inclined to reinvest in a company they previously sold if the stock is selling at a lower price, If you sell and then buy back at a lower price, you'll feel good about your decision, they say, but if you sell and then buy back at a higher price, you'll feel bad about selling. Investors want to avoid repurchasing at a higher price because of the possibility of regret. According to Odean (1998), investors are more inclined to reinvest in a company whose stock price has fallen since they first bought it than in a company whose stock price has risen. Again, this behaviour might be explained by an attempt to prevent future regret. Investors tend to delay realising loss in both the situation. For instance, if the future expected returns for the loosing stock is higher than that of a winning stock then its fair for investor's to believe in the stock and their behaviour is rational. Whereas, if the

future expected return for the loosing stock is not greater than that of a winning stock but still the Investor’s continue to believe in the stock despite the evidence of the later situation and their belief is considered irrational (Odean, T. , 1998).

2.4.(i) Reasons for holding the shares

From the past literature we have identified other reasons why Investors hold a losing stock and end up selling a winning stock?

(a)The effect of mental accounting leads Investors to pay attention to losses and gains from the aspect of Individual stock rather than focusing on Portfolio return (Mullainathan, S. and Thaler, R.H, 2000).

(b)Positive information in the market can influence investors and they may sell the stock if the price goes up depending upon the information, rationally believes that price is up due to the information and they hold the stock if the price declines assuming that their information is yet to reflect in the price of the stock.

(c)Stocks with lower price usually has higher trading costs, because price of losing investments are low compared to that of an winning investments.

So, investors hesitate to sell their losses and try run away from facing higher cost of trading low priced stocks

(d) Investors blindly trust their initial assumption and they convinces oneself that their stock would likely come back in form rather than admitting that he/she is unwilling to accept the loss.

The literature review signifies that Investors demonstrate the Disposition effect, i.e they prefer to sell their winning stock and hold on to their losing stock (Barber, B.M., Lee, Y.-T., Liu, Y.-J. and Odean, T. ,2007).The disposition effect is in existence for both short and long positions, for individual or institutional investor(they have the ability to affect asset prices and trading volume) and tend to decline the appreciation in the market. This section attempted to analyse various reasons why investors hesitate to realise their losses and what are the reasons Investors tend to sell winning stocks and hold on to losing stocks.

Gervais et al. (2001) further suggest that limited attention plays an important role in whether an individual investor rethinks their portfolio. Instances of shocking news reports tend to have grab attention and influence investing decisions. They state that investors do not often think about their trading decisions unless their attention is diverted to their positions in the market. A situation of significant gain or loss makes investors revise their strategy. As a result, when there is no substantial change made to price, there is no incentive for investors to re-examine their trading positions.

The confidence of an investor is tied to how their stocks perform. If the price of their stock holdings increases, then the investor may become more confident in their abilities and purchase more stocks. At the same time, if the price decreases and the investor is confident about their investment, they may take the price drop as an opportunity to further invest in stocks to reap gain as they perceive that the stock price will rise with time. If the price of the stock remains constant, then the investor has no reason to change their trading strategies. (Ben-David and Hirshleifer, 2012).

Tang et al. (2019) investigate the relationship between Financial Self Efficacy, Versatile Cognitive style and the Disposition effect. Their study suggests that there is a strong positive relationship between Financial Self Efficacy (FSE) and the Disposition effect. Self-efficacy is a personality trait that affects how individuals process information and make decisions. Individuals with high cognitive flexibility often tend to switch between rational processing and experiential processing based on the situations in their environment (Hodgkinson and Clarke, 2007). This suggests that investors with high trading confidence tend to hold investments with losses for longer than investors with low trading confidence (Kadous et al., 2014). The investors with high Financial Self Efficacy have higher expectations in terms of their financial outcomes and therefore, often tend to sell the investments that make gains and hold investments that make losses in order to meet their financial expectations. This causes a large disposition effect. It was also found that higher self-efficacy is linked to higher cognitive flexibility, which in turns means that Versatile Cognitive style and the Disposition effect were positively related. Therefore, highly rational and intuitive individuals also often choose to sell stocks that earn gains and sell their losing investments.

The decision making process of the management is highly influenced by the behavioural aspect. Barberis et al., (2001) stated that the herding behaviour impacts the quality of the decisions. These improper decisions or lack of quality may cause losses if the losses are not

handled well. It would be better for companies to plan for the losses before it occurs as it will reduce the risk of uncertainty. Eventually prior planning will also result in stabilising the financial performance quicker.

2.5. Loss aversion explained in the aspect of holding share.

Investors are biased when it comes to loss making stocks and profit making stocks. They tend to prefer the stocks which are performing well in the stock market. Decision taken to not perform a sale of the loss making stock fail to consider the benefits attached with the same that could alert the institution about managing the losses in an effective manner. As stated by Barber et al., (2003) buyers of the shares are highly interested in buying the shares that are highly valued as that can earn them better investment returns. This aspect is the only possible factors that are looked upon by the Institution that sells the winning stocks. The presumption that the stocks with higher returns will benefit the management and thus encourages the investors to decide not to sell the declining shares.

2.6. Corporate decision

According to Vissing-Jorgensen et al., (2004) the loss aversion process is highly associated in making any corporate decisions. Which eventually might impact the allocation and performance of the institution. The human behaviour of not accepting loss is natural and the management of the company fall for the same. In the Financial market, the sole body of the institution which is the management tend to adopt the disposition effect by hesitating to make decision relating to closing down the projects which might not yield return. As they are fearful of losses that might occur from the project or are not willing to take the risk. This reluctance/ignorance causes the institution to face huge loss that could have been controlled in the earlier stage.

In case of the loss aversion, behaviour and the risk-taking inability of the investors restrains them from making any relevant decisions. Past literature has conducted an analysis on finding whether the investors benefit from the sales of the shares that had lost its value previously since the time it was earlier sold.

Based on the market performance, the institutions issues the stocks to increase their capital. The management have an expectation for earning from the sale of the shares of the company and that is given a top priority. The impact of loss aversion is so adverse that the management

does not consider the sale of shares that are reducing in value by overlooking the positive side of the same.

As mentioned by Baker and Wurgler (2013) the loss aversion is an important aspect that assists in apprehending the dividend policies that are followed by the companies. This was analysed through the dynamic model wherein the managers of the company decide the volume of the dividends that needs to be paid to the investors and in retaining the position in the selected market. A drop in the price or value of the dividends leads to an investor's loss aversion process, and this has a negative impact on the brand valuation process.

Wilson and Gilbert., (2005) stated that through process of fearing loss the institution might increase or raise costs of future losses that could affect the overall performance. The optimal dividend policies are related to the trade-offs and thus it depends upon the market performances and the processes and the policies that are determined for improving the business activities.

