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AN OVERVIEW OF FRAMING BEHAVIORS IN FINANCIAL DECISIONS

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ABSTRACT

Deciding is a difficult task. Things get tougher especially if the number of choices available is big. This may lead to people falling into decision-making biases which cause undesired outcomes. Financial decisions are also susceptible to biases. In this research work, I discuss the framing biases in financial decision-making. The topic is important to be discussed because the bad management of one's financials causes drastic consequences not to the individual only, but to the society, the nation, and the world. After a thorough literature review basing on three financial decisions, savings – retirement planning – insurance purchasing, I present financial literacy as a solution for people to overcome their fears in falling into financial choice framing.

KEYWORDS: Framing, Choice Bracketing, Financial Decisions, Financial Literacy, Saving Behavior, Retirement Planning, Insurance Purchasing

JEL Codes: D14; D15; D8; G41

1. INTRODUCTION

Decision-making, a term composed of two simple words, yet one which turns our lives upside down. From the very first human decision made by Adam and Eve in eating the apple from the forbidden tree to your decision in reading this paper at this moment, human history is filled with an infinite number of decisions, some of which were good and some bad. Interestingly, we'll keep on making decisions long after reading this paper, but hopefully, ones which will be wiser! Regardless to the big number of decisions we make on a personal level and the knowledge we acquire from the experiences of others, we still make many unbalanced decisions (Agnew, et al., 2008; Rabin & Weizsacker, 2009; Shin, et al., 2019).

Academia has been working on understanding how people make choices for centuries (Read, et al., 1999; Shin, et al., 2019). Even the old Greek philosophers argued about it. Surely, we have uncovered much and now understand a good amount of people's behaviors. However, that didn't change much in people's good decision-making practices. That's not a shock. Talking about good decisions on paper



is much easier than making them. That's because we all fall short in overcoming biases. In nature, the process of decision-making isn't a very simple one, especially that we often disregard or fail to see the bigger picture of the consequences of our choices (Read, et al., 1999; Webb & Shu, 2017; Shin, et al., 2019). Not only that, but the fact that we are sometimes faced with a good number of choices to decide from turns our decisions too complex (Rabin & Weizsacker, 2009; Webb & Shu, 2017). Researchers who work on the decision-making science call the phenomenon of our blindness to the consequences of the decisions we make "choice bracketing" or "choice framing". Many prominent works such as Read, et al. (1999) and Rabin and Weizsacker (2009) prove that the way an information is presented to us plays a fundamental role in deciding which choice suits us the best.

If a very simple decision we make, as simple as eating a desert after a good meal or not, has a serious effect on our overall well-being (Read, et al., 1999; Webb & Shu, 2017), how about if the decision we need to make is on managing our financials? A good amount of research works exists in explaining the need of people in making sound financial decisions (Hastings, et al., 2011). This topic got boomed especially after the 2007-2009 financial crises as people's misperceived financial decisions caused drastic personal, national, and international consequences (Hastings, et al., 2011). A vast majority of these research works base their explanations on the lack of people's understanding of financial principles, i.e., financial literacy, rather than approaching the matter from a behavioral approach. A proof of that is the scarce research on the role decision biases such as framing plays in people's financial decisions (Agnew, et al., 2008). More recent works have joined the idea of financial literacy along with the behavioral approach in understanding people's financial choices (Anderson, et al., 2017).

In this paper, three important concepts in personal financial management are thoroughly presented: choice bracketing/framing, financial decisions, and financial literacy. This makes the research work an important one as it has academic and policy implications. It fills the gap found in the literature in joining these three topics together. It also offers a possible solution to improve people's understanding of choice bracketing and refraining of falling in it whilst making financial decisions.

The first part of the literature review discusses the idea of choice bracketing. After that, I explain some important financial decisions such as savings, retirement planning and insurance purchasing then I introduce the concept of financial literacy. Later, a review of the existing literature which have researched about the framing effects in different financial decisions are presented. Before the conclusion, a recommendation to the policymakers in alleviating people's financial literacy as a solver to financial framing problem is argued.



