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IMPACT OF BEHAVIORAL BIASES ON INDIVIDUALS RETIREMENT PLANNING: A SYSTEMATIC LITERATURE REVIEW APPROACH

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Abstract

This study aims to examine the impact of behavioural biases on individual's retirement planning specifically in the context of private pension schemes. The research work collected the data from the time frame from 1977 to 2024 to check the impact of behavioural biases on individual's retirement planning specifically in the context of private pension schemes. The data was collected from 52 top listed Scopus and Web of Science journals. Prior research works investigate that behavioural biases has significant relationship with the individual's retirement planning specifically in the context of private pension schemes.

Keywords: Behavioral Finance, Behavioral biases, Private pension Schemes, Individual Planning, Retirement

Introduction

The main emphasis of the investor in contemporary finance was on the risk and return where they choose the securities on the basis of maximization of return and minimization of risk. Therefore, investors were limited to develop their investment portfolios on the basis of risk and return. With the further research and developments in finance, a new field which is combination of finance, sociology and psychology was emerged named behavioral finance. Behavioral finance is a field which indulges with an insight in human psychology. According to behavioral finance, investors are not rational and they can make errors while decision making. There can be such factors which can influence the decisions of the investors. These factors are basically related to the mindset of the individuals depending on their psychology. As it's natural that all human cannot think in a similar way so the psychology of individuals vary with different individuals. Therefore, it's not easy for every individual to make an accurate decision for any particular investment rather it is a very difficult and complex process. So,

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individuals usually take short cut in decision making which leads to some biases. Thus in this study these behavioural biases are observed on the investments in private pension schemes.

However, individuals may opt for retirement planning on their own will and priorities, that is why, financial investment companies have to motivate and attract the individuals towards it. Retirement is basically a distinctive part of an individual's life, where one has to take some initiatives for securing future. Usually in case of government employees, they do have occupational pension also called defined benefit scheme as well as other incentives like free medical, education scholarships for their children, rent allowance, fuel allowance and other fringe benefits. Thus, they may be less worried for their retirement age as compared to the private employees who do not have any such financial benefits other than their salary. Therefore, private employees may be more worried for their retirement age, which may lead them to think for investment in any private pension scheme. In essence to it, one of the major issues now a day is savings for old age by public employees also, as retirement pensions are moving towards decline day by day. So, now a proper planning is required for such an alarming issue because lack of financial resources will lead to hurdles in smooth consumption of retirees.

The central problem to be studied by the proposed study is the low coverage of private pension schemes in Asian developing countries. Pakistan is also one of the Asian developing country where people are either not much aware of the private pension schemes or they are not interested to do so. Thus, this study will focus on the certain issues supported by literature which lead to lack of awareness and limited usage of private pensions. Thus some studies suggested a more vigorous study of the variation in one's behavior towards their investments particularly for their future time (Mitchell & Lusardi, 2023; Mitchell et al., 2011; Rameli & Marimuthu, 2018).

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Pensions

Individuals when allow some portion of their earnings to be used after their employment end, is called pension. This amount might be paid by the organization where one work while in case organization does not offer any such scheme than individuals can save the same on their own (Wang et al., 2014). If the pension payment is made periodically after retirement it is called annuity while if a single payment is paid after retirement it is called lump sum benefit. While the payment paid before retirement age is called severance payment not pension payment. Hence, pension is the payment paid only after the employee has reached the retirement age.” (Lusardi et al., 2014). The pension schemes in general have two basic objectives. The first objective is to reduce poverty which can be obtained through non-contributory pension system. The second objective is to smooth consumption between working years and retirement years which can be obtained through contributory pension system (Arif & Ahmad., 2012).

Private Pension Schemes

A private pension scheme is one of the categories of pension types. This category of pension is basically personal investments of individuals for securing smooth earnings in their old age. In contrast to pension paid by employers in Occupational one, this scheme is purely dependent on the intention of the individual whether one want to invest for their future in private pension plan.

Behavioral Biases Vs Individuals Retirement Planning

Valaskova et al., (2019) furthermore emphasizes the crucial role played by the behavior of individuals driven by human psychology in the investments for securing the future old age time span. Bhandari & Hassanein, (2010) has categorized these biases in to three segments. First one is Affective bias which reflects emotional aspects of individuals Ajzen & Fishbein, (2000). Second one is cognitive bias which is more related to mental psychology of individuals (Wright, 1980) and the third

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one is the irrationality of individuals in their decisions irrespective of the conditions Massa & Simonov, (2005). Benartzi & Thaler, (2001) in addition to it stated that such individuals suffered by such mental and emotional heuristics face more adversity in their final outcome of investments. Although Individuals whereas, always want to make such decisions which results in pride and gains rather than losses and regret (Shefrin & Statman, 1985). In addition to it, Sałek, (2010) further provides positive relationship exists between psychological factors and retirement planning.

