

La Finance Comportementale : Comment Révéler et Surmonter les Biais des Investisseurs?

Behavioral Finance: How to Reveal and Overcome Investor Bias?

Auteur 1 : MIHRAJ Zineb

Auteur 2 : ALAOUI MDAGHRI Abdelouahed.

MIHRAJ Zineb,

Doctorante à l'université Hassan II –FSJES Ain Chok Casablanca

ALAOUI MDAGHRI Abdelouahed,

Directeur du centre d'études doctorales

Directeur du Laboratoire finance banque et gestion des risques

Professeur chercheur

Déclaration de divulgation : L'auteur n'a pas connaissance de quelconque financement qui pourrait affecter l'objectivité de cette étude.

Conflit d'intérêts : L'auteur ne signale aucun conflit d'intérêts.

Pour citer cet article : MIHRAJ .Z & ALAOUI MDAGHRI .A (2024) « La Finance Comportementale : Comment Révéler et Surmonter les Biais des Investisseurs? », African Scientific Journal « Volume 03, Numéro 22 » pp: 0834 – 0849.

Date de soumission : Janvier 2024

Date de publication : Février 2024



DOI : 10.5281/zenodo.10820645
Copyright © 2024 – ASJ



Résumé

La finance comportementale explore les biais psychologiques et émotionnels qui influencent les décisions financières des investisseurs. Intégrant des concepts de psychologie, de sociologie et d'anthropologie, ce domaine multidisciplinaire remet en question l'hypothèse de rationalité parfaite de la finance traditionnelle. Les investisseurs ne prennent pas toujours des décisions rationnelles, comme le suggère la théorie de l'homo Economicus. Au lieu de cela, ils sont souvent sujets à des erreurs systématiques et à des jugements biaisés. La finance comportementale révèle ces schémas comportementaux récurrents, offrant ainsi un regard neuf sur les mécanismes de décision financière. En reconnaissant l'importance des facteurs cognitifs et émotionnels, cette discipline cherche à mieux comprendre et à expliquer le comportement des investisseurs. Les avancées en finance comportementale ont des implications significatives, non seulement pour la recherche académique mais aussi pour les régulateurs et les conseillers financiers, qui peuvent utiliser ces connaissances pour protéger les investisseurs contre les conséquences néfastes de leurs décisions financières. L'objectif de ce papier de recherche est de préciser l'impact des biais psychologiques sur la prise de décision, d'expliquer l'irrationalité existante sur marché. Pour se faire, nous aborderons la littérature des anomalies et la manière de constitution du groupe de chercheur. Nous détaillerons de plus près les causes et l'impact de l'irrationalité des investisseurs dans un marché efficient, ainsi que les critiques faites vis-à-vis de la notion d'efficience des marchés. Ensuite nous décortiquerons les principaux biais émotionnels.

Mots clés :

Finance comportementale, Biais cognitifs, Décisions financières, Psychologie financière, Rationalité économique

Abstract

Behavioral finance explores the psychological and emotional biases that influence investors' financial decisions. Integrating concepts from psychology, sociology, and anthropology, this multidisciplinary field challenges the assumption of perfect rationality in traditional finance. Investors do not always make rational decisions, as suggested by the theory of homo Economicus. Instead, they are often prone to systematic errors and biased judgments. Behavioral finance reveals these recurring behavioral patterns, offering a fresh perspective on financial decision-making mechanisms. By acknowledging the importance of cognitive and emotional factors, this discipline seeks to better understand and explain investors' behavior. Advances in behavioral finance have significant implications, not only for academic research but also for regulators and financial advisors, who can use this knowledge to protect investors from the harmful consequences of their financial decisions. The aim of this research paper is to clarify the impact of psychological biases on decision-making and to explain the irrationality that exists in the market. To do this, we will look at the literature on anomalies and the way in which the group of researchers was constituted. We will take a closer look at the causes and impact of investor irrationality in an efficient market, as well as the criticisms leveled at the notion of market efficiency. We will then examine the main emotional biases.

Keywords

Behavioral finance, Cognitive biases, Financial decisions, Financial psychology, Economic rationality.

Introduction

Behavioral finance is an interdisciplinary field of research that seeks to effectively integrate concepts and discoveries from psychology, sociology and even anthropology. It sheds light on many recurring behavioral biases among investors, offering a fresh look at the mechanisms at work. After briefly examining the origins and causes of these biases, we present an overview of the biases most likely to disrupt an investor's optimal management of a portfolio of assets. These phenomena, which are now widely documented, pose a number of challenges. In conclusion, we explore the new perspectives they open up for researchers, finance professionals and regulators.