2. LITERATURE REVIEW

1. Choice Bracketing

Read et al. (1999) explain choice bracketing by the grouping of individual choices together into sets. In other terms, when a choice is made after considering the effect of a previous decision on the current choice, these decisions are said to be bracketed (Read, et al., 1999; Rabin & Weizsacker, 2009; Webb & Shu, 2017). For example, if we discuss the choice of smoking or not, each cigarette's effect on one's health is negligible (Read, et al., 1999). Therefore, the decision of smoking seems like a good choice as it causes pleasure and relaxation to the smokers (Read, et al., 1999). However, if the effects of all the cigarettes smoked throughout the year are combined, the negativities seem tougher and might lead to the smoker abstaining from smoking (Read, et al., 1999). Considering the number of choices in the sets in tackling choice bracketing is also an important matter especially if we're willing to understand the underlying causes to such a behavior (Webb & Shu, 2017). If the sets are small and very few choices exist, the bracketing is said to be narrow (Read, et al., 1999; Rabin & Weizsacker, 2009; Webb & Shu, 2017; Gottlieb & Mitchell, 2019). For example, fighting a war at a pace of one battle at a time with the ultimate war goal being undetermined (Read, et al., 1999). Or based on the previously given example, the consideration of the effect of just one cigarette at a time is a narrowly bracketed decision. On the other hand, when there are an ample of choices to decide from, the bracketing becomes broad and allows people to maximize their utility (Read, et al., 1999; Rabin & Weizsacker, 2009; Webb & Shu, 2017).

In 1990s, different denominations rose to prominence discussing choice bracketing (Read, et al., 1999; Rabin & Weizsacker, 2009; Webb & Shu, 2017; Shin, et al., 2019). The terms differed based on the field as some attempted it to explain it from a psychological approach and some others from a behavioral economic approach (Shin, et al., 2019). Sequential choices, isolated choices, and choice myopia are some of the examples (Shin, et al., 2019). Kahneman's labeling of the phenomenon "decision framing" along with Read, et al. (1999)'s "choice bracketing" might be the most well-known and most used terms. It is so because researchers frequently use these two terms interchangeably, but very rarely the remaining terms. However, regardless to the different terminologies used in academia, all the researchers argue about the necessity of understanding the choices that we make (Read, et al., 1999; Shin, et al., 2019). Our decisions can be based either on local consequences or global consequences (Read, et al., 1999). Notably, despite the consensus of narrow bracketing causing suboptimal and unwanted results, many of our decisions are focused on local consequences (Read, et al., 1999; Rabin & Weizsacker, 2009; Shin, et al., 2019). The literature about making choices shows that taking into consideration the global consequences give a better outcome to the decision maker in most times, if not always (Read, et al., 1999; Rabin & Weizsacker, 2009; Webb & Shu, 2017). Rabin and Weizsacker (2009) make it clear that the idea of utility maximization isn't frequently taken into consideration. People usually don't rely on making decisions based on the correlations between their



other decisions (Rabin & Weizsacker, 2009; Webb & Shu, 2017). That's why, narrow bracketing is seen to be a more of an uncertainty aversion strategy to get the short-term visible gains, even if partially, than taking a risk in the uncertainty of the future pay-outs (Rabin & Weizsacker, 2009; Webb & Shu, 2017; Gottlieb & Mitchell, 2019).