The loss aversion process also assists in understanding the different aspects related to the merger and the acquisition that are being carried out by the companies. Historical prices and the performances are observed, which is used to find how the shares performed and reacted when the market was favourable and when there was an increase in the value of the shares. However, during the off-peak time the value of shares are low, and this impacts the business conduct, and in controlling the prices.

2.7 Research Gap

The literature review and the research work that has been carried out until now highlights how investors fear to lose their money and tend to postpone realising the losses to a future date. The Behavioural aspect such as overconfidence, mental accounting, future expectation, Past performance could influence the management/investors in deciding whether to sell the winning stock instead of the loss making stock. This above research paper focuses on the Banking institution in Ireland and how loss aversion is occurring due to non-issuance of additional shares. The previous literature had analysed many categories of investors, such as individual investors, mutual funds investors , institutional investors, etc., and their behaviour towards loss aversion, but had not focused specifically on the behaviour of the Banking Institutions towards loss aversion. Hence, this research paper intends to fill this gap and contribute to the future research. The field of research is Ireland since no prior literature has been conducted on Ireland.

It is also vital to analyse the Irish Banking Institution because the Banks performances have been unstable since the 2008 Global Financial Crisis. (Beck, T., 2014),

Chapter 3: Research questions

The research question is the base for any research paper as it guides the researcher in developing the complete design of the study. A research question should be clear to understand and concise which will help an individual to get started with the topic proposed. The following three questions would be the main focus of this research paper:

1.Are Banking Institutions in Ireland hesitant to realise their losses?
2. Analysing the impact of loss aversion through non-issuance of shares in the Banking sector of Ireland .

Chapter 4: Research methodology

4.1. Introduction

The methodological and philosophical ideas that are pertinent to the investigation will be described in this section. First, the study's research philosophy is presented. The philosophy is introduced, and then the approach is offered. The chapter also discusses the study methodology. The purpose of the research method is to outline the process employed in the study. Methodology is the 'Theory of how research should be undertaken including the theoretical and philosophical assumptions upon which research is based and the implications of these for the method or methods adopted' explained by Saunders(2007).
Collection, analysis and interpretation of data was followed to examine the effect of loss aversion in the Banking Institution of Ireland. Secondary method of data collection is been used for this research paper.

4.2 Research philosophy

Research philosophy is the way in which data is gathered, analysed and interpreted. The term epistemology is used to describe the philosophies used across research. The two kinds of research philosophy are Positivism and Interpretivism. Positivism believes that data can be analysed from an objective viewpoint (Levin, 1988). It is based on the assumption that reality is stable and that observations can be repeated. Interpretivism, on the contrary, analyses the

subjective nature of reality. It studies data in its natural environment while accepting the fact that there is no control over the environment and any external factor may impact the study. Since the environment banking institutions operate in are susceptible to change, the research uses the subjective perspective towards reality. The study, therefore, makes use of the interpretivism philosophy.

The research is based on existing literature review and on empirical data . In order to collect data, Quantitative methods will be used, and the analysis is made based on the data obtained. Positivism generally is based on the use of large samples. For the research, a sample of three Irish banks has been gathered in order to test research theories. Therefore, due to the subjective nature of the study, the interpretivist method is more appropriate for this investigation than the one of positivism.

It is important to understand and implement a research strategy based on existing information in order to form the basis of the research. The approach towards the research can either be deductive or inductive based on the reasoning used. In the realm of natural sciences, the deductive method is quite common. According to the deductive method, the hypothesis is first developed and then applied to the research on the empirical data gathered. It is generally used in quantitative studies (Soiferman, 2010) Therefore, it can be deduced from testing the data whether or not the hypothesis applies. The inductive method, on the other hand, is used for qualitative studies (Soiferman, 2010).It does not start with a set hypothesis. This means that the hypothesis is made based on the data gathered and analysed.

In order to obtain a clear and comprehensive image of banking fund raising options, a quantitative method is adopted in the research. The inductive method may not be suitable to this research as it involves concluding a hypothesis based on the data gathered. Due to the relatively small sample size and duration, the inductive approach is not followed. The strategy of the research is to confirm the predetermined hypothesis upon analysing the data gathered from the Annual reports of the banks. This is in line with the deductive approach which will be followed during the research.

4.3. Research Method

The goal of research is to find answers to research questions by using scientific methods. The main aim of research is to find out the hidden truths that haven't been found yet. The methodology is the process of using a specific method which could be utilised to solve the research analysis.

The research method is usually based on either primary or the secondary source of data collection. The acquisition of data, organising the information and evaluating the overall results for the conduct of the research are quite unique in both the method.
Primary source of data collection is the first hand information obtained by the researcher to carry forward their research. The information is collected in real time through various ways. One of the most common way is through issuing the questionnaire/surveys, personal interview etc.

This research method is focusing on collecting data through reliable secondary source of information. Secondary method means using the data that is already available to the public. Newspaper articles, journals, books, government publication, websites etc.
In order to analyse how the loss aversion behaviour is being followed in the Banking sector of Ireland secondary method is considered.

Secondary method is chosen for this research purpose as it is less time consuming compared to the primary collection of data. This method uses existing data which makes longitudinal and comparative studies much easier. Cost effective benefit is an added advantage of secondary source of data. The data available publicly are more handy as they have already been organised and stored in an electronic form. Researchers have access to large volume of Government findings or data which would have been impossible to fetch otherwise. However there are few limitation to the method such as there might be complications involved with the fact evaluation.

This research paper focus on collecting information from different reliable source which could contribute to study of the research topic. The financial times newspaper article, Banking institutional financial report, related journal papers, price variation graphs etc are the main source of data collection used for analysing if the Banking institution are reluctant to realise their losses.

4.4 Research Approach

After finding data required for the analysis, the next step would be to follow an approach to use the information acquired effectively. Collected data should be collectively summarised in a systematic manner in order to perform or examine the information for the purpose to conduct the research. In this approach, the material that were originally published by the researches earlier on the loss aversion are considered as the base for carrying out this study. Various theories introduced such as disposition effect, risk averse, loss averse and few other crucial concepts are taken in consideration while evaluating for the purpose of the study.

The research motive is to analyse and interpret the acquired data from varies reliable sources which helps satisfies the research question -how the loss aversion could impact the Banking institution of Ireland.

For the same, the Financial report for of AIB, Bank of Ireland and permanent TSB is studied briefly to answer the above question(AIB Annual Report, BOI Annual Report, Permanent TSB, 2021). The balance sheet of the banks for the period from 2018-2021 are overlooked. Two major component of the balance sheet are taken into account for the entire study.

(i) Common stock -To acquire a piece of a company, you may purchase common stock. Common stockholders get to vote on who leads the company and what it does. Long-term returns on this kind of stock investment tend to be greater than average.