Traditional finance, which has long dominated the financial landscape, is based on the assumption - sometimes implicit, sometimes explicit - that individuals act in a perfectly rational economic manner. This rationality implies two things: firstly, individuals adjust their beliefs appropriately when they receive new information, with a perfect understanding of probabilities; secondly, based on these beliefs, they make decisions that maximize their satisfaction (according to the theory of expected utility), seeking to increase their wealth while limiting their risk.

This research paper is a literature review, which aims to elucidate the influence of psychological biases on decision making, as well as to explain the irrationality present in the market. In order to accomplish this, we examine the research on anomalies and how the group of researchers is constituted. We examine in detail the origins and consequences of investor irrationality in a well-functioning market, as well as criticisms of the notion of market efficiency. We then examine the main emotional biases.

However, numerous studies have revealed behavior that does not correspond to the predictions of this classic financial theory. This brings us face to face with the reality that investors make mistakes. In other words, unlike the homo Economicus described by Thaler and Sunstein (2009) as a rational being capable of long-term forecasts, mathematical calculations of satisfaction and rational choices independent of emotion, we 'homo sapiens' often make mistakes and reproduce these mistakes over time. It is this regularity in behavior, highlighted by Tversky and Kahneman (1974) that explains why investors tend to make irrational decisions. Behavioral finance recognizes the importance of cognitive and emotional factors in decision-making, drawing on psychology and even anthropology to better describe and understand the behavior of investors and markets.

1. The literature of anomalies and the formation of a group of researchers

Since the 1980s, researchers have observed that the theoretical results of standard finance do not always correspond to the reality observed in financial markets. This discrepancy between theory and facts has generated increasing interest and has prompted researchers to question the fundamental assumptions of traditional finance.

One of the pioneering studies in this field was conducted by Robert Shiller in 1981. In his study of the American market, Shiller observed a volatility of stock prices much higher than expected and results according to the classical models of finance. This finding challenged the idea that markets are efficient and that prices perfectly reflect all available information. This discovery paved the way for many other empirical studies aimed at identifying and understanding the gaps observed in financial markets. Researchers have focused on various phenomena such as yield anomalies, investors' behavioral biases, and distortions in price formation.

The literature of anomalies in finance has thus developed, highlighting situations where the returns of assets do not correspond to the predictions of classical models. These anomalies challenge the idea that markets are perfectly efficient and rational.

These observations have led to the formation of a group of researchers committed to the in-depth study of these anomalies and their causes. This group of researchers has questioned the foundations of traditional finance and paved the way for the emergence of behavioral finance as a new research trend.

The literature of anomalies has played a crucial role in raising awareness of the limits of traditional finance and has contributed to the recognition of the need to integrate investors' behaviors and psychological biases into financial analysis.

In other words, the literature of anomalies in finance has been the starting point of behavioral finance by highlighting the gaps between the theory and the reality of financial markets. It has spurred research on investors' behavioral biases and has challenged the fundamental principles of traditional finance.

2. The causes of irrationality

Although human beings are capable of complex analysis and of making decisions based on that analysis, they are also subject to many constraints that can lead them to take shortcuts and rely on their intuition. Unlike machines following a rigid program, we are likely to make decisions influenced by our emotions or our social environment. What's more, our perceptions of reality may differ from objective reality, just as our memories may diverge from past events. These

limitations and imperfections often lead to erroneous decisions, which would not be significant for financial theory if they were random. However, when these individual errors are systematic, i.e. when we tend to make mistakes in a particular direction, the results of collective actions can diverge considerably from the predictions of a financial model based on the perfect rationality of individuals.

Behavioral finance thus makes an important contribution to finance as a scientific discipline by shedding light on these systematic biases. To fully understand these biases, it is essential to explore their origins and causes. In this section, we will identify four main categories of factors that can influence our perceptions, memories, decisions and, consequently, our behavior.

2.1. The use of heuristics

In the decision-making process, we are all faced with constraints and limitations. These may be the time available to complete a task, our knowledge and experience, or our ability to calculate and analyse. Although our brain is a remarkable tool capable of processing a great deal of information simultaneously, it also has its limits.