Vitmiasih et al., (2021); Butt et al., (2011) focused on the irrationality of investors due to representativeness bias. Investors tend towards this representative bias by assuming that good companies will always remain good and perform outstanding while, the low performing companies will always perform low. They ignore other realistic tools and approaches to analyze and predict the future performance of the firm and rely only on mental shortcuts (Vitmiasih et al., 2021). Some research studies showed that investors might link the probability of occurrence of an event with the performance of its past events. However, they ignore and avoid the variation in the other terms and conditions of past events with the future upcoming event. This will lead towards representative bias when the probability and expectations go wrong (Konteos et al., 2018). In contrast, in another past study, individuals assigned probabilities to certain events on the basis of their previous outcomes. These investments provided optimistic outcomes (Butt et al., 2011).

Investors risk taking capacity can be determined by the previous outcomes of financial investments. Investors usually tend to take higher risk while investing again. They reinvest their gains previously earned aggressively with more level of risk. When prior achieved gains are compared with currently earned savings and income; investors tend to take more risk for gains that are already gained in previous investments whereas they take lower risk comparatively if they invest their current

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earnings. This type of bias is named as house money effect (Udayan & Ranjan, 2017; Hsu & Chow, 2010). This effect of house money in the financial behavior of investors was noticed not only in the outcomes of the research studies but also in the actual situations in the financial markets. Although this heuristic showed its strong existence in the behavior of investors while investing in the financial instruments, but once investors determined and focused on their reference point, House money effect might disappear from the investors' behavior (Hsu & Chow, 2010).

Investors exaggerate their capabilities and skills in making investment decisions which is referred as overconfidence bias. The planning and execution of investments decisions alter significantly by the cognitive bias – overconfidence. Individuals perceive themselves to be superior in their abilities. Such kind of irrational behavior lead to estimate the outcome higher than it actual is. It also misleads the decision by considering oneself to be relied more upon and over – precision. Overconfidence bias affects the rationality of investor in accurately choosing the investment. The moment to be selected for investment might also be unsuitable resulting in misfortunate outcomes (Udayan & Ranjan, 2017). Overconfidence show positive link with individual's investment decisions according to prior research (Shah & Malik, 2021). Thus, individuals need to focus on such heuristics in order to have an adequate insight to avoid such biases in making financial decisions in investments funds (Jin et al., 2023; Abdin et al., 2022)

Prior research showed positive impact of ambiguity aversion on the behavior of investors. Investors prefer to invest in portfolio of assets with known level of risk. They rather avoid investing in portfolios for which the outcome is uncertain and unknown. Investor's behavior towards risk is not altered. This does not mean that investors will stop investing in risky assets (Charness & Gneezy, 2010). Myung, (2009) further support this bias by comparing investor's behavior in preferring

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local investment choices over foreign investment choices.

It has been observed in prior research that an investment decision of investors is effected by the status quo bias. No doubt, investors choose their future opportunities on the basis of their past investment consequences (Harbi & Toumia, 2022). Investors feel more comfortable while staying with the similar trend of their investment choices rather than choosing rationally. There can be two types of consequences which can result from this status quo bias. Either the investor will achieve positive outcome or losses. This outcome can be titled then either rational or irrational on the basis of that particular outcome (Freiburg & Grichnik, 2013). Lyu et al., (2024) focuses on the investor's trend towards the status quo bias in the context of retirement planning for their future. Investors show disposition effect in their investment decisions. Disposition effect is a bias in which investors promptly sell their investments with positive trends while avoid trading their investment with negative and downward trend. They rather prefer to hold such securities (Crane & Hartzell, 2007; Crane & Hartzell, 2011).

Theoretical Approaches

This study investigated the effect of the behavioral factors on the investors who want to invest in private pension schemes. So each discipline has its own theory linkage. This theory mentioned below supported the investors' tendency to alter their behavior towards investments for their future post employment time.

Social Learning Theory

Individual behave in a certain manner because of the various factors. Thus this theory has the capability to observe their behavior and the cause behind that particular type of behavior. Behavior of an individual does have strong effect on the decision making according to those financial and economic theories which are based on the human psychology (Bandura & Walters., 1977; Kahneman, 1979; Martin & Bush, 2000). Hence, social cognitive theory reflects three aspects; personal

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(includes; cognitive, affective and biological), behavioral and environmental. In support of this Kohlberg & Hersh, (1977) also further states that individuals are motivated to follow their own patterns and norms.