An investment in common stock is a long-term bet on the success of a firm. A shareholder is a person who owns a portion of the shares of a corporation. Shareholders cannot just go into the workplace and start claiming desk space or laptops as their own. The company, as a separate entity, is the owner of these assets. The stockholders, on the other hand, are the legal owners of any such remaining claim. All types of investors and dealers may buy and sell common stock on the markets. Dividends are a potential benefit for stockholders who own common stock.(Corporate Finance Institute, n.d.)

(ii) Total Equity = common stock + share premium + preferred stock +retained earnings+ other. Total equity residual interest in asset. Total assets minus Total liabilities Equity is kind of a Capital. They are used to expand operation, invest in projects and purchase assets. A business normally may raise money by issuing debt (in the form of a loan or through bonds) or

equity (by selling shares) (by selling stock). Equity investments are preferred by most financiers because they provide shareholders a larger stake in the company's future success and development. (Study.com, 2022)

These factors are closely interpreted to make an statement/ assumption about the study. Observing the two major factor would help this research paper to find out the reasons that impacts the process of the decision-making of the management. Selection of such method is cost effective as compared to the primary method for the research conduct.

The Banking institution's reluctance to realise their losses could be analysed through the Banks's financial statement published by them in their official website. The financial statements are the written documentation of a company's operations and financial performance. To guarantee accuracy and for tax, financing, or investment reasons, financial accounts are often audited by government agencies, accountants, businesses, etc. The balance sheet, income statement, cash flow statement, and statement of changes in equity are the four most important financial statements for for-profit businesses. The financial statements used by non-profit organizations are comparable but not identical to those used by for-profit businesses.

Choosing the right data will be the most crucial part of the research. That would be the initial step and the base for carrying out the analysis further. The reliability of the data collected and source should be stated. For the purpose of the research, the data will be based on the newspaper articles and the news published by the government agencies for making the required changes in the process of the loss aversion that is being followed in the country.

These data are quite an important aspect as it assists in dealing with various challenges related to the selection and the analysis of the data that will be used for the analysis of the facts. These are the published articles and will help in examining the behaviour of the company, and in finding the other factors that will be used for improving the overall process of the strategies that are being used for recommending the changes in the behavioural aspects.

The theory analysis will be one of the most important aspects, which will be useful in determining how the people behave and the other factors that directly and highly affect the attitude of the companies that has a higher percentage of loss-making stocks.(Bircău, F.R., 2012.)

By counting this research process, the objective will be to collect and then use the details to analyse how the risks are overlooked at the time of the planning for the loss aversion process. In this case, the loss aversion and the risks related to the same are investigated and there are aspects that needs to be considered at the time of making the decisions for selling of the loss-making stocks that are being held by the banks for an uncertain period.

The major banks that are being included for this analysis includes AIB, bank of Ireland, and permanent TSB. They all faced a tremendous loss due to the recession, that impacted the financial performance of the company and eventually leading to collapse of the economy. These banks suffered huge losses due to the non-recovery of the loan amount, increase in the interest rates, and others however it was noted that there was no changes that were made to improve the existing business conduct, and in dealing with various challenges that were mainly associated to the non-performances in the financial sector.(AIB sets aside €1.2 billion to deal with loan losses, 2020)

Through following the above research methodology the analysis can contribute to find if the Banks in Ireland are facing the loss aversion aspect and how they impact the long-term plans for improving the business performance.

4.5 Dataset

In order to analyse loss aversion in banking institutions, the annual reports of the three banks in the Irish Banking system were gathered. In particular, the banks in which the government has a stake are examined. These are AIB, Bank of Ireland and Permanent TSB (Gov.ie, n.d.). As a result of the Global Financial Crisis, the Government of Ireland purchased a stake in three Irish Banks to prevent them from collapsing. As of 2021, the government continues to own 13.9% in Bank of Ireland, 71% in AIB, 75% in permanent TSB (Ireland finally eyes the exit door for bank stakes, 2021). The Statement of Financial Position was then analysed for changes in Share capital and Total Equity. Share capital denotes the common stock while Total equity denotes the residual interest in assets over liabilities. The data was analysed over the period 2018-2021 to test the response of the banks during financial crises. The research examines the performance of the banks prior, during and after the Covid-19 pandemic to identify if banks exhibit loss aversion during times of uncertainty.

	2021 € m	2020 € m	2019 € m	2018 € m
Equity				
Share capital	1,696	1,696	1,696	1,696
Reserves	10,850	10,609	11,543	11,668
Total shareholders' equity	12,546	12,305	13,239	13,364
Other equity interests	1,115	1,115	496	494
Non-controlling interests	(1)	1	495	–
Total equity	13,660	13,421	14,230	13,858

(Source: AIB Annual Report, 2021, 2019)

	2021 €m	2020 €m	2019 €m	2018 €m
Equity				
Share capital	1,079	1,079	1,079	1,079
Share premium account	456	456	456	456
Retained earnings	8,842	7,337	8,180	7,975
Other reserves	(53)	(260)	(60)	(242)
Own shares held for the benefit of life assurance policyholders	(20)	(25)	(30)	(25)
Shareholders' equity	**10,304**	**8,587**	**9,625**	**9,243**
Other equity instruments - Additional Tier 1	966	966		
Total equity excluding non-controlling interests	**11,270**	**9,553**		
Non-controlling interests	68	68	808	808
Total equity	**11,338**	**9,621**	**10,433**	**10,051**
Total equity and liabilities	**155,268**	**133,754**	**131,883**	**123,669**

(Source: Bank of Ireland Annual Report, 2021 & 2019)

	31 December 2021 €m	31 December 2020 €m	31 December 2019 €m	31 December 2018 €m
Equity				
Share capital	**227**	227	**227**	227
Share premium	**333**	333	**333**	333
Other reserves	**(787)**	(791)	**(795)**	(793)
Retained earnings	**1,893**	1,937	**2,110**	2,091
Shareholders' equity	**1,666**	1,706	**1,875**	1,858
Other equity instruments	**123**	245	**122**	122
Total equity	**1,789**	1,951	**1,997**	1,980
Total liabilities and equity	**22,235**	20,986	**20,278**	21,810

(Source: Permanent TSB Annual Report, 2021 & 2019)

Chapter 5: Research findings and Discussion

5.1. Introduction

The stocks that are being held by the Banking institutions of Ireland are analysed to find how the profit-making stocks are sold instead of focusing on the loss making stocks especially during Financial crises. The Banking Institution sell their stocks to create additional funds for carrying out the operations and to plan for business expansion.