To better understand how our brains work in this context, Kahneman (2012) proposed a simple analogy: he distinguishes between the 'fast system' and the 'slow system'. The fast system processes most operations automatically and instantaneously, acting almost like a reflex. The slow system, on the other hand, is involved in more complex tasks that require conscious thought.

However, with experience or habit, certain tasks can be transferred from the slow system to the fast system. For example, a novice driver may be unable to answer a complex calculation during his first driving lesson, whereas an experienced driver may be able to do so with ease.

Ainsi, pour ne pas surcharger notre cerveau en permanence, nous utilisons souvent des astuces, des raccourcis et des approximations dans nos décisions quotidiennes. Ces "heuristiques" sont des opérations mentales rapides et intuitives qui nous conduisent généralement (mais pas toujours) à la bonne solution. Cependant, cela peut également entraîner des biais cognitifs, tels que la focalisation sur des événements récents ou médiatisés, des difficultés à estimer des probabilités, ou encore des décisions influencées par des éléments contextuels non pertinents.

2.2. Over-confidence and the mechanisms for preserving self-esteem

Somewhat surprisingly, it seems that we are naturally inclined to overestimate our abilities, which probably contributes to our psychological equilibrium. Scientific research has shown, for example, that very few people consider themselves to be less competent at driving than the average person, while the majority consider themselves to be above average. In addition,

psychologists have identified a phenomenon where we tend to overestimate our own contribution to successes and attribute failures to bad luck or external circumstances beyond our control. Numerous studies have also highlighted our propensity to overestimate the accuracy of our predictions, illustrating the multiple manifestations of overconfidence.

Similarly, confirmation bias illustrates our tendency to favor information that confirms our pre-existing beliefs, to the detriment of information that contradicts them. We also tend to interpret ambiguous information in such a way as to confirm our existing beliefs.

The phenomenon of cognitive dissonance also comes into play. It manifests itself as a mental discomfort felt when our knowledge, opinions or beliefs conflict. To reduce this dissonance, we try to adjust our way of thinking and reasoning to minimize the contradiction. For example, if we firmly believe in our intuition about the stock market but our investments suffer losses, we might minimize our discomfort by attributing the fall to a market that has not yet realized the potential of our shares, and anticipating a rise in prices.

2.3. Feelings and emotional control

A great deal of research has highlighted the importance of emotions in the decision-making process. This is particularly relevant in the field of marketing, where it is crucial to assess the emotional impact on the perception of a product and on purchasing decisions. However, it would be a mistake to think that our financial choices are immune to emotional influences. In fact, it is likely that our financial decisions are largely influenced by our emotional state, as our emotions contain information that we use to evaluate our environment.

For example, it has been shown that a good mood tends to increase optimism and the propensity to take risks. This correlation between mood and financial behavior is reinforced by the positive impact of light on our emotional state. This is why some studies have established a link between seasonal variations in sunlight and stock market fluctuations.

What's more, since saving involves deferring consumption to a later date, it requires a certain amount of self-control. Like our purchasing decisions, our savings choices can also be influenced by our emotions, particularly our current mood.

3. The emergence of dynamic school

The dynamic school of behavioral finance has brought significant insights into financial behaviors by highlighting the psychological biases to which individuals are subjected in situations of uncertainty. These biases can be grouped into two main categories:

- ***Cognitive biases:***

They reflect the influence of our knowledge, beliefs, and experiences on our financial decision-making. They can lead to erroneous judgments and irrational behaviors. For example, an investor who relies on a simplistic belief acquired during their education, such as the idea that a decrease in interest rates automatically leads to a rise in stock prices, may make inappropriate decisions by ignoring other important parameters.

- ***Emotional biases:***

They highlight the negative effects of emotions on investors' performance. Emotions such as fear, greed, and excitement can influence financial decisions in an irrational manner. For example, an investor may panic and sell their stocks hastily during a market downturn, rather than considering the long-term fundamentals.

The researchers at the dynamic school have conducted numerous studies and experiments to better understand these psychological biases in the context of uncertainty. Their work has challenged the paradigm of market efficiency by demonstrating that the perfect rationality of economic agents does not correspond to reality.

Thus, the emergence of the dynamic school was a very important step for behavioral finance by providing a better understanding of the psychological mechanisms underlying financial decisions. It has questioned the foundations of traditional financial theory and opened up new research perspectives. Thanks to these advances, behavioral finance has emerged as an essential discipline for understanding real financial behaviors and the anomalies observed in the markets.