Methodology

In this paper the concepts of pension schemes, behavioural biases and retirement planning was explained. Moreover, it was also observed that behavioural biases alter the individual's behavior for investing in private pension schemes. This study has assessed 52 articles to examine the impact of behavioural biases on individual retirement planning. This article comprises of different sections including the causes of lack of investment in private pension schemes and types of behavioural biases. This study reviews 52 articles from 1977 to 2024. These research articles were selected from various research engines including Science Direct, Google scholar, Emerald and Springer Link.

Discussion

Humaira & Sagoro, (2018), explained that personal perception, logic, and thoughts derive one's attitude and then behavior. Similarly, when one is indulged in financial matters then it becomes financial attitude and financial behavior. This can also be stated that financial behavior is the practical application of one's financial attitude towards decision making of varying financial issues. Thus, the behavior of individuals do effect their investment decisions (Atmaningrum et al., 2021).

The behavioral biases studied in this study showed significant effect on the decision making of an individual regarding retirement planning. The irrationality of individuals is caused due to the illogical mental thoughts and emotional in capabilities which results in wrong decisions (Zahera & Rohit, 2018), Furthermore, another study by (Ritika & Nawal, 2020) supported that individuals mental capabilities decline when they are in the state of high emotions. In this study, house money effect shows significant positive effect on the individual's retirement

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planning which means that individuals are keener towards investing their funds in such projects from where they have earned gains previously. Investors show more interest towards house money effect in their financial behavior and decisions (Chen et al., 2017).

Disposition effect shows significant positive relationship with the retirement planning. In this heuristic, when individuals prefer not to sell the securities with decreasing prices and quickly sell those with the increasing prices. Thus, individuals avoid retirement planning and investments because of fear of potential losses. According to past studies, disposition effect exists in individuals' behavior because of their previous bad experiences, poor performances and losses. It also exists where education and knowledge is less (Goo et al., 2010). Ambiguity aversion bias is the heuristic where individuals tend to focus more towards the investment options where they already know the results. Representativeness bias also shows positive significant effect on the individuals retirement planning. This confirms the results of the past study where the representativeness bias was observed in the behavior of investors of Pakistan stock exchange. Individuals in this bias usually tend more towards such investment choices regarding which they are more certain and sure. Thus they opt for the one, they know more about rather than conducting the technical and fundamental analysis of the market and securities. Despite of the fact, that sometimes false information is spread within the market. So those investors who just rely on the already available information then have to face the losses and poor performance (Asif et al., 2021). Overconfidence bias also shows statistical positive significant relation with the retirement planning. This bias usually affects the behavior of investor in case of trading. As the investor opt for the investment opportunities having the risk beyond their capacity for tolerating that risk (Kozol, 2024). So those individuals with overconfidence bias will invest for their old age income support. Status quo bias also shows statistical positive significant relation with the

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retirement planning. Individuals are reluctant towards change thus they remain stick to their own perceptions, and decisions. In connection with it, it was observed by (Xue & Yang, 2024) , that those individuals having status quo bias were not able to decide according to the latest information available as they are too slow to adapt to the new and latest information which results in irrational decision making.

The post employment stage for most of the individuals becomes more costly and difficult to sustain their life style. Thus in order to avoid the inflation affect on the earnings, individuals need to invest in such private pension retirement schemes that can provide maximum returns in such a critical time. Individuals can better plan their retirement time investments when they show more concern for their future. The more one is interested in securing their old age future time, the better well prepared one is for retirement (Hershey et al., 2015). Thus one's future consumption and saving pattern can be depicted from one's current motivation, participation and engagement in the retirement planning investments (Hershey et al., 2008; Kooij et al., 2018).

Conclusion

Behavioral finance revolves around investigating the psychological factors and behavioral aspects of the individuals for their financial decision making. Antony, (2020), states that these cognitive, affective and conative biases play crucial role in one's financial matters and thereafter financial decisions. Hence, it is behavioral finance which links the behavioral science with the standard finance and provides a new insight in to the financial aspects of investors. Wagdi, (2017) further stated that behavioral factors acknowledged that risk is not the only factor which can alter the return rather there can be some other behavioral factors as well which differs the return from the forecasted expectations of the investors. In contrast to it, standard financial theories were unable to do the same (Fogaat et al., 2022). In addition to it Hon et al., (2021), also focused on it that behavioral finance adds more

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knowledge to the existing finance theories of risk – return and rational – irrational and other core concepts.

The results of this study also supports the past studies that behavioral factors including cognitive biases, affective biases, and conative biases do positively significantly affect the individual's decisions for their old age. Retirement planning can be enhanced by thoughtful behavior of individuals regarding their savings. Thus it is essential to upgrade their behavior in such manner that their vision broadens and they become long sighted by focusing on their future in order to secure their old age time.

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