5.2. Analysis

The evaluation is being conducted for the common stocks which is the stock that represents the shareholder's ownership in the company. Common stock can be sold to prospective investors and a share of the profit is then issued to them as dividend payment in return. An issue of Common stock increases the equity value of the company and in turn increases its stockholding. However, this is not being carried out, as the banks usually issue the stocks i.e preferences and equities that have a higher value in terms of sales (O'Connell, P.G. and Teo., 2009).

Loss aversion plays a vital role in the decision-making process of the company's management when evaluating financial decisions. The one reason that companies don't issue common stocks to the clients could be due to the fear of losing their ownership stake in the company, thus overlooking the benefits associated with the same. There are benefits that are associated with the issuance of the shares, and one of them is the acquisition of new businesses and in improving the operations. However, due to the loss aversion, the behaviour and the decision-making of the banks are impacted, wherein the goal becomes to retain the stock that are underperforming until prices of the stocks appreciate.(Barberis and Huang, 2001)

Performances of the banks in past few years

Banking institutions like Bank of Ireland and AIB had not issued the common stocks over the past few years (AIB Annual report 2021, BOI Annual report 2021). AIB for instance during the year 2020 and 2021 had termed the services of around few staffs, as the cost of operations had become quite challenging to handle (The Labour Party, n.d.). This is what happened with AIB during the pandemic, and the process of the loss recovery seemed to be quite time consuming and complicated.. Thus, raising of the funds, through issuing additional shares were

one of the recommended options. This could have improved the earnings thus, stabilising the business.

During the Covid-19 pandemic the losses suffered by AIB was high and there was no scope for the recovery of the loans that were issued to the individual and corporate clients. This resulted in a drastic decline in the banks Profit margin, and thus an issuance of the common stocks could have benefitted the organization (Independent, n.d.).

Data was collected and analysed of the selected banks for the period 2018 to 2021, this was the period when the financial performance of the banks across Ireland had been adversely affected. This was the period when stock markets crashed and many industries in Ireland were affected as a result of the crash. The financial and operational performance of the banks had dropped during this period and the management did not initiate any stock issues that would have raised the capital and would have benefitted the investors interested in buying them. It was noted from the balance sheet of AIB and Bank of Ireland that there were no or minimal issuances of the common stocks that could have been one of the options for raising finance for meeting the losses or to control the operating activities of the Banking Institution.

Can sales of common stock be made

Common stocks held by the Banks can be issued for various business improvement purposes including the expansion and adoption of new strategies. The non-issuance of shares is related to loss aversion as the fear of reduction in the value of the shares is one of the factors that restrains the Banks from making any capital decisions.

Losses suffered by AIB

During the research period, it was observed that AIB had incurred losses in the non-recovery of the loans, and terminated the services, and had to bear the loan costs that were highly impacting the overall performance of the Institution. Shu., (2010). AIB recorded actual loss of 741 million euros and 1.2 billion euros of provision was created for the loan losses during the pandemic (AIB sets aside €1.2 billion to deal with loan losses, 2020).

Another way for banks to raise funds is through Government bailout. This occurs when the government injects capital when a company is in financial turmoil.

One of the recommendable way of raising finance, during the occurrence of high losses is by issuance of the common stocks that will create a market and get the banks connected with the customers. The behaviour aspect stated that the fear of incurring more losses by making this decision. In case of the loss occurrences, it is quite essential to ensure that the cost related to the same are closely monitored and it is controlled, and this is needed for improvising the existing condition of the bank performances, and in doing the best for meeting the requirements of the financial conditions.

When the company is facing loss and share price is decreasing, the behaviour of the bank's management is assumed to be loss averse as the management fears to incur additional losses. The fear of losing rights on the equity that is being held in the form of the common stocks causes a reluctance in making the decisions to sell them. Since the banking system forms the backbone of the economy, the capacity of banks to undertake risk is relatively low in order to minimize their losses.

Despite incurring losses, AIB was not inclined to raise finance through equities in the form of additional stock. They utilized their retained earnings to carry out their operations. This can be seen as an instance of loss aversion. Since running banking operations smoothly are of utmost priority to the management, it is a crucial factor the authorities consider to make calculative decisions to improve the business activities and in making the right offers.

AIB had suffered from heavy losses during the Covid-19 pandemic era where the recorded losses were €741 million, with a €1.2 billion provision set aside for dealing with loan losses However, the company stated that the impairment measures will be adopted for covering up these losses, and this had restricted the ability of the management to raise more funds that were needed for the proper and accurate conduct of the business activities.(AIB sets aside €1.2 billion to deal with loan losses, 2020).

Debt instruments could be an option to raise funds. Debt instruments can either be loans or bonds. Loans are usually funded by the government and other financial services provider but with risk of interest payment which is quite high.

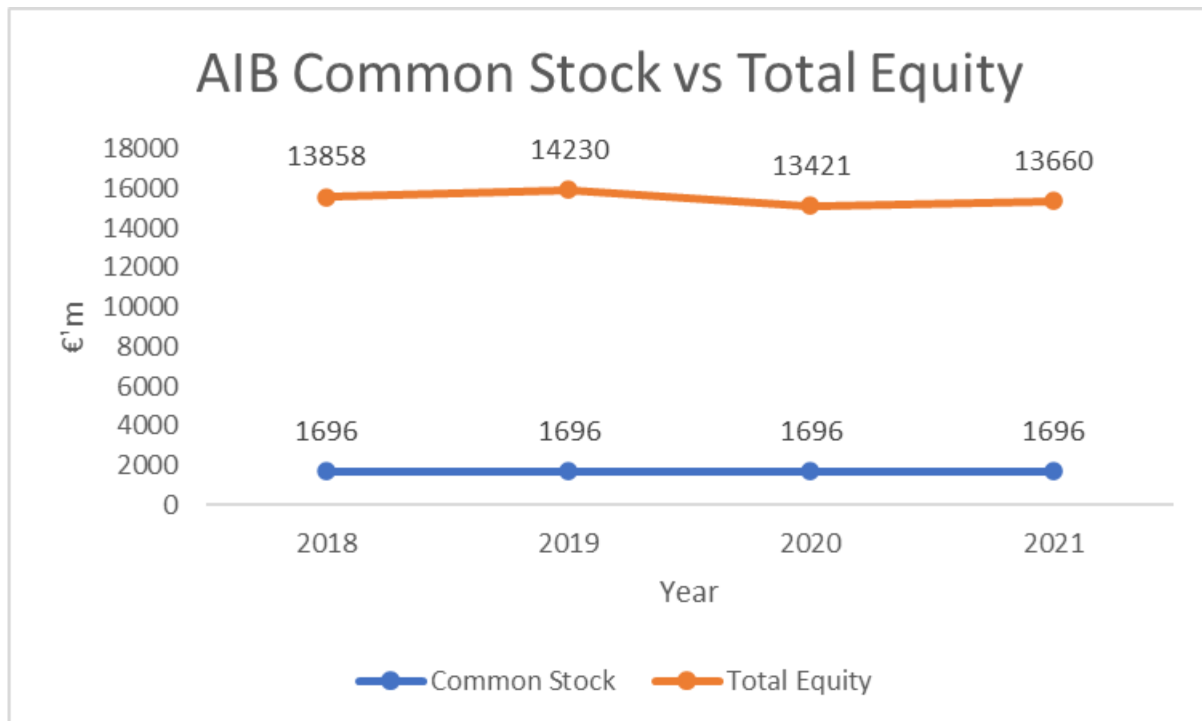
Bonds are fixed income securities in which fixed payments are made to the bondholder periodically till maturity. The principal amount of the bond is also paid at maturity. Bonds are