Moreover, choice bracketing is a decision-making bias with some important determinants. First, cognitive capacity limitations such as deficiencies and weaknesses people might have in perception, attention, memory, and analytical processing turn the decision-making process to a complex one especially if the number of choices is big (Read, et al., 1999; Webb & Shu, 2017). Second, cognitive inertia, a phenomenon in which people treat the choices based on how these choices are presented to them (Read, et al., 1999; Webb & Shu, 2017). If they all come at once, they bracket them broadly. In contrary, if they come one after another, the choices are bracketed narrowly (Read, et al., 1999). Third, socially acquired decision making rules from previous experiences and the formation of heuristics also causes people to engage in framing (Read, et al., 1999). A most simple example to this phenomenon is our tendency of dividing the week into two unequal parts, weekdays and weekends, and planning our days accordingly (Read, et al., 1999). Fourth, motivated bracketing which is the act of deciding a choice to make a certain accomplishment (Read, et al., 1999). For example, instead of bracketing oneself to the intake of 2000 calories per day, one can decide an intake of 14,000 calories per week (Read, et al., 1999). The weekly decision is no different in calories intake than the daily on a seven-day calendar, however, it gives the person a certain amount of flexibility and turns the goal more attainable (Read, et al., 1999).

It's also vital to discuss about the gain/loss framing behavior people engage in (Elliehausen, 2019). As previously mentioned, most of the people at most times narrowly-bracket their decisions (Rabin & Weizsacker, 2009). This is not simply a coincidence. People in nature are risk averse and prefer gains over possible losses (Elliehausen, 2019). For example, using the prospect theory presented by Kahneman and Tversky in 1981, we now understand that people would prefer a chance of 90% in remaining alive than a 10% of dying (Elliehausen, 2019). Regardless to the chances of survival and death being equal, people are framed in a way to secure gains and forego losses (Elliehausen, 2019). Nonetheless, this is not an all-time true behavior. There are some experiments which show that people might prefer taking a risk of loss than securing a gain if the possible outcomes of the risky chance overweight the secured gains (Elliehausen, 2019).

2. Financial Decisions

People are nowadays more liable in making financial decisions than ever (Remund, 2010; Anderson, et al., 2017; Shin, et al., 2019) . That's because much has change in the last couple of decades. First, financial markets have grown and became opaque (Remund, 2010; Anderson, et al., 2017). People



have now a big number of financial providers to be clients of. Second, financial planning has become a task households need to take care of on their own (Anderson, et al., 2017; Shin, et al., 2019). The pre-planned retirement options are no more because they were costly, and people's needs have differed immensely (Benartzi & Thaler, 2007). Hence, the need of customization in the planning for retirement (Benartzi & Thaler, 2007; Anderson, et al., 2017). Third, we all are now faced with novel financial products which are relatively complex (Remund, 2010; Anderson, et al., 2017). In my discussion of financial decisions, I will be focusing on the retirement planning, savings and investment behavior, and insurance purchasing. That's because in such a volatile economic environment, engaging healthily in these behaviors may keep individuals safe from factors beyond their control (Remund, 2010).

To start with 1978's Revenue Act which shifted the responsibility of planning for retirement from the employers to the employees (Shin, et al., 2019). Previously, the defined benefits plans provided the employees with a lifetime income (Shin, et al., 2019). Hence, they didn't need to necessarily think and decide on how to manage their financials during the times of high income for them to be able to cover their expenses during times of low income (Shin, et al., 2019). Whereas, with the shift, the defined contribution plans made employees responsible of planning for their retirement (Benartzi & Thaler, 2007; Shin, et al., 2019). People need to make several decisions such as when to start saving, how much money to save, what mode of retirement planning should be implemented and so forth (Shin, et al., 2019). It's important to think thoroughly about retirement because it is essential for our mental, physical, and psychological wellbeing (Yeung & Zhou, 2017). Defined contribution plans if correctly understood outmatch the defined contributions plans (Benartzi & Thaler, 2007). They are tax deductible and accumulations are tax deferred (Benartzi & Thaler, 2007). Plus, employers usually motivate their employees to engage in defined contribution plans by matching with a high rate their employee's contribution (Benartzi & Thaler, 2007). For example, if an employee chooses to invest 100\$ in a monthly retirement account, the contribution plan adopted by the employer might lead to the employee accumulating 150\$ in a monthly retirement account - a 50% contribution by the employer (Benartzi & Thaler, 2007). Regardless to such benefits, the engagement rates toward contribution plans remain low (Benartzi & Thaler, 2007).

