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Key determinants influencing investor decision in financial markets: Systematic Literature Review

Déterminants clés influençant la décision des investisseurs sur les marchés financiers: Analyse systématique de la littérature

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Summary

Decision research has experienced a significant growth, especially after the inclusion of behavioral factors in the equation. This has led to the rejection of the idea that decision makers are purely rational, but there is still a gap in the literature to understand this phenomenon in the context of financial markets.

The objective of this article is to present the notion of decision-making and the theories that explain it, including decision theory, perspective theory, theory of planned behavior, and traditional finance theory.

Furthermore, considering that investors play a pivotal role in financial markets and their decisions can have a significant impact, we raise the question of the primary factors that can influence their decision-making process.

Thus, this research aims to conduct a theoretical examination basing on sysyematic literature review while trying to define determinants that can influence investors' decision in financial markets.

According to this article, a study of 23 articles from the Google Scholar database revealed the identification of four primary factors that can impact an investor's decision-making process. In fact, the findings obtained from these results can be advantageous not only for researchers but also for individuals involved in or connected to the financial markets.

Keywords : Decision-making ; investors ; factors ; financial market ; finance.

Résumé

La recherche sur les décisions a connu une croissance significative, en particulier après l'inclusion de facteurs comportementaux dans l'équation. Cela a conduit au rejet de l'idée que les décideurs sont purement rationnels, mais il y a encore une lacune dans la littérature pour comprendre ce phénomène dans le contexte des marchés financiers.

L'objectif de cet article est de présenter la notion de prise de décision et les théories qui l'expliquent, notamment la théorie de la décision, la théorie des perspectives, la théorie du comportement planifié et la théorie financière traditionnelle.

Par ailleurs, considérant que les investisseurs jouent un rôle central sur les marchés financiers et que leurs décisions peuvent avoir un impact important, nous nous interrogeons sur les principaux facteurs qui peuvent influencer leur processus décisionnel.

Ainsi, cette recherche vise à effectuer un examen théorique basé sur une revue systématique de la littérature tout en essayant de définir les déterminants qui peuvent influencer la décision des investisseurs sur les marchés financiers.

Selon cet article, l'étude de 23 articles issus de la base de données Google Scholar a permis d'identifier quatre facteurs principaux pouvant influencer le processus de prise de décision d'un investisseur. En fait, les conclusions obtenues à partir de ces résultats peuvent être avantageuses non seulement pour les chercheurs, mais aussi pour les personnes impliquées dans les marchés financiers ou liées à ceux-ci.

Mots clés : Prise de décision ; investisseurs ; facteurs ; marché financier ; finance.

Introduction

Decision-making is a complex process that consists of making a choice based on information and intuition, between several possible options, in order to act in a social context. It is not always about choosing the best option, but about understanding the situation in order to make the best decision. (Simon, (1977) ; March, (1994) ; Zsambock & Klein, (2014).

In fact, decision making is situated on a continuum between absolute rationality (in the context of simple problem solving, for example) and limited rationality (in the context of simple or complex situations). (Eisenhardt & Zbarcaki, (1992).

Based on the above, we can take the example of librarian, when he decides whether or not to purchase a journal for his patron, he gathers information about the supply, the preferences of his patrons, and the statistics on the use of the journal. In the case of a renewal, the librarian may not have complete information on all of his users, so he can chooses the solution that he deems most satisfactory. Tp be precise, according to Bergeron (2004), a decision-maker can be in three different states when making a decision :

(1) A state of certainty in which the environment is fully known and the various options and their consequences are understood ;

(2) A condition where the environment is unpredictable and there are many possible outcomes, making it difficult to assess the risks involved ;

(3) A state of ignorance occurs when the environment is uncertain and it is not possible to calculate the probabilities of each alternative.

Besides, Lin, Cole & Dalkir (2014) affirm that it is important to carefully evaluate the information to see if it is relevant, understandable, reliable, and accessible, and then make the decision based on that information.

In a context of uncertainty, the information that allows an individual's state of knowledge to be modified (Choo, (2002)) would therefore contribute to improving his or her decision making. (Drevon and al. (2018)).