subject to interest rate risk due to market volatility. This means that if market interest rates drop, banks are still required to pay interest at the agreed amount as per the bond indenture. In this regard, the issuance of the common and other stocks could be a better option. The appropriate method to raise the funds for each company and the procedure to use the funds has to be decided by the management. However, the loss aversion factor minimizes the possibilities to raise the needed funds and to properly and accurately plan for the business expansion. Raising funds through share issues also attracts more investors, thus helping the bank achieve its objectives and improve its performance.

Bank Financial performances

Shareholders Equity (€ Thousands)	2017	2018	2019	2020	2021
Redeemable Preferred Stock, Total	--	--	--	--	--
Preferred Stock - Non Redeemable, Net	--	--	--	--	--
Common Stock, Total	16,97,000	16,96,000	16,96,000	16,96,000	16,96,000
Common Stock	16,97,000	16,96,000	16,96,000	16,96,000	16,96,000
Additional Paid-In Capital	0	--	--	--	--
Retained Earnings (Accumulated Deficit)	1,07,74,000	1,12,88,000	1,09,66,000	1,04,48,000	1,10,47,000
Treasury Stock - Common	--	--	--	--	--
ESOP Debt Guarantee	--	--	--	--	--
Unrealized Gain (Loss)	9,95,000	6,90,000	6,37,000	2,20,000	1,66,000
Other Equity, Total	1,46,000	1,84,000	4,36,000	10,56,000	7,52,000
Translation Adjustment	(6,05,000)	(5,95,000)	(5,29,000)	(5,99,000)	(5,12,000)
Other Equity	4,94,000	4,94,000	4,96,000	11,15,000	11,15,000
Other Comprehensive Income	2,57,000	2,85,000	4,69,000	5,40,000	1,49,000
Total Equity	1,36,12,000	1,38,58,000	1,37,35,000	1,34,20,000	1,36,61,000
Total Liabilities & Shareholders' Equity	9,00,62,000	9,15,36,000	9,85,62,000	11,03,85,000	12,78,75,000

Source: AIB Group Plc (Thomson Reuters, 2021)



For the purpose of the study, the Statement of Financial Position of AIB during the period 2018 to 2021 is analysed for changes in common stock and total equity. As seen in the figure above, it was observed that there was no additional issue of common stock as well as additional paid-up capital issued by the bank in this period. The common stock of AIB was constantly valued at €1,696 million in the years 2018-2021. On the other hand, the total equity of the Bank varied from year to year.

	2021 €m	2020 €m	2019 €m	2018 €m
Equity				
Share capital	1,079	1,079	1,079	1,079
Share premium account	456	456	456	456
Retained earnings	8,842	7,337	8,180	7,975
Other reserves	(53)	(260)	(60)	(242)
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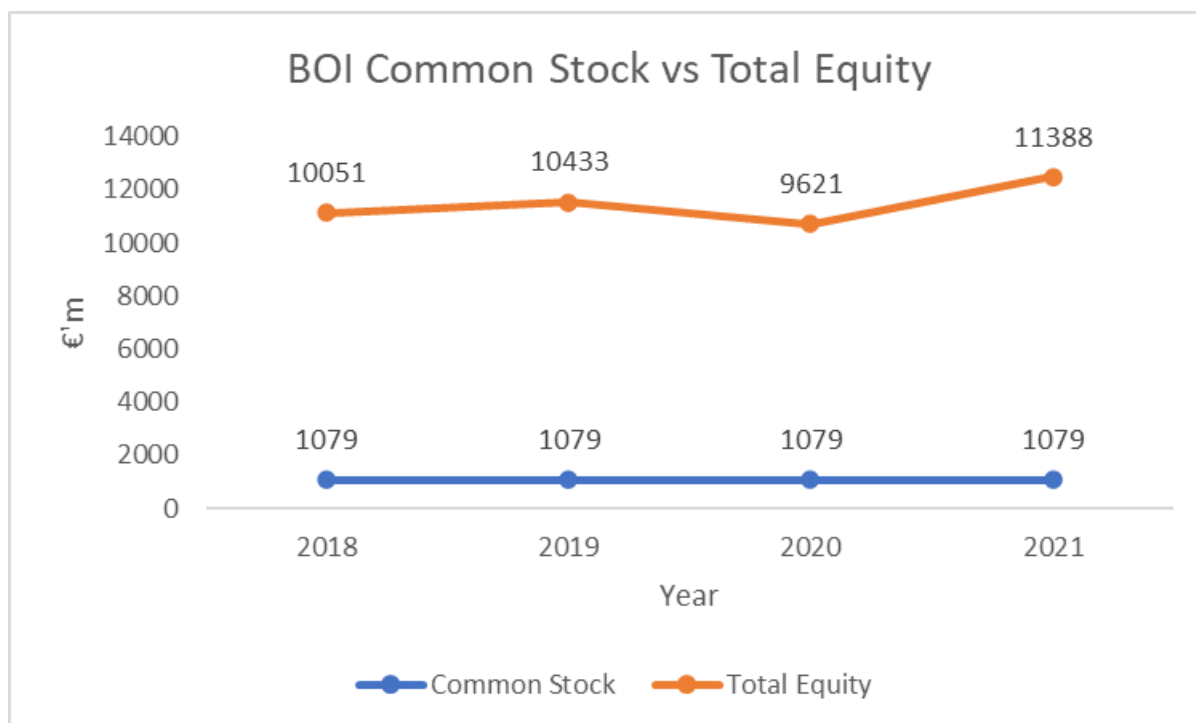
Total equity	**11,338**	**9,621**	**10,433**	**10,051**
Total equity and liabilities	**155,268**	**133,754**	**131,883**	**123,669**