4. Investor behavioral biases

We have recently examined the reasons why individuals tend to make non-rational choices. This inclination is particularly pronounced among investors, given that they are confronted with often complex financial instruments, their decisions generally involve a balance between present and future needs, and they frequently have to assess the risks and uncertainty associated with these decisions. In addition, some financial decisions are so rare that they do not allow investors to learn from past mistakes, such as choosing a mortgage or a retirement savings plan. In this section, we provide a brief overview of the main behavioral biases observed among investors. These biases, identified by empirical or experimental studies, are now widely recognized and well documented in the scientific literature. They are classified as emotional when behaviors are influenced by the individual's emotions or mood, and as cognitive when behaviors result from the process of gathering and processing information. Our focus is on biases that are likely to lead investors to sub-optimal management of their asset portfolios.

4.1. Anchoring bias

The concept of anchoring, also known as anchoring bias, is of great importance in cognitive psychology. It refers to the propensity of investors to use a specific anchor value, such as a past price or performance level, as a reference for assessing the future value of a financial asset. For example, if an investor sees strong performance in a stock, he may overestimate its future value and be optimistic about its future prospects. Similarly, if a stock performs poorly, they may underestimate its future value and adopt a pessimistic attitude.

This tendency to base oneself on an initial reference point can lead to distortions in the decision-making process. The investor may neglect or minimize the importance of information contrary to his initial anchor, which can lead to sub-optimal decisions and a biased assessment of the situation.

Research by Kahneman and Tversky (1979) highlighted the importance of anchoring in human decision-making processes. They showed that individuals tend to adjust their assessments on the basis of an initial value, even when that value is arbitrary or irrelevant. This anchoring-influenced decision-making can have a significant impact on investors' financial choices, underlining the importance of taking this bias into account in investment analysis and management.

4.2. Representativeness bias

This behavioral bias, known as the representativeness bias, influences the way in which individuals evaluate information and make decisions, by causing them to attach excessive importance to the specific characteristics of a situation rather than to more general statistical data.

For example, when an investor observes a series of recent successes in the financial market, he may be tempted to believe that these successes are the sign of a lasting trend rather than the result of chance. This misperception can lead them to overestimate the probability of future successes and to make investment decisions based on irrational expectations rather than on an objective analysis of the data.

In addition, representativeness bias can lead investors to assess the quality of a stock on the basis of its recent performance. For example, if they see that the price of a stock has risen significantly in recent months, they may be inclined to regard it as a good investment, even if this price rise is the result of temporary factors or irrational speculation.

As a result, investors often tend to go with the flow and buy stocks whose prices are rising, in the hope of making a quick profit. However, this strategy can be risky, as it exposes investors

to speculative bubbles and potential market corrections. In reality, a more cautious approach based on an in-depth analysis of economic fundamentals can often lead to more sustainable and satisfactory results over the long term.

4.3. Regret bias

Regret bias, a concept studied in the fields of psychology and behavioral finance, has been explored in depth by researchers such as Daniel Kahneman and Amos Tversky. They have examined the cognitive and emotional mechanisms underlying decisions influenced by regret and fear, rather than by a rational assessment of the risks and potential rewards.

This bias clearly manifests itself when investors are upset or disappointed by a past investment decision that turned out to be a bad one. As a result, they are influenced by the fear of re-experiencing this negative emotion and this can alter their decision-making, pushing them towards irrational choices.

Regret bias can take different forms:

- An investor may be reluctant to sell a stock that has suffered significant losses, even if this would be rational from a financial point of view, simply because he fears regretting this decision if the stock were to recover.
- An investor may be tempted to blindly follow the recommendations of a financial expert to avoid regretting not having followed his or her advice in the event of success.

This bias underlines the importance of emotions in the decision-making process of investors and highlights the need to take these emotional aspects into account in investment management. A thorough understanding of regret bias can help investors to better assess risk and make more rational and informed decisions.

4.4. Availability bias

The availability bias reflects the propensity of individuals to assess the probability of occurrence of an event based on the ease with which they can recall examples of that type of event. This tendency can lead to an overestimation of the probability of events that are widely publicized and easy to recall, while events that are less publicized or less easily recalled may be underestimated.