Furthermore, the decision to invest or not is a highly subjective one, influenced by a variety of factors, including the decision maker's beliefs, visions, emotions and intuition, as well as his or her degree of risk aversion. In terms of strategic decisions, such as investment decisions, this has many implications, especially in terms of planning. The decision is usually based on the investor's past experiences, as well as his or her assumptions about the potential gains that can be made from various opportunities.

According to Harcourt and al. (1967), when making investment decisions, the investor takes into account his expected return, but in return for a risk. When the expected return on investment far exceeds the cost of financing, the investor is in a good position to initiate the investment process and make the decision to invest. Then, the investor's decision in the financial market, especially whether or not to invest, is highly subjective, based largely on the costs he or she will incur if he or she decides to invest, as well as on his or her own knowledge and perception of risk. (El Majhed, H., & Rigar, S. M. (2020))

In this context, it seems important to ask several questions to resolve his problem of decision making, namely :

- What are the theories that focus on the decision-making process ?
- What are the main factors that influence decision making ?
- What are the key factors that can impact financial market decision-making ?

The research methodology adopted for this article is a "Systematic Literature Review" (SLR). This method involves a structured and replicable approach to identify, select, synthesize, and critically evaluate relevant research articles that meet specific eligibility criteria. The main characteristics of an SLR include clearly stated objectives, predefined eligibility criteria, explicit and reproducible methodology, systematic and comprehensive literature search, assessment of the validity of included studies, and systematic presentation of characteristics and results. The article's research question is "What are the factors that influence the decision-making of investors in the financial markets," and by using the SLR method, the authors conducted a comprehensive search, analyzed various sources, and synthesized the information to provide a comprehensive overview of the factors influencing investor decision-making in financial markets.

Thus, this article will be articulated around four sections: the first section will be devoted to the study of the main theories which treat the decision aspect; the second will present the research methodology concerning the study of the systematic literature review, before moving on to the third section which will present the results of our study, in particular the factors impacting the decision making of investors on the financial market, and the last section will provide a discussion of the findings.

1- Factors impacting decision-making

To assimilate the term "decision-making", it is necessary to go through two phases. The first one is the definition of the term, while the second will focus on the theories that can explain this decision-making.

1.1 The decision making

Decision-making is the process of choosing one of several options. It is a complicated process that involves the analysis of various personal, technical and situational factors. In fact, investment decisions pose a challenge for stakeholders, and certain personal factors, such as age, education and income, Play a crucial role in the decision-making process. On the technical side, there are different financial models that can be followed, while considering situational factors like current market conditions to make decision.

In the financial market, it is essential to understand human behavior in order to make good decisions. This involves compregending human thought processes, which is facilitated by the study of cognitive psychology (Chandra, (2008)). (David Marine, (2015))

In this specific context, several authors have indeed studied the link between environmental monitoring and decision making (Pfefer & Salancik (1978) ; Choo & Auster (1994). Indeed, they share many similarities in terms of the characteristics of the underlying process and the decision support objectives (Drevon, Maurel & Dufour 2016; Drevon 2017). In 1977, Nobel Prize winner Herbert Simon proposed the model of limited rationality model based on cognitive psychology.

However, the Markowitz model is a simplified representation of a complex reality. It is a decision-making tool that indicates to each investor the optimal solution to his problem : the combination of securities with the best risk/return ratio adapted to his degree of risk aversion. The central idea here is that any rational "risk-averse" investor will demand, in order to "climb one more rung on the risk ladder", an increase in financial return more than proportional to the increase in risk to which he is consenting, and all the higher the greater his aversion to risk (Nihat Aktas, (2004)).

The persistent presence of multiple anomalies, which can be added to a model to increase its explanatory power, is a major challenge for finance researchers.

Thus, the analysis of the main decision-making models allows us to say that there is not only one model to be retained and that we can learn from several of them. Moreover, Eisenhardt & Zbaracki (1992), conclude that "strategic decision-making is best described by an interweaving

of both boundedly rational and political processes". Decision-making is a process in which you make a choice between several options, based on the information you have and your feelings about those options. It is not about choosing the best option or choosing between the options you have. The objective is to understand the situation and decide which option will be best for everyone involved, based on what you know. (Drevon and al, (2018))

The crisis impact the decision of inves in this cases The national and worldwide shutdown of activity that had a plummeting on the profits of companies and therefor impacted their gross amount of public revenues. (El Mouissia and Benabdelhadi A. 2022))

1.2 Theories explaining decision-making

This part will deal different theories that have explained decision-making, while illustrating the factors that can infulencer it. Among these theories we find : the theory of decision, the theory of perspectives, the theory of plained behaviour and the traditional theory of finance.