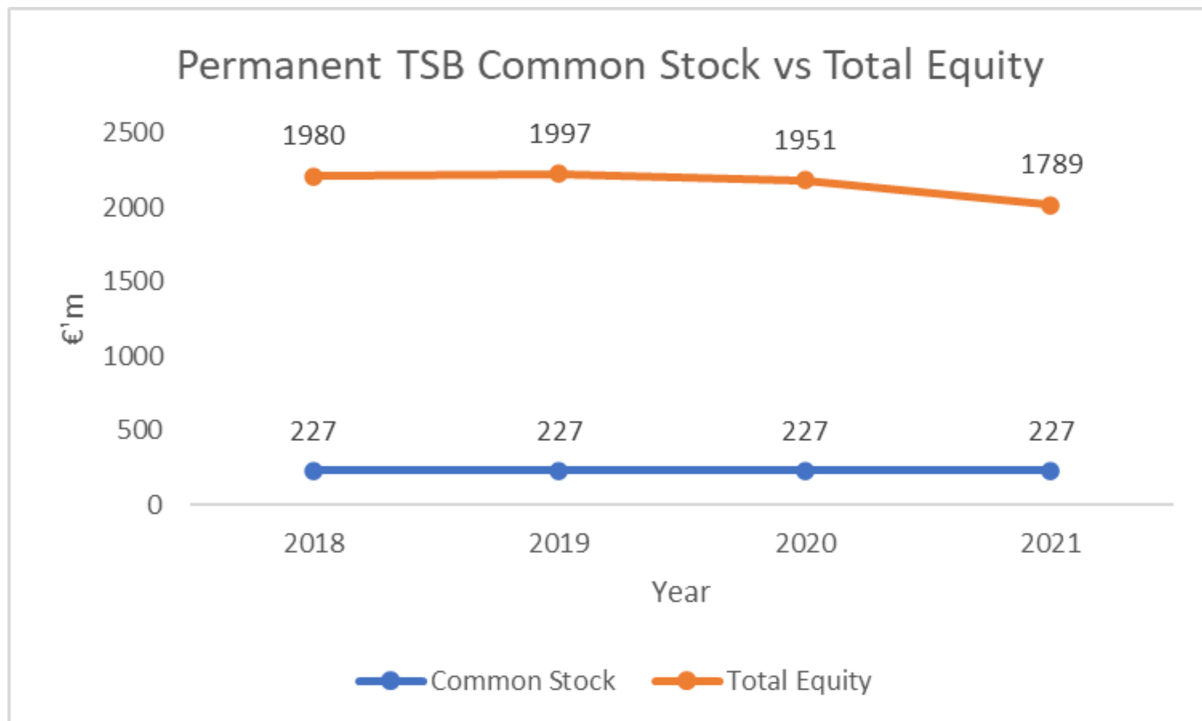
(Source: Bank of Ireland Annual Report, 2021 & 2019)



A similar observation is made in the Statement of Financial Position of Bank of Ireland (BOI) for the years 2018-2021. On examining the Common stock, it was noted that no additional common stock was issued by the bank during this period. The common stock of Bank of Ireland remained constant at €1,079 million during the years from 2018 to 2021. However, the total equity of the Bank did not remain constant in the given period.

	31 December 2021 €m	31 December 2020 €m	31 December 2019 €m	31 December 2018 €m
Equity				
Share capital	**227**	227	**227**	227
Share premium	**333**	333	**333**	333
Other reserves	**(787)**	(791)	**(795)**	(793)
Retained earnings	**1,893**	1,937	**2,110**	2,091
Shareholders' equity	**1,666**	1,706	**1,875**	1,858
Other equity instruments	**123**	245	**122**	122
Total equity	**1,789**	1,951	**1,997**	1,980
Total liabilities and equity	**22,235**	20,986	**20,278**	21,810

(Source: Permanent TSB Annual Report, 2021 & 2019)



Similarly, the common stock or share capital of Permanent TSB was also valued constantly during the years 2018-2021 at €227 million each year respectively. Despite the value of common stock remaining constant, the total equity values continued to vary from year to year. This indicates that the management had refrained from selling additional equity needed for carrying out banking operations for the three-year period.

The analysis from the above table states that the issuance of the shares was highly controlled by the management, as it was held back with the intention of the share price increase in future. Thus, it reflects that the banks showcased loss aversion associated with the sensitivity towards the potential losses, rather than focusing on gains. Here, the gains were associated with the capital that could have been raised by the bank for improving the business activities and in handling the shareholders and stakeholders interest at large. (Yang and Zhang, 2013).

Loss aversion fallacy

A loss aversion fallacy causes the banks to withhold the loss-making stocks, despite there being minimal possibility for these stocks to benefit them. Rather than holding on to stocks, their sale can be used to raise their value and use the resulting funds to improve overall performance for meeting the operational goals. In the period 2018-2019, AIB didn't make any changes with the

common stocks. Hence, it can be assumed that the bank management did not consider selling their stocks as necessary for growth.

Loss aversion fallacy states that the focus of the management is to improve the overall performances and avoid losses rather than concentrating on raising more funds needed for carrying out operations and attracting more clients. Non issuance of the shares due to expectations of the price increase is a clear form of the loss aversion, which is a serious concern for the economic growth and the sustainability of the companies and the people on a larger scale.

As a result of the Global Financial Crisis, the banking system in Ireland took a major hit in the year 2008. Funding pressure on Irish banks rose steadily, reaching a peak in September 2008 and then again in 2010. In order to control the financial stress, the Irish authorities initiated various measures but the market was adversely affected and needed financial support. The Central Bank of Ireland responded by requesting banks to increase their liquidity levels. This was required in order to prevent banks from over lending and thus, helped regulate the performance of the other companies operating across various industries that depended on the banking system.(The banking crisis in Ireland, Bourke et al., n.d.)

The major issue was with the recapitalisation process that had to be conducted on the long term and the Banks and other institutions had to work upon the various source of the cash to improve the overall performances. Banks had to deal with various challenges that was quite similar to recession period and due to lack of proper planning of issuing of shares the bounce back of the economy was quite difficult to achieve. This could be one of the scenario wherein the banks could have issued additional shares and controlled the losses to an extend but whereas it is assumed that the bank's management might have experienced loss aversion. To further deal with the issues, the debt instrument such as bonds and other notes were pledged with the banks with the objective to source cash, as the market was running out of liquidity. The banks eventually needed to increase the cash flow to sustain the market condition.

5.3. Challenges related to the AIB bank

The bank had suffered a huge loss of around 1.2 billion euros. To deal with this, the banks had provided with 64 thousand payment break-ups to the retail clients, especially during the year

2019-2021 (AIB Annual Report, 2021). However, there were 47 break-ups that existed and had to be resolved. To deal with this internal issue, the banks had proposed to introduce the negative interest rates especially to the retail clients and made an attempt to reduce and support recovery of the loan amount . (AIB sets aside €1.2 billion to deal with loan losses, 2020).