For example, in the current context of extensive media coverage of terrorist attacks, individuals are likely to overestimate the probability of such an event occurring, even if it remains relatively rare in reality. On the other hand, they may underestimate the probability associated with events that receive less media coverage, but which may be just as important from a statistical point of view.

In the financial sector, after the shocks caused by the 2008 financial crisis and the 2011 sovereign debt crisis, availability bias can lead investors to overestimate the likelihood of another financial crisis. Past events of this type, widely covered by the media and easy to recall, can disproportionately influence investors' perception of future financial risk, prompting them to adopt more cautious strategies or avoid certain types of investment, even though current economic fundamentals do not necessarily support such a prediction of an imminent crisis.

4.5. Status quo bias

The concept of status quo bias, also known as inertia bias or change aversion, was identified and studied by Samuelson and Zeckhauser in 1988. It describes the natural tendency of individuals to prefer to maintain their current situation rather than make changes or explore alternatives.

Richard Thaler, a renowned American behavioral economist, has furthered our understanding of this bias in the context of economic decision-making. He has observed that individuals have a natural inclination towards stability and are often reluctant to leave their comfort zone.

Status quo bias influences behavior by encouraging individuals not to take action or change their behavior. They prefer to hold on to their existing assets rather than explore new investment opportunities, mainly because they are familiar with their current portfolio and fear the uncertainties associated with change.

This bias is also linked to the possession effect, which describes the tendency of individuals to overestimate the value of their current assets and be reluctant to sell them or exchange them for other assets.

As a result, the status quo bias can lead to under-diversified portfolios, as investors maintain an unbalanced asset allocation simply out of habit. This increases their exposure to risk and limits the opportunities for optimal returns. To counter this bias, it is essential that investors become aware of its impact and actively consider strategies to diversify their investments and minimize the risks associated with an excessive fixation on the status quo.

4.6. Familiarity bias

This bias leads individuals to invest more in the securities with which they are most familiar. Several studies have shown that when faced with securities offering equivalent probabilities of success, investors tend to favor those with which they are most familiar. This preference for familiar stocks manifests itself in different ways, and can give rise to geographical biases such as the local, regional or national bias, depending on the geographical location of the preferred

stocks. Similarly, employer bias occurs when investors overweight the stocks of the company that employs them in their portfolio.

Whatever its form, this bias leads to an under-diversification of investors' portfolios. By concentrating their investments in a limited number of familiar stocks, investors reduce their exposure to a diverse range of investment opportunities. This increased concentration exposes investors to greater risk, as the performance of their portfolio is closely linked to the performance of a few specific securities. As a result, a more diversified investment approach is often recommended to mitigate this risk and improve the chances of more stable returns over the long term.

4.7. Disposition bias

Disposition bias, identified by Shefrin and Statman in 1984, is a well-established behavioral trend in finance, which has significant implications for investment decisions. This propensity of investors to sell profitable securities quickly while holding on to loss-making securities for too long has been observed at various levels, both in the markets as a whole and among individual investors.

One of the reasons for this behavior can be attributed to a mistaken belief in so-called mean reversion. Investors may think that a stock that has made significant gains is about to fall, while they hope that a losing stock will rise again in the medium or long term. This biased perception can influence their sell or hold decisions inappropriately.

Furthermore, behavioral theories, such as prospect theory, suggest that individuals are risk averse in the area of gains and more inclined to take risks in the area of losses. Thus, when they make gains, investors prefer to secure their profits quickly to avoid any future losses, while they are more inclined to tolerate losses in the hope of a favorable turn of events.

Psychological factors such as the search for pride and the avoidance of regret can also influence this behavior. Investors tend to feel proud of their gains and seek to realize them quickly to reinforce their sense of success. On the other hand, they avoid acknowledging their mistakes by maintaining losses in the hope that they will be reversed, in order to avoid the regret associated with unsuccessful investment decisions.

Finally, the phenomenon of escalating commitment can also contribute to disposition bias. Investors may hesitate to close a losing position because of the resources (time, money) already invested in the initial purchase of the stock. They therefore continue to hope for a trend reversal rather than recognize their loss.

4.8. Overconfidence bias

The overconfidence bias mentioned above is one of the most widely studied phenomena in behavioral finance, alongside the disposition bias. It is often invoked by researchers to explain the high trading volumes on stock markets. Unlike liquidity needs, adjustments to new information or tax reasons, which alone cannot explain these volumes, overconfidence seems to be a key factor. It leads investors to trade large volumes too frequently, which can be detrimental to the overall performance of their portfolios.