1.2.1 The theory of decision

Daniel Bernoulli can be considered as the father of modern decision theory since he was the first to propose the concept of the "expectation of gain utility". The aformentioned criterion is constructed by considering the potential integration of various forms of uncertainty, consequently, we will have a theorical framework that can be applied to decision problems, Faced by agents situated in diverse environments.

It should be noted that beyond the direct users of a theory's recommendations, the rationalization of decisions is an essential element in the construction of new theories involving decision makers in the humanities and social sciences. Economic theory is based on the description of the behavior of actors (consumers, producers) ; management models must make assumptions about the representation of the objectives to be achieved.

The following situations call upon decision theory ; they help to clarify the different aspects. One of the main objectives of this theory is to supply the means of constructing quantified descriptions of problems as well as criteria for providing solutions. (El Majhed, H, & Rigar, S, M. (2020))

1.2.2 The theory of perspectives

This theory was introduced by Danierl Kahneman and Amos Tversky in the 80s. It calls into question the theory of "expectation of gain utility" while trying to introduce the behavioral

approach to expose its impact on investment decisions. (Smith and al. (2003), Mishra (2000) and Zahra (2005))

These two authors explain through their theories that people are averse to loss based on their behavior, they feel this fear of losing, but they find pleasure in winning, In this context, they tested the validity of this observation and estimated as results that the individual feels the pain of losing twice as much as the pleasure of winning. This explains their feeling of risk aversion. (El Majhed, H., & Rigar, S. M. (2020))

1.2.3 The theory of planned behavior

This theory was initiated by Ajzen (1985), it is based on the observation that human behavior in a specific context can be predicted and explained by (Koropp and al. 2014) :

- ✓ His attitude toward behavior : The decision maker's assessment of the consequences of the behavior is favorable or unfavorable ;
- ✓ Subjective norms : relate to the decision maker's beliefs, preferences, and the opinions of those around him about whether or not the potential behavior should be acted upon ;
- ✓ Control over the behavior : This refers to the degree of ease or difficulty of performing the potential behavior.

In fact, Grouping the three variables initiates the logic of planned behavior, Ajzen assume that the more the three variables are sharp, the more the intention to put the behavior into action increases (El Majhed, H., & Rigar, S.M. (2020)).

1.2.4 The traditional theory of finance

Generally, the primary objective when taking financial decisions is to optimize the firm’s value (Shareholder wealth), and reduce its costs, while taking into consideration financial risks.

Based on the accounting concept of financial leverage, the existence of a neutral point of profitability of the company makes it possible to define debt as an absolute advantage for the shareholder (positive financial leverage). Schwartz and Aronson (1967), Illustrate the existence of significant industrial effects of debt ratios, which they interpret as evidence in favour of optimal debt ratios.

Actually, traditional financial theory is based on the classical assumption of rationality which is the basic concept of all models of financial decision optimization developed by classical authors such as : Markowitz (1952), Sharpe (1964) and Fama (1970). (Lachaari & Benmahane, (2020))

In order to delve into this theory, it is crucial to adress the issue of transparency within financial markets.

The phenomenon of transparency has invaded our daily life and more particularly the field of investment in the financial market. "Transparency" is implicitly linked and represents an indispensable condition for building trust (Bentle and Seidenglanz (2008); Bentle and Seiffert (2009)). Besides, transparency remains less an option than a necessity for organizations that wish to restore the trust of their stakeholders and maintain a good relationship with them. While transparency can build stakeholder trust and ensure financial market stability, it can also lead to sub-optimal outcomes if poorly implemented. (Jean-Pierre Allegret & Camille Cornand, (2006))

Transparency is seen as a new mechanism for achieving trust as long as it opens professional practice to public scrutiny (Bunting (2004), p.6). In business ethics, transparency is an informational mechanism necessary for trust, justice, and prudence (See Das Neves & Vaccaro, (2013)). However, leadership studies generally link leadership transparency to trust and effectiveness (Schmitz, Raggo & Bruno-van Vijfeijken, (2012)). In general, transparency is presented as a condition for better governance because it is seen as a way to reduce informational asymmetry and opportunistic behavior of agents (Benjamin Fung (2014)). (Omayma Dikaoui, (2020))