In the year 2020, the bank also reported the losses of around 670 million euro and declared for the voluntary redundancy policies or schemes. During those period, the goodwill of the bank was impacted, as around 1400 workforce had to be terminated from the services, due to the reduction of the profit margin . In fact, the bank was spending a huge amount in order to reduce the continuous occurrence of the losses, which could have been reduced or controlled through an issue of the shares or the equities. A lack of the strategic planning and the process for bailing out of the losses was not conducted by the bank which then impacted the overall financial institution performance.

5.4. Once in a generation growth impunity

During the last three years 2019-2021 there were many banks that exited from the Ireland and two of them were KBC and Ulster Bank. KBC, a Belgium bank is quitting its business performances from Ireland due to higher percentage of the losses and bank 's inability to recover the losses . The bank has left behind the 10.5 billion euros of home loans that will be observed by the existing Bank of Ireland. This has in fact created a huge risk for the housing and the customers.

Ulster Bank also has proposed to dissolve the business in Ireland, with the total value of mortgage of 20.5 billion euros, and there were a higher percentage of the business loans and some of them were termed to be permanent (AIB, 2022).

The banks had not planned for a bail out in order to cover up the losses that were incurred in the initial stage. Banks fallout leads to the increase in the interest rates, which then results in the increase of the crisis that impacts the economic condition, and the growth that is expected in this country. (Yahoo finance., 2022).

AIB and other Banking institutions had failed to either bail out the losses or issue additional shares to raise funds to handle few losses. The impact of this situation was unreal, prior

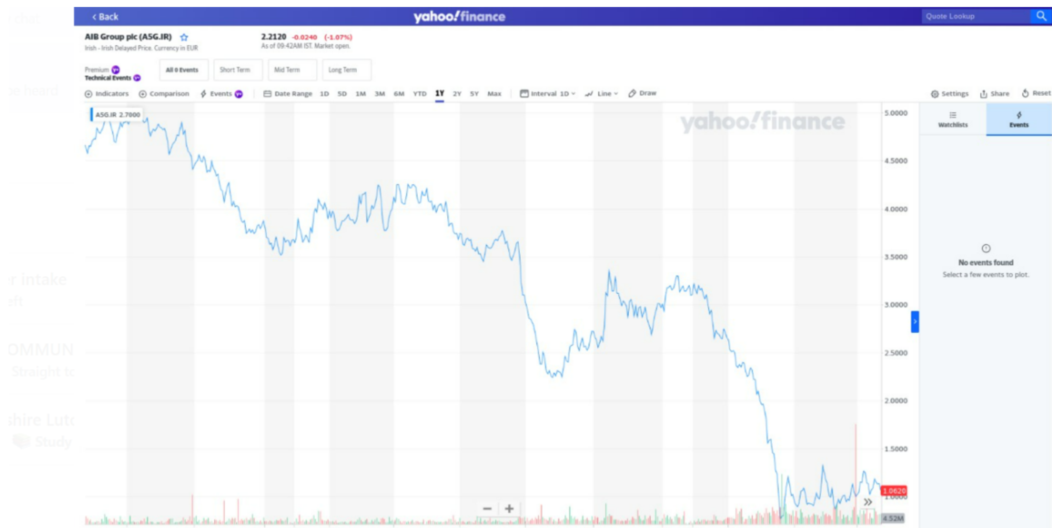
prediction of the happening or impact of loss aversion could have made things more difficult to make a decision of sale of additional shares. These factors also had a higher impact on the consumer market, especially after the KBC exit, wherein the relevant changes in the fund handling and the task doing were planned and it was executed. KBC had a total market of 12% of the commercial and personal mortgage market, and was known to offer reasonable loans. Despite being one of the reputed banks, the bank couldn't succeed in retaining their market in Ireland. (www.kbc.ie, n.d.)

In the similar manner, Ulster had decided to withdraw the shareholdings as it decided that the other banks were comparatively higher valued and the relevant changes in the banking activities conduct were not decided. From the year 2019, the existing banks had not adopted any strategies for stabilising the situation, through the issues of extra shares and funds that were needed for sustaining the challenging market requirements.

Post-acquisition of Ulster and KBC, the AIB and the bank of Ireland will together have a higher holding of the mortgage market share, which will be a value-added feature to the services that is being provided to the clients.

5.5. Strategies adopted by AIB bank for stabilising

The prices of the stocks of AIB have been quite volatile due to the Brexit, Ukraine invasion, and COVID-19. In 2022, the government of Ireland proposed a plan to sell of the shares of AIB at a discounted cost. These shares were totalling up to a maximum of 5% of the total holdings and the values were determined at the cost of 2.28 euros which was at a higher discount rate of 6.5%. The authorities of the banks had challenged this decision, which was then refused by the department of Finance. The offers was executed and the performances of the liabilities of the bank was expected to be taken care of. (The Irish Times, n.d.)



(Yahoo finance – 2022) :Share price variations

The variation in the price had been observed from the IPO pricing that existed 5 years ago, and the existing current share intrinsic value. As stated by the bank authorities, the total value of the IPO was just 55% of the book value of the bank, which was lower than the expected value for the shares that were needed for sustaining the competitiveness in the market.

Yahoo finance., 2022 - Lower price to sell the stocks

The bank is liable to pay to the government for bailing it out at the time of the crisis, which was done in the form of the share proceeds, dividing interest rate payment, and others. However, the bank is still under a bigger liability that is not being able to meet the requirements of the company to deal with various challenges. The stakeholders stake of around 4.14 euros are still not being taken care of, which indicates that the government is at the liability to take

care of around 5.56 euros in the form of the investments that will be required for rescuing the bank and its existence.(yahoo finance, 2022)

5.6 Discussion

The above analysis states that the bank is following the strategy of loss aversion, done through not selling the stocks that is being held by them. There are common reasons for not undertaking such a risk and one of them is related to the fear of losing the value of the existing stocks as this will affect the overall performances and the brand value. This is related to the disposition effect, where the behaviour of the management and the finance department are the major aspects that are necessary for making the changes in the existing business performances.

Cost of the lost handling is usually quite high, and thus it needs the leaders of the banks to find the best possible process and procedure that can be used for controlling the same. The cost of the loans and other expenses in case not controlled beforehand, leads to a serious business handling process.

Decisions are to be taken in order to create an opportunity for improving the financial performances, and this will need the management to decide the sales of the common stocks and/or preferences and equity shares. Common stock at the time of the downward market trend can be assumed to be a positive option as this will assure the ownership to the investors to the extend the stocks have been purchased. With the raised funds, it could be possible to plan for the cost control, and in planning the expansion of the businesses and avoiding loan taking which is not good as it increases debt (Valenti et al., 2011).

AIB had proposed to take over the Ulster bank that was exiting from Ireland, and this was a part of the business expansion and improvement of the financial portfolio. However the issuances of the stocks at the discounted price or for that matter of fact using the available stock in hand was not done and planned. This process of the loss aversion causes a serious financial crisis, which will need the government to enter and bail out situation that the bank is in (AIB, 2022).