Researchers treated this matter from a behavioral approach and found out that one of the major reasons to the low retirement planning rates is due to people not being well informed not of the situations, but of financial principles (Shin, et al., 2019). This phenomenon is not only existent in a country or two, rather all around the globe (Benartzi & Thaler, 2007). Financial literacy is a topic widely discussed in academia and it'll be discussed more thoroughly in the next section. Another reason is people's focus on heuristics and falling in biases (Shin, et al., 2019; Elliehausen, 2019). Narrow-framing for instance could be the most important bias one might talk about in retirement planning. The on-topic research works showed that it's due to the latter bias that people don't engage much in retirement nor invest in



long-term projects such a long-term care insurance (Gottlieb & Mitchell, 2019; Shin, et al., 2019). Shin, et al. (2019) explain that there is a direct link between the low retirement planning and the high number of narrow framers. Such people make no future financial plans not because they don't want to, but because their decisions are focused on current consumptions (Shin, et al., 2019). They consider a certain status quo to uphold during their lifetime forgetting about the times of low or no incomes (Shin, et al., 2019). Moreover, heuristics are used in financial decisions to overcome the hardships in the decision-making process (Elliehausen, 2019).

People's saving behaviors are treated to be rational decisions in classical theories such as the life-cycle theory (Shin, et al., 2019). Such approaches assume that people are well informed and have the willpower to make sound financial decisions in basing their choice on optimization, primarily in consumption and saving behaviors (Benartzi & Thaler, 2007; Shin, et al., 2019). This theory also assumes that people accumulate a certain sum then spend it to maximize a certain life-span related utility function (Benartzi & Thaler, 2007). Nonetheless, the idea of people behaving rationally in the different stages of their lives is no longer valid (Shin, et al., 2019). Recent works have proved that people are subject to bounded rationality, just as Herbert Simon had claimed (Shin, et al., 2019; Elliehausen, 2019). They are imperfectly informed about the situation and have a limited cognitive ability to understand the future (Shin, et al., 2019; Elliehausen, 2019). Hence, as once Daniel Kahneman argued, people tend to use heuristics and rules of thumbs in their saving behaviors (Anderson, et al., 2017; Shin, et al., 2019; Elliehausen, 2019). People do so because they cope with the idea of the future's uncertainty and would like to make a swift decision (Benartzi & Thaler, 2007). The data also shows the contrary of what the life-cycle theory tells us. In a recent survey, nearly 45% of the United States of America's working force had not yet planned for retirement (Shin, et al., 2019). Hence, savings decisions which are quite vital for retirement planning are interesting to be discussed.

When discussing people's saving behaviors, academics divide them into three categories: contractual, discretionary and residual savings (Elliehausen, 2019). Contractual savings are commitments to payment obligations such as pension contributions, life insurance premiums and debt repayment (Elliehausen, 2019). However, rarely do people see contractual savings as a good approach (Elliehausen, 2019). For example, paying debt is seen as part of the previous consumption accountability and the life insurance premium as fees paid for protection against adversity (Elliehausen, 2019). Though, in recent years, the reforms the governments did in their tax-deferred retirement, educational, and medical savings plans have made the understanding of such savings clearer and more attractive to the people (Elliehausen, 2019). Discretionary savings are the conscious saving decisions people make (Elliehausen, 2019). If for a certain personal reason, an individual chooses to put aside part of the income generated, then he's engaging in discretionary saving (Elliehausen, 2019). Usually, such funds are kept aside for precautionary purposes such as the use of



money in emergencies (Elliehausen, 2019). Consequently, discretionary savings are often kept in the most liquid ways (Elliehausen, 2019). Whereas the residual savings are the left-over part between the income and consumption (Elliehausen, 2019). They are unplanned type of a saving which usually are accumulated and kept in people's bank accounts (Elliehausen, 2019).