In this context, the investor needs environmental information to make an informed investment decision (Hanen Khemakhem and Hédi Turki (2007)). When it comes to investments, it is difficult to predict when it might become obsolete or when it would no longer be profitable to keep it. Indeed, new technologies can quickly make old investments obsolete. But even if we can't predict when this will happen, we can still decide whether or not to downgrade an investment based on other factors. For example, we can decide to downgrade an investment if it is no longer profitable or obsolete ; the traditional view of investment is that it is important for companies to make the decision to invest in things like new equipment or new businesses. But there is a different view of investment that is based on how companies should act in a global market. This view is called Keynesianism. It says that companies should make decisions based on what will benefit the economy as a whole, not just one individual company. In Keynes' words. Investment is also a need of its own, a creative impulse, as well as a voluntary choice, based on rational data. The project of investing, by definition, belongs to the imagination (Y. Gaillard and G. Thuillier (1968)). In general, one is content to remodel structures, combine factors differently and refine techniques. As a projection of the past, the investor's behavior is

predictable, given, and therefore vulnerable : it can be easily deciphered by competitors, and cause problems if the projection is not far enough from the initial point. The business of investing consists of having interference factors and ensuring the autonomy of the projection with respect to the past. (Y. Gaillard and G. Thuillier (1968)).

Since the last global financial crisis of 2008, the financial markets are becoming more and more interconnected, and the commodity market constitutes one of the most alternative markets for the traders, hedgers, and the speculators agents. As a result and instead of interesting in one risk factor, the market markers are interested in other risk factors. This has direct impact on their financial position. (Chbili.S & Rafiki. A (2023))

2- Research methodology

The methodology adopted for this article is "The systematic literature review" (**SLR)**, while incorporating all the necessary for its implementation.

To process this part effectively, a series of steps need to be undertaken. First, we will proceed with the definition of this method. Second, we will study the steps taken to select the articles on which we based our study.

2.1 Systematic literature review

This method can be defined as « a clearly formulated question review that uses systematic and replicable methods to identify, select, synthesize and critically evaluate all relevant research that meets predefined eligibility criteria to answer a given research question, and to collect and analyse data from studies that are included in the review ». (Nambiemaa and al, (2021))

The main characteristics of an SLR are the following :

- ✓ Clearly stated objectives ;
- ✓ Predefined eligibility criteria ;
- ✓ Explicit and reproducible methodology ;
- ✓ Systematic and comprehensive literature search ;
- ✓ Assessment of the validity of included studies ;
- ✓ Synthesis and systematic presentation of the characteristics and results of included studies. (Nambiemaa and al., (2021))

By adopting this method for our article, we proceeded with the formulation of the research question, "What are the factors that influence the decision- making of investors in the financial markets", then we conducted research to select and collect information from many sources

regarding the question posed, after we performed a data extraction, and concludes with the evaluation of the study's quality.

2.2 The process of selecting articles

The articles chosen for inclusion in our study were carefully selected through « Google scholar», based on specific criteria and consideration.

To began, we start by entering the first keyword "Decision making", this resulted en 591,000 findings. Then, search terme of "Impact of decision making" limited the results to 277,000.