This overconfidence bias is often associated with other concepts such as optimism bias, the illusion of control and the illusion of knowledge. Investors tend to attribute success to themselves and blame failure on others or bad luck, which can lead to excessive optimism and increased risk-taking. Nowadays, with the advent of the Internet and online trading platforms, investors often find themselves in an environment where they are responsible for their own decisions. This abundance of information and direct control over transactions can reinforce the feeling of over-confidence by giving the illusion of knowing and controlling events.

These behavioral biases highlight the complexity of the influences that shape investors' decisions, combining both cognitive heuristics and emotions. In addition, certain individual and collective factors, such as age, gender, religion and culture, can also influence the quality of financial decisions. For example, women generally have a greater aversion to risk, which may lead them to adopt more conservative strategies. Similarly, social interactions and the environment play a crucial role in investment decisions.

5. Limitations of the perspective

In the previous sections, we briefly outlined the various factors that restrict individual rationality, highlighting some of the many biases that influence investor decisions. The behavioral finance literature is now full of scientific articles that demonstrate not only the existence of these biases, but also their systematic and often predictable nature. Moreover, recent financial crises, such as the bursting of the dot-com bubble in 2000, the financial crisis of 2008 and the sovereign debt crisis in 2011, have heightened interest in this area of study. These phenomena can no longer be ignored, as they represent both major challenges and new opportunities for researchers, finance professionals and regulators.

5.1. For professionals

As a provider of financial services and advice, the financial institution must use this knowledge to guide its clients towards wise decisions, i.e. those that will serve their own interests. To do

this, it must rely on an understanding as precise as possible of the weaknesses of investors, whether cognitive or emotional.

The financial advisor must be able to identify the client's erroneous evaluations, the relevant information that he tends to neglect, and sometimes even his difficulty in assuming his previous decisions. He is therefore responsible for providing timely warnings about the pitfalls related to intuition, various biases, in order to avoid, for example, under-diversification of the portfolio, prolonged holding of financial assets, excessive trading activity, or inadequate evaluation of risks related to a financial investment.

It is evident that the financial sector may face conflicts of interest, as the client's objectives are not always aligned with those of the financial institution. For example, when the investor records unsatisfactory performance in his portfolio due to a large number of stock transactions, the bank may be satisfied.

For financial sector regulators, these biases or systematic errors also represent a major challenge in terms of protecting investors (and consumers of financial services in general) against their own weaknesses and against unscrupulous business practices. This is all the more crucial as the services sold can be complex and consumers rarely contract products such as mortgages or retirement insurance.

For example, insurance contracts covering low-probability events or low-value damages could be sold at unfair prices due to policyholders' difficulties in evaluating the risks covered. Our limited ability to estimate probabilities or our tendency to overestimate the risk of a widely publicized loss thus facilitates the exploitation of these biases by insurance companies.

5.2. For researchers

Shefrin (2009) summarizes the fact that finance is currently undergoing a paradigm shift, with the behavioral approach adding a more realistic dimension by offering alternatives to the often unrealistic assumptions of the traditional approach. It is hoped that research will succeed in exploiting and integrating the strengths of both approaches: the rigor of the traditional approach and the realism of the behavioral approach. This change of perspective is giving rise to a growing interest in multidisciplinary research that combines finance with other social sciences such as psychology, sociology and anthropology.

This new interest is reflected in the emergence of new studies on investor behavior, with more specific areas of investigation, such as financial literacy, financial coaching, financial psychology, investor personality traits, household finance, “neuro-finance”, and so on. At the same time, promising new currents of research are emerging, proposing new models. These

include behavioral portfolio theory, the behavioral asset pricing model and the adaptive markets hypothesis.

What these new models have in common is a better integration of investors' differentiated attitudes to gains and losses, as well as the behavioral factors that influence their decisions. For example, behavioral portfolio theory takes into account the fact that investors do not perceive their portfolio as a homogeneous whole. Instead, they mentally divide it into different assets, to each of which they associate a specific level of aspiration. According to this view, risk-free or low-risk assets correspond to investors with low levels of aspiration, while equities and derivatives are better suited to investors with high levels of aspiration.

The challenge of these new models is to provide a better understanding of reality and improve predictions of individual behavior. Ultimately, this should lead to better recommendations for financial professionals, regulators and even individual investors.