As when it comes to the idea of purchasing an insurance policy, primarily medical and life insurances, the way people make their choices is very complex (Gottlieb & Mitchell, 2019; Born & Sirmans, 2019). The choice to purchase an insurance policy or not requires a cost-benefit analysis from the insured (Born & Sirmans, 2019). However, it's important to note that the analysis shouldn't only include the financials and that is what many people do wrong (Born & Sirmans, 2019). The need of hospitalization, personal medical history, and ease of access to medical care are important to be included in the decision making of purchasing an insurance or not (Born & Sirmans, 2019). Unfortunately, many face the feeling of regret after purchasing an insurance by narrow bracketing their decision, an idea discussed more clearly in the coming parts.

3. Financial Literacy

Academia has been taken by the idea of financial literacy for the last decade and a half. That's because of two major events. First, the scores of people's financial literacy levels all the research works provided over time are consistently low all around the world (Mandell & Klein, 2007; Hastings, et al., 2011). Such results have turn it into an international issue as it raises grave concerns on the ability of the people in making good financial decisions (Hastings, et al., 2011). Second, the number and the types of financial products are constantly increasing with time making the choices more and more complex (Mandell & Klein, 2007; Hastings, et al., 2011). With an ample of research and experiments, it has shown to be a promising factor in shaping better and wiser financial decisions to the public (Mandell & Klein, 2007; Shin, et al., 2019). Specifically, in discussing about savings and retirement planning, financial literacy becomes an undetachable idea (Shin, et al., 2019).

Financial literacy didn't only attract the academic world (Mandell & Klein, 2007). Governments also recognized its importance and started providing trainings to their citizens aiming to improve their understanding of financial principles (Mandell & Klein, 2007; Remund, 2010). The primary initiatives didn't do much good because the concept of financial literacy wasn't clear (Remund, 2010). Nor was there any motivation from the people to learn more about financial management (Mandell & Klein, 2007). However, after the financial crises, people became more keen in benefitting from their government's plans in improving their financial literacy (Remund, 2010).

Understanding financial literacy can be done from two angles, conceptual and operational (Remund, 2010). Conceptual definitions have evolved over time and there's been no agreement on one single



definition (Remund, 2010). Remund (2010) divides the development stages of the different explanations of financial literacy into five categories. The first category, knowledge of financial concepts, is the founding ground of the term financial literacy (Remund, 2010). All the definitions of financial literacy start with the understanding of financial principles (Remund, 2010). The two terms are quite synonymous to the point that financial knowledge and financial literacy have very often been used interchangeably (Remund, 2010). The second category, ability to communicate about financial concepts, opens its arms wider than the simple knowledge base approach (Remund, 2010). Researchers in this phase advance the idea of the application of the knowledge (Remund, 2010). The third category, aptitude in managing personal finance, bases its explanation on the managerial ability a person has in controlling his or her finances (Remund, 2010). The fourth category, skill in making appropriate financial decisions, sets itself apart from the remaining definition by approaching financial literacy from a skill angle (Remund, 2010). This means everyone can master it as it's a learned skill and everyone can benefit from it in making the correct choices (Remund, 2010). The fifth category, confidence to plan effectively for future financial needs, introduces some new concepts into the definition of financial literacy (Remund, 2010). Confidence, a psychological trait, gets to be part of the ability to use the acquired knowledge similarly to the inclusion of planning for the future (Remund, 2010). Through his categorization of the definitions to financial literacy, Remund (2010) makes the concept more easily understood. Whereas, when it comes to the operational definitions, there's a puzzlement and loss in measuring financial literacy (Remund, 2010). There are some good constructs, such as the Big 3 questions presented by Mitchell and Lusardi, quite frequently used by researchers. Some other constructs also exist. But the idea of each construct being constrained to a particular sociodemographic, economic, and behavioral factor makes things unclear (Remund, 2010).