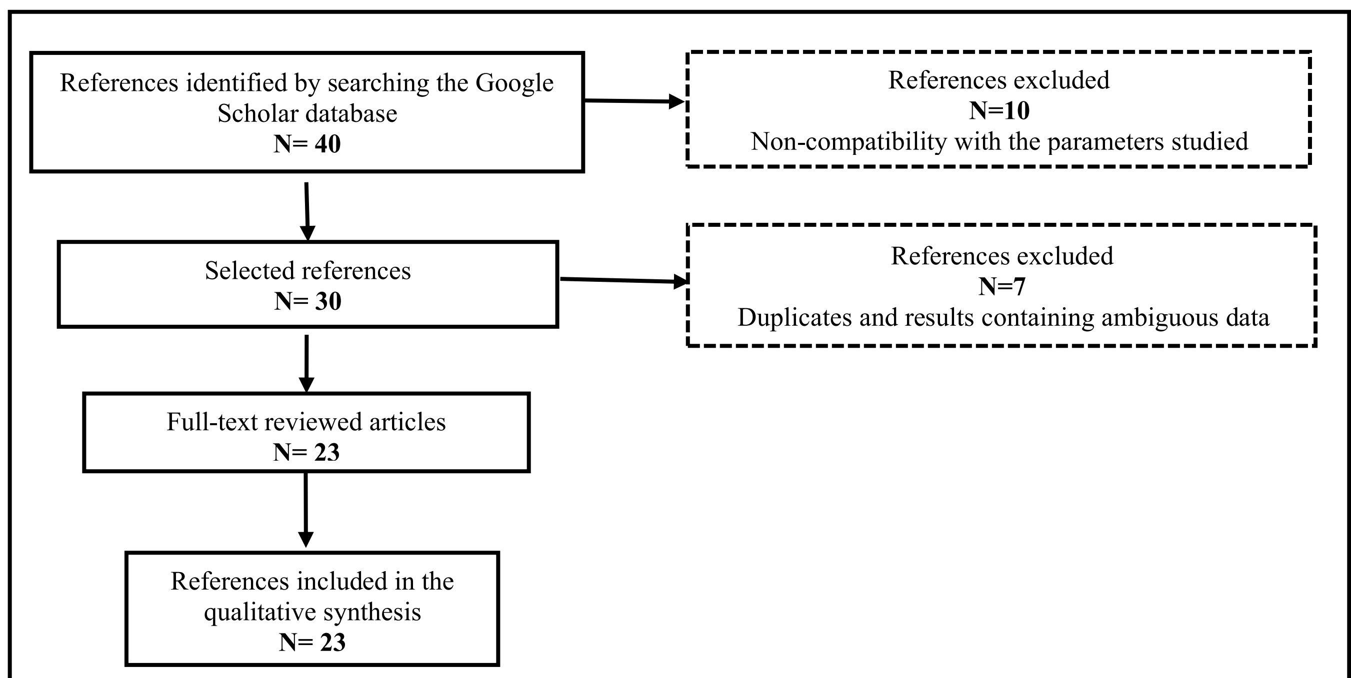
Furthermore, to be more specify, we tried to search the term of "factors that impact the decision making" and we obtained 163,000 results,

"Factors that impact the decision making of investors" permit to have 16,800 results. Then, to conclude this step we tried to introduce the term "factors that impact the decision making of investors in the financial market", we obtained the results of 307 articles.

After excluding the repetitive searches, articles containing unclear data, and searches that are unrelated to our theme, we were able to process 23 articles and tried to attempted to clarify and categorize the addressed factors.

The following diargam presents recapitulation of all the steps adopted for the systematic literature review for our study focus.

Figure 1 : PRISMA diagram



Source : prepared by the authors

2.3 Guatered data from references

Based on the references selected for the qualitative analysis of this study, multiple factors were detected that can influence decision-making, namely : trasparency of information, mimicry, psychology, emotions, the patent and IFRS.

2.3.1 Transparency of information

In fact, it is recognized that information on intangibles impacts investment decisions and investors' evaluation processes (Cazavan-jeny, (2004) ; Churyk, (2005) ; Garcia- Meca and Martinez, (2007)). This creates situations of particularly acute information asymmetry between company managers and investors (Schleifer and Vishny, (1989)). For investors, accounting information, by impacting their investment decisions, represents an important source of control over the opportunistic behavior of managers (Bellalah and al., (2010)). (Gonné Jérôme and al. (2021, p.43))

It is important to mention that one of the tools that enables managers to produce information useful for making investment decisions is financial accounting (Martinez, 2004).

In an economic and financial context of internationalization of business transactions and investments, benchmarks for the quality of financial and accounting information within a company are sought by the different stakeholders of the organization (Koubaa Riguen and Jarboui, (2014)). Good quality financial and accounting information reduces information asymmetry between managers, shareholders, and lenders, which can help to limit agency problems (Fan Yu, (2005)).