An hypothetical example of the Loss Aversion

Imagine a stock was proposed at the cost of 10000 euros in the beginning of January, and this is a cumulative value, the shares would either make a profit or a loss by the year end. This is one of the processes of describing the loss aversion process, wherein on the 5th month the returns on the stock were around assumed to be 11% with a determined probability value of 0.75 and/or (23)% with a determined probability of around 0.25%. This process of the return's distribution is considered to be the left tailed process with a value of skewness of around (1.15).

In case of the next 6 months period after May, the stock investment is assumed to have increased up to a value of around 11000 euros, then the bank intends to sell it off. If the price is locked for a gain of around 1100 pounds, and its total value under the loss aversion utility is considered to be around 1100. On the contradiction, if the bank decides to retain the stocks and then as a part of the probability if the price increases or continues to go up and the value reaches to around 12321 pounds, then it is termed to be a gain of 2321 pounds. The probability rate in this case will be around 0.75 percentage.

However, there is a possibility that stock price might drop and the investment cost will also drop to say around 8547 euros, and this will reflect a probability of 01.25, thus a loss is generated in the overall process. This is stated to be the value of holdings which is 1014.31 and it is quite smaller than the original value of around 1100 that is the sales price. The bank in such a case prefers to hold the shares until the time the management is having a confidence of the price rise, and the losses in the possible extent can be controlled. However, by holding the common stocks, the operational expenses and other charges become quite difficult to afford and this increases the financial liabilities.(Rephael et al., 2012).

Thus, based on the above hypothetical situation, the management can decide how the sale can be made for the stocks, and the overall pheromones in terms of management of finance and in reducing the possibilities of incurring losses can be reduced or controlled. Through such a process, the behaviour towards the profits and gains can be examined, and the required and the useful changes in the declaration of the shares for the sale purpose can be made.

Relevance of the above analysis

From the above analysis it can be stated that the banks constantly wait until the prices of the shares to appreciate, so that it can be sold for a gain. Until then the management undergo the risks of bearing the charges, and indirectly increase the liability. The management could indulge in decision making which would overlook the disposition effect and the behaviour aspects, as these would restrain from selecting the right options for improving the performances of the banks.

Issuing the additional common stock would be an helpful way to increase the finance required for the operations of the business and also helps to deal with losses. This will assist in improving the financial position, which will then attribute towards the increase in overall position of the banks that is always considered to be the backbone for the economics of the country. The strategies that will be adopted will help in dealing with a financial loss situation that arises due to the loss aversion that is being followed (Wilson and Gilbert., 2005).

Chapter 6: Conclusion

Loss aversion is a process that could impact the Banking Institution of Ireland. They tend to withhold the stock which is underperforming and involve in the sale of the winning stock. The benefit associated with this strategy is that Banks can overlook the losses due to the decline in the share price and wait for the right opportunity that will earn the company the income from the sales of the shares. However, the issue lies with the cost of handling the losses which is expensive and if ignored could impact the overall performance of the Institution. Independent. (n.d.).

Loss aversion could have a negative effect on the economic growth and sustainability as it stops business from taking risks. Here, it would be important for the management of the banking institution to adapt or find an effective ways and process for controlling the losses without actually indulging into the loss aversion strategy. The process of the loss aversion offers a short-term benefit to the banks, like the avoidance of the losses that could possibly occur due to the larger volume of the shares or bonds of the banks. However, in the long-term, the losses and the cost incurred towards the same are quite high, and this impacts the business

performances and the strategies that are being decided by the management of the Banks. .(AIB sets aside €1.2 billion to deal with loan losses, 2020)

The dividend payment on the shares would be an aspect the management would have to rethink about because that is the cost involved for issuing of shares. The impact is high when the authorities are liable to pay the dividends despite of making a huge loss. These are the factors that are usually occurring at the time of the global or national recession that reduces the phase of the economic growth and affects the cash flow. During this time, the buying capacity of the people are reduced, and this impacts the banking sectors on a larger scale. (Beck, T., 2014),

Thus, it is recommended to have a proper and effective system that will be used for making the best use of the shares that is being held within the company. Stocks which are left ideal in the Institution could be put for a better use during the crises. It could help cover the expenses and control future losses. Raising of funds through new issue during crises could help the institution retain their earnings. Those retained earnings could be further used for the expansion of the business or for introducing new product line or service or for the introduction of new technology.

The behavioural aspect is one of the factors that influences or triggers the process of loss aversion, as the buyers are not interested in suffering from any sort of losses from the sales of the stocks held in their portfolio. The Expectation of Bank's management with the underperforming stocks to raise in the future could further cause additional cost of handling the losses as the future is unpredictable and the chances of the stocks declining further might double the cost. Barber and Odean (1999)

The risk averse behaviour could directly lead to loss aversion. Risk aversion means the fear of facing certain unpredictable situation and loss aversion is similar to risk aversion but is quite different. Loss aversion means individual's reluctance to face losses and it has monetary effect whereas risk aversion is situational based. Management of an Institution is required to take some risk in order to explore new areas that would give them newer opportunities to grow.

The management usually with a fear of losing or incurring more loss, doesn't make the required decisions. AIB bank didn't issue shares, instead was handling the losses that were incurred due to the non-payment of the loans. The cost for handling the operational expenses was constantly

increasing, and thus the management had to take the decide to terminate the services of some of the staffs working for the organisation. (Beck, T., 2014)
In such situation the management could have made use of the resources available in the best possible way to handle the losses. Preventing the company from entering into huge losses is uncontrollable but the management's decision could help the company in reducing the burden of losses. The management's ability to take up risk could avert the loss aversion behaviour which could eventually benefit the economy.

From analysing the Banking sector of Ireland we have found that AIB and Bank of Ireland have recently acquired the Ulster and KBC. The reasons for both the companies to exit the Irish market was the inability of the bank management to adopt the required changes, and in implementing them after analysing the risks. There were no protocol and methods that were adopted and followed by the banking institutions to avert the risks, and this was the biggest issue faced while implementing the changes in the process of the handling the losses.(AIB,2022) (www.kbc.ie, n.d.)

Loss aversion is a psychological factor and its benefit cannot be retained or had by the company for a longer period of time. The costs of the loss handling affect the goodwill of the banks, and this impacts the relationship with the investors. Thus, it is quite important to ensure that the required funds for carrying out the operational works are planned and it is executed well.

It is quite important for the banks to indulge into the process of the risk analysis as this will be useful in finding how the performances related tasks could be improved. The factors are related to the analysis of the internal and the external market conditions and in implementing the required changes that are needed in improving the existing business performances and various tasks that will contribute towards the performance improvement process.

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