4. Framing in Financial Decisions

People fall in the choice bracketing bias when making any type of decision from which the financial decisions (Hastings, et al., 2011; Webb & Shu, 2017). From the many such decisions, research works show that people are very sensitive to framing especially in saving and investment decisions (Hastings, et al., 2011). That's why, I start the discussion on framing behaviors in financial decision making with the choice of purchasing an annuity. It is important to be discussed because companies have shifted from defined benefit plans to defined contribution plans (Benartzi & Thaler, 2007; Agnew, et al., 2008; Shin, et al., 2019). This shift has made people more liable to their own decisions in financial planning and financial management (Shin, et al., 2019). It is also important to discuss annuities because regardless to the extensive academic and market research, there is little demand on such products (Brown, et al., 2019). Annuities were believed to overtake all the other retirement planning programs since they provide people an opportunity not to outlive their possessions (Brown, et al., 2019). However, the levels of annuitization remain lower than the predictions (Brown, et al., 2019). According to the US Social Security Administration, only 3% of the individuals have maximized the



social security annuities by delaying their claims until the age of 70 (Brown, et al., 2019). This triggered academics to work in understanding this phenomenon and several explanations became available to the public (Brown, et al., 2019). One part of the academicians tackled the issue from the angle of structural models and have included the motives and incentives in explaining it (Brown, et al., 2019). The other part of the academicians approached it from a different strand and tried explaining this phenomenon from a behavioral approach (Brown, et al., 2019). Many experiments showed that behavioral factors influence on people's demand of annuities with even a good number showing that framing of the annuity choice affects the demand of annuities (Brown, et al., 2019). Nonetheless, the knowledge we have acquired from the long lists of research works on annuitization's behavioral approach people implement, there is a big gap in understanding how they are shaping such behaviors (Brown, et al., 2019). Yet again, we may find some research works which partially explain the framing behavior in annuitization from a behavioral approach.

In research conducted by Agnew, et al. (2008) on retirement planning programs, data showed framing effects to be existent and significantly different between the two genders. Women, who are more risk averse than men, engaged in safer financial investments (Agnew, et al., 2008). Consequently, they preferred investing in annuities rather than on their own (Agnew, et al., 2008). However, a biased 5-minute presentation towards the positive outcomes of personal investments decreased their likability of the annuities by 16% (Agnew, et al., 2008). Whereas men were less affected by the framing effects as biased information praising investments decreased their likeability of the annuities by 14% (Agnew, et al., 2008). Biased information presentation on the benefits of annuities also increased men's likability of annuities by 21% (Agnew, et al., 2008). The strong framing effect of a very short presentation with a duration of 5-minutes has on people's decision making is quite surprising (Agnew, et al., 2008). That's because it's consequently dangerous to think the possibility of financial service providers in using framing effects to their benefit and exploiting people's needs (Agnew, et al., 2008).

This matter is in fact researched by Hastings, et al. (2011). Focusing on the presentation of fees and charges for financial services in Chile, the researchers reached to great insights. Even after thirty years from the start of the defined contribution retirement plans, Chilean citizens lack the necessary knowledge in understanding the fees, charges, and commissions on their savings accounts (Hastings, et al., 2011). They also lack the necessary knowledge in choosing the most suitable pension fund manager who will be dealing with their retirement plans (Hastings, et al., 2011). Due to the latter two causes, presenting the necessary information to the consumers in a certain way may deviate their decision making, or in other terms lead them to fall in information framing bias (Hastings, et al., 2011).

Similarly, Gootlieb and Mitchell (2019) researched about people's behavior in purchasing long-term care insurances in the US. In its nature, the behavior of purchasing an insurance policy is skewed



towards relieving the insured from the possible financial burdens which might incur due to an accident (Gottlieb & Mitchell, 2019; Born & Sirmans, 2019). With the probability of an accident happening being negligible and the premiums to purchase an insurance policy being remarkable, people often regard insurances as bad investments (Webb & Shu, 2017; Gottlieb & Mitchell, 2019; Born & Sirmans, 2019). Especially that people might hold insurance policies for years and never use them makes it harder to convince people in purchasing insurances (Webb & Shu, 2017; Gottlieb & Mitchell, 2019; Born & Sirmans, 2019). Gottlieb and Mitchell (2019)'s research showed that the people who narrowly frame things in general have a lower tendency in getting insurances. With over 1600 respondents, they also find that framing behavior is a much stronger indicator in understanding people's insurance purchasing decisions than the indicators frequently discussed in the literature such as risk aversion and private information.