In fact, information is used to reduce uncertainty about the firm's cash flows and to improve investment decisions. Investors need to have an overview of all the value-creating factors of the company to better assess its potential and ability to deliver sustainable results. (Gonné Jérôme and al. (2021, p.45))

The tax definition, however, has a decisive influence on the investors' decision. (Y. Gaillard and G. Thuillier (1968))

Several empirical studies have found different results on the market response and have developed with divergent results. Some, such as the Foster, Jenkins and Vickray (1986) study, suggest that there is no reaction when publishing annual reports and accounts, while others, such as Firth (1981), find that there is an informational effect.

The study by Beaver, (1968) is the first study to measure the reaction of the US financial market to annual earnings announcements. The objective of this study was to test whether or not

earnings announcements are useful for investor decision-making. In other words, it was a question of verifying whether the announcement of results brings new information likely to modify investor behaviour or whether, on the contrary, it has no effect because investors are already aware of the informational content of the results well before their publication. (Elleuch Sarra, (2011))

Despite these criticisms, many authors (Megna and Klock, (1993), (2000); Chauvin and Hirschey, (1994); Lev and Sougiannis, (1996); Barth and Karsznik, (1999); Barth et al, (2000); Lev et al., 2003; Cazavan-jeny, 2004; Churyk, 2005; Lev et al., 2005; Garcia Meca and Martinez; 2007) who continue to advocate that accounting information on intangible investments continues to impact investors' investment decisions and valuation processes. (Bellalah and al., (2008))

Rational anticipation is based on the idea that we must take into account all the new information we know. This is what makes our predictions as effective as possible. (Christian Walter, (1962))

We find this idea according to which, ideally, prices should provide all the signals necessary for decision-making (investment or disinvestment) : "We must look at the price system as a mechanism for communicating information if we want to understand its real function. Through a kind of symbol, only the most essential information is transmitted". (P. A. Cootner, (1962))

2.3.2 Mimicry

Mimetic behavior in financial markets can lead to a wave of large-scale fund movements. In such markets, uncontrolled mimetic dynamics can lead to crises of confidence that can lead to general insecurity. Mimicry in financial markets is problematic when it accelerates and traders are forced to quickly align their behavior with that observed. Here, the credibility or relevance of economic information is no more fundamental. In such circumstances, it is sufficient to anticipate the trend in market behavior as best as possible and to stick to it. There is little confidence that quickly wins over all traders. (Benyahia-Taibi (2009))

2.3.3 Psychology, emotions and behavioral biases

- **Psychology**

The decision to do something depends on many factors, including how a person feels and thinks. Therefore, we consider psychological and behavioral factors when making decisions. Isen (1987), Schwarz (2002), and Au et al. (2003), certifies that sentiment affects information processing and thus market-related decisions. Investor sentiment is a belief in future cash flows and investment risk that cannot be supported by fundamentals (Chang et al., (2012)). Besides,

Baker and Wurgler (2007) define it more specifically as optimism (high sentiment) or pessimism (low sentiment) about stocks. (Bengrich and al., (2021))

In addition, investment decisions are affected by the number of psychological factors when making an investment decision. These factors are identified as overconfidence and optimism, heuristics, faith, pessimism, herd behavior and confirmation bias. Among these biases, heuristics, confirmation and pessimism make the investor more rational while biases like faith, overconfidence and optimism vary from investor to investor and these biases are responsible of the irrational behavior of the investor (Syed and Bansal, (2018)). Jayaraman, Vasanthi, and Ramaratnam (2012) affirm that the investor's decision is based on their feeling and emotions which is based on their psychology. These things include their expectations, optimism, and confidence. These factors affect the market, leading to bullish and bearish market conditions. In alignment with this idea, Brown and Cliff (2004) specify a strong association between sentiment and contemporary stock returns, as an example, they noted (Brown and Cliff (2005)) that the sentiment affects the mispricing of the US stock market. (Bengrich and al. (2021))

Furthermore, Lee and al. (2002) proved that excess returns are simultaneously positively correlated with changes in sentiment, and that the magnitude of bullish (bearish) changes in sentiment leads to downward (upward) revisions in volatility and higher (lower) future excess returns. Also, Baker and Wurgler (2006) argue that market-wide sentiment should exert greater effects on stocks. Moreover, Ben-Rephael and al. (2012) prove that investor sentiment was positively correlated with market excess return in the same period and negatively correlated with excess return in later periods.