5.3. Moroccan Capital Market Authority (AMMC).

Regulators in Morocco are faced with a triple challenge. First, they must identify areas requiring intervention, that is, aspects that could be detrimental to investors or consumers.

Finally, they must choose the form of intervention: additional regulation or prior consumer awareness before any decision. Each of these elements represents a challenge because what may be a good decision for one investor can turn out to be disastrous for another. For example, in the United Kingdom, financial institutions often offer very low credit rates on credit cards during an initial period, with higher rates after this period. While this may seem advantageous to some, others may find themselves trapped in costly debt. Regulatory intervention to regulate this practice must therefore be carefully balanced to avoid hindering consumer choices. For Moroccan regulators, the implementation of such approaches requires a deep understanding of citizens' financial behaviors and an adaptation of regulatory strategies based on the specific needs of the local financial market. This also involves close cooperation with financial sector players to ensure fair and transparent practices, while protecting the interests of investors and consumers.

Conclusion

Behavioral finance constitutes a multidisciplinary research domain that seeks to better understand human behaviors in financial matters by integrating concepts and findings from psychology, sociology, and even anthropology. It has revealed the existence of numerous behavioral biases that manifest recurrently among investors, thus demonstrating systematic patterns that financial research must take into consideration. In other words, behavioral finance seeks to transcend the theoretical model of "homo economicus" to better grasp the reality of "homo sapiens" with all its imperfections and biases.

The advances in behavioral finance pave the way for significant challenges and perspectives. Their impact is not limited to the academic field; they are also crucial in guiding regulators and financial advisors in their mission to protect the interests of investors. Indeed, understanding investors' weaknesses helps to shield them from potential pitfalls associated with their intuitions, heuristics, emotions, or overconfidence. This in-depth knowledge of human behaviors in finance thus helps improve regulatory practices and financial advice, thereby enhancing investor protection against judgment errors.

Bibliography:

SNINEH, M. H., & MESK, H. . (2021). Les théories fondatrices de la finance comportementale. *International Journal of Financial Accountability, Economics, Management, and Auditing (IJFAEMA)*, 3(5), 962–972.

Shiv, B., Loewenstein, G., Bechara, A., Damasio, H., & Damasio, A. R. (2005). Investment behavior and the negative side of emotion. *Psychological science*, 16(6), 435-439.

Richard H. THALER, « Intégrer économie et psychologie », 2017, Académie Royale des sciences de Suède

Mangot, M. (25). ans de finance comportementale ou l'émergence d'un nouveau paradigme. *Grandeur et misère de la finance moderne*.

HARRAB , S. ., & TAOUAB, . O. . (2020). PEUT-ON TOUJOURS PARLER DE L'EFFICIENCE DES MARCHÉS FINANCIERS ?. *Revue Du contrôle, De La Comptabilité Et De l'audit* , 1(3)

MIHRAJ, Z. et MDAGHRI, AA (2022). L'influence de la psychologie sur la prise de décision d'investissement. *Revue internationale de comptabilité, finance, audit, gestion et économie* , 3 (4-2), 425-436.

Grandjean, Julien. *La finance comportementale ou comment la psychologie s'imisce dans des décisions dites rationnelles*.. Louvain School of Management, Université catholique de Louvain, 2020. Prom. : Devolder, Pierre.

Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases. *Science*, 185(4157), 1124-1131. <https://doi.org/10.1126/science.185.4157.1124>

Statman, M. (2017). Financial Advertising in the Second Generation of Behavioral Finance. *Journal of Behavioral Finance*, 18(4), 470-477. <https://doi.org/10.1080/15427560.2017.1365236>

Kahneman, D., & Tversky, A. (2013). Prospect Theory: An Analysis of Decision Under Risk. In *Handbook of the Fundamentals of Financial Decision Making: Vol. Volume 4* (p. 99-127). WORLD SCIENTIFIC. https://doi.org/10.1142/9789814417358_0006

Shefrin, H., Statman, M. (1985). “The Disposition to Sell Winners Too Early and Ride Losers Too Long: Theory and Evidence”. *Journal of Finance*, 40 (3), 777–90.

Samuelson, W., & Zeckhauser, R. (1988). Status quo bias in decision making. *Journal of risk and uncertainty*, 1, 7-59

Shiller, R. J. (1981). Do stock prices move too much to be justified by subsequent changes in dividends?.