Their findings are in a good position with the explanation of this phenomenon by Webb and Shu (2017). Their approach is based on understanding people's behaviors in purchasing products with primarily negative outcomes such as an insurance policy. They emphasize on the important role the presentation of the information plays in narrow or broad framing. The weight people put on the possible gains and possible losses is a key indicator of their bracketing behavior (Webb & Shu, 2017). Webb and Shu (2017)'s research work prove Gottlieb and Mitchell (2019)'s claim that people don't like buying insurances because of their biased probability distribution. As the chance of an accident occurring is negligible even though any accident may cause drastic losses makes the premiums to be seen quite high (Webb & Shu, 2017).

3. RECOMMENDATIONS

To overcome the framing bias in retirement planning, some researchers advise on following the automatic enrollment idea in defined contribution plans (Benartzi & Thaler, 2007). Such an act would automatically include an employee into a defined contribution plan with the freedom of opting out from it (Benartzi & Thaler, 2007). The use of such acts has increased the enrollment in the US from 20% to 65% in only 3 years (Benartzi & Thaler, 2007). The good point of automatic enrollment is the negligible rate of dropping out from the plan once an employee joins it (Benartzi & Thaler, 2007). However, following such a step brings people closer to joining a defined benefit scheme with reasonably lower benefits. To avoid this, what employers do is to increase the number of plans possible to decide from which in fact make the decision-making process even more complex than earlier (Benartzi & Thaler, 2007). This also makes the employees more susceptible to fall into choice framing. Hence the need of finding a better way to motivate people in making better financial planning decisions by avoiding falling in biases.

The discussed works in the previous sections indicate that financially illiterate people have a higher



propensity in falling into financial decision biases, more particularly choice framing, than the ones who are financially literate. They also indicate that women are more influenced than men by framing effects especially if the ideas are contradicting to their preconceived notions (Agnew, et al., 2008). The gender differences in financial literacy scores and the gender differences in financial decision framing biases are quite interesting to be discussed. Similarly, educational attainment which is in general a good indicator of people's financial literacy scores, is also included in our discussion of the factors influencing the falling into financial decision biases. Hastings, et al. (2011), for example, talk about educational attainment's role in people committing financial framing biases. In addition, cognitive capabilities such as logic and mathematical capacities, are good explanatory variables to people's framing behaviors (Webb & Shu, 2017). A higher cognitive ability allows people to understand the risks by the distribution of the probabilities, therefore make the informed person less susceptible to framing effects (Webb & Shu, 2017). The latter idea is also discussed by Brown, et al. (2019) in experimentally proving that the cognitive challenge caused by the complexity of the annuities make people less willing to get involved in such products. They also add that complex decisions in financial management can become easier to make if the person doesn't narrowly bracket the choices and doesn't have a cognitive limitation. Therefore, financial literacy might be used as a solution to overcome much of the framing problems people face. At least when we're discussing about the bias in financial decisions, a boost in people's understanding of financial matters can enhance their decisions. In general, financially literate people make better financial decisions and fail to fall in financial biases.