Baker and al. (2006) affirm that the sentiment is a contrarian predictor of stock returns, in other words, the negative sentiment is often associated with higher stock prices, while positive sentiment is often associated with lower stock prices.

In the same way, Wang and Sun (2004) found that investor sentiment has a significant impact on stock market returns in Shanghai and Shenzhen, and is often responsible for correcting stock market fluctuations. The study of Huang et al, (2014) reveal that there is a distinct cross-sectional effect between the investor sentiment index and the expected market return. (Bengrich and al. (2021, p.70))

Chen et al. (2013) one of the factors that affect a stock's return is the business cycle. This includes those control variables of a stock's return such as inflation, growth, and unemployment rates.

Sood (1995) studied the relationship between macroeconomic factors and stock returns in the Indian stock market over a pre-liberalized period from 1986-1989. The results of this study showed that inflation rate, interest rate and growth rate can be considered as the systematic risk factors affecting stock returns.(Bengrich and al. (2021,p.75))

- **Emotions and behavioral biases**

Numerous observations have shown that our emotions are the source of several biases that affect our decision-making process. Our moods can have a significant impact on our perception of risk. (Right and Bower, (1992))

The researchers found that being in a good mood can help us to be more risk-taking and optimistic, while being in a bad mood can make us more critical. They believe this is because good moods make us more willing to take risks, while bad moods make us more cautious. What is most interesting is that people seem to be able to control their emotions a lot, depending on their mood.

In 1998, a researcher named Roy Baumeister discovered that our ability to control our emotions is limited. This means that we are influenced by our emotions in our decision making, which can lead us to act irrationally in the markets. Moreover, David Hirshleifer (2001) found that the individual has two cognitive systems, one that allows him to reason from complex and multiple information, and the other that allows him to make quasi-decisions. These systems are automatic, which means that they are influenced and controlled by our emotions, which means that we can use our feelings to help us make better decisions. (Daoudim, (2020))

Investors' feelings are one of the major determinants of market movements. In fact, studying emotions that produce financial actors seems important to understanding investment decision making. In that context, behavioral finance is the evolving field of study that investigates the psychological factors that affect the decision-making process of individuals when faced with uncertainty (Nosfinger, (2001)). Economists and financiers behave in accordance that psychological factors influence investment decisions. (David Marine, (2015))

Thereby, the objective of public authorities was to improve the functioning of the financial system and to raise the level of investor confidence (Ball, (2009); Hart, (2009); Zingales, (2009)). (Constant Djama (2013, p.134))

The notion of investor sentiment was introduced by Nicholas Barberis, Andrei Shleifer and Robert Vishny (1998). Fisher & Statman (2000) then Baker & Wurgler (2007) studied the relationship between investor sentiment and stock performance in financial markets. Brown and Cliff (2004) show that there is a negative Sentiment-Profitability relationship on the level of the

US stock market and find a difference between the Profitability / Sentiment relationship and the Profitability / Sentiment level relationship while Kahneman and Tversky (1979) prove that the investor is sensitive to the change in wealth and not to total wealth. Brown and Cliff (2005) found no correlation between investor sentiment and future shortterm stock performance and a negative correlation between the two variables for the medium term. (Chniguir and al. (2022, p.356))

2.3.4 The patent and IFRS

Robb and Robinson (2014), Zacharakis and Meyer (2000) show that professional investors consider the prior experience of the executive as an uncertainty-reducing factor in their investment choice. Indeed, according to the work of Villiers and Sharma (2017), by providing the market with accurate information about intellectual assets, investors can make better decisions and firms can obtain financing at lower costs. Patent ownership also provides valuable technical information that would otherwise be difficult to share (Cohen and Lemley, (2001)). (Dardour and al., (2018, p.88))

There have been many research studies on how IFRS disclosure can help reduce the problem of information asymmetry. Stock liquidity is a good indicator of information asymmetry because it reflects the ease with which investors can trade stocks (Diamond and Verrecchia, (1991); Kim and Verrecchia, (1994)). In fact, when investors know a lot about a company, they can be more confident that each stock transaction is a fair trade, this increases the liquidity of the company's stock, which can lead to better financial information being made available to the public. Then, this information can be used as a good starting point for stock market participants, such as investors, when making their decisions. (Oubahou and al., (2022))

The information provided by numbers and indicators tell us how companies are performing and can help people make important economic decisions. Based on this, some researchers are interested in investigating whether the IFRS standards change the accuracy of financial analysts' forecasts. Based on the study of JiaoJiao, King, and Mertens (2012), they found that financial analysts' forecasts become more accurate after the adoption of IFRS in a particular country. However, Jönsson, Jansson and von Koch (2012) affirm that the accuracy of financial analysts' forecasts in the United Kingdom did not change after IFRS adoption. (Britel and al., (2020))

3- Results

Based on the systematic literature review adopted for our study, It can be concluded that there are multiple factors that can influence decision-making of investors in the financial market as observed in the context of the previous axis.

Via out chosen references, itw as observed that :

- ✓ **The factor of information transparency** was cited by 13 of 23 articles, with a dominance percentage of **56%**. According to the authors (Cazavan-jeny, (2004); Churyk, (2005); Garcia- Meca and Martinez, (2007)), the information on the intangible impacts the investment decisions and the evaluation processes of the investors also for (Bellalah et al. (2010)) the accounting information, impacting their investment decisions ;
- ✓ **The mimicry factor** demonstrated by a single literature review is **5%.** Mimetic behavior in the financial markets can lead to a large-scale wave of fund movement ;
- ✓ **The psychological factor** is shared between three reviews represent **13%.** According to authors Jayaraman, Vasanthi and Ramaratnam (2012), the way an investor decides to invest his money is based on how he feels, which is based on his psychology. In fact, the Conception of Emotion where neuroscience and psychology come together to offer a dynamic understanding of emotion. In this framework, the latter could be likely to influence decision making in line with the work of Dane & Georges (2015) Andrade and Ariely (2009) ;
- ✓ **The patent and IFRS factor** that was mentioned by three reviews account for **13%**. According to authors JiaoJiao, King, and Mertens (2012), financial analysts' forecasts become more accurate after the adoption of IFRS in a given country.

It can be deduced from this literature review that there are many factors that influence investor decision-making in the financial market.

4. Discussion

This adopted methodology, which is « The systematic literature review », carried out an analysis on decision-making in financial markets. The topic was especially to identifiy multiple factors that could have a direct or indirect effect on making decision in financial markets.

Our study was based on 23 articles away from Google Scholar database.

Accordingly, it was found that four main factors can influence investors decision-making in the financial market.

Many authors (Megna and Klock, (1993 and 2000); Chauvin and Hirschey, (1994); Lev and Sougiannis, (1996); Barth and Karsznik, (1999); Barth et al. (2000); Lev et al. (2003 and 2005); Cazavan-jeny, (2004); Churyk, (2005); Garcia Meca and Martinez; (2007)), defended the first factor, which is **transparency of information**, while pretending that accounting information on intangible investments continues to impact investors' investment decisions and valuation processes.

Whereas, Isen (1987), Schwarz (2002), and Au et al. (2003), attest that sentiment affects information processing and thus market-related decisions, **investor sentiment** is a belief in future cash flows and investment risk that cannot be supported by fundamentals (Chang et al. 2012). In the same way, Baker and Wurgler (2007), Syed and Bansal (2018), Jayaraman, Vasanthi and Ramaratnam (2012), Brown and Cliff (2004), . Chen et al. (2013) and others, supported the big influence of psychology and emotions of investor for decision-making in financial markets.

Although, it exist a restricted group of authors who consider that the patent and IFRS factor can impact investor decision- making in financial markets (Robb and Robinson (2014); Zacharakis and Meyer (2000); Villiers and Sharma (2017); (Cohen and Lemley, (2001); JiaoJiao, King, and Mertens (2012)).

Conclusion

In an economy driven by technological advancements and heightened competitiveness, effective decision-making in financial markets has emerged as a critical determinant of investment success. Thus, the primary objective of this study was to identify the factors influencing decision-making in the financial market, focusing on individual and situational variables in articles predominantly in the French language.

This research has made valuable contributions with significant implications for both managerial and scientific perspectives. The study's key findings shed light on the two primary factors that have the most significant impact on decision-making by investors in financial markets : the transparency