4. CONCLUSION

Decision making is a complex task due to the unavailability of a clear picture to the future (Read, et al., 1999; Rabin & Weizsacker, 2009). If we had known what the future will be like, our choices would've been much simplified (Read, et al., 1999; Rabin & Weizsacker, 2009). Sometimes, we take a choice which later shows that it was wrong decision. We may refrain in engaging such acts if we look at the consequences of all the related decisions as one. Narrow bracketing makes it possible for us to take quick and swift choices, but also puts us under the risk of achieving undesired outcomes (Rabin & Weizsacker, 2009; Webb & Shu, 2017; Gottlieb & Mitchell, 2019; Shin, et al., 2019). Like all the decisions, financial decisions are also under the risk of being skewed by the framing bias. Our behaviors in retirement planning, savings, and insurance purchasing show abnormalities. Especially that the financial services are provided by financial services providers, the way they present an information to us dictates our actions (Gottlieb & Mitchell, 2019). Therefore, we are always vulnerable in making wrong decision due to choose bracketing, unless we choose to do something about it. The previously recommended way in solving retirement planning framing bias through the automatic enrollment isn't a very practical idea (Benartzi & Thaler, 2007). That's why, improving financial literacy is a good choice to overcome the possibility of people falling into financial decision-making



biases. Now that we're talking about the benefit of individuals, what about the benefit of the companies? Don't they plan their marketing strategies in a way to be a bit tricky biting the weaker segments of the population? Isn't that how they make their services very profitable? These are good approaches to be checked in the future.

5. REFERENCES

Agnew, J., Anderson, L., Gerlach, J. & Szykman, L., 2008. Who Chooses Annuities? An Experimental Investigation of the Role of Gender, Framing, and Defaults. *American Economic Review*, 98(2), pp. 418-422.

Anderson, A., Baker, F. & Robinson, D. T., 2017. recationary savings, retirement planning and misperceptions of financial literacy. *Journal of Financial Economics*, Volume 126, pp. 383-398.

Benartzi, S. & Thaler, R., 2007. Heuristics and Biases in Retirement Savings Behavior. *Journal of Economic Perspectives*, 21(3), pp. 81-104.

Born, P. & Sirmans, T. E., 2019. Regret in health insurance post!purchase behavior. *Risk Management and Insurance Review*, Volume 22, pp. 207-219.

Brown, J. et al., 2019. Behavioral Impediments to Valuing Annuities: Complexity and Choice Bracketing, Bonn: IZA Discussion Paper, No. 12263.

Elliehausen, G., 2019. Behavioral Economics, Financial Literacy, and Consumers' Financial Decisions . In: A. Berger, P. Molyneux & J. Wilson, eds. *The Oxford Handbook of Banking* (3rd edn). s.l.:Oxford Hanbooks Online, p. Ch. 3.

Gottlieb, D. & Mitchell, O., 2019. Narrow Framing and Long-Term Care Insurance. *Journal of Risk and Insurance*, 87(4), pp. 861-893.



Hastings, J., Mitchell, O. & Chyn, E., 2011. Fees, Framing, and Financial Literacy in the Choice of Pension Manager. In: O. Mitchell & A. Lusardi, eds. *Financial Literacy: Implications for Retirement Security and the Financial Marketplace*. New York: Oxford University Press, pp. 101-115.

Mandell, L. & Klein, L. S., 2007. Motivation and Financial Literacy. *Financial Services Review*, Volume 16, pp. 105-116.

Rabin, M. & Weizsacker, G., 2009. Narrow Bracketing and Dominated Choices. *American Economic Review*, 99(4), pp. 1508-1543.

Read, D., Loewenstein, G. & Rabin, M., 1999. Choice Bracketing. *Journal of Risk and Uncertainty*, 19(1-3), pp. 171-197.

Remund, D., 2010. Financial Literacy Explicated: The Case for a Clearer Definition in an Increasingly Complex Economy. *Journal of Consumer Affairs*, 44(2), pp. 276-295.

Shin, S., Kim, H. & Heath, C., 2019. Narrow Framing and Retirement Savings Decisions. *Journal of Consumer Affairs*, 53(3), pp. 975-997.

Webb, E. & Shu, S., 2017. Is broad bracketing always better? How broad decision framing leads to more optimal preferences over repeated gambles. *Judgment and Decision Making*, 12(4), pp. 382-395.

Yeung, D. & Zhou, X., 2017. Planning for Retirement: Longitudinal Effect on Retirement Resources and Post-retirement Well-being. *Frontiers in Psychology*, 8(1300), pp. 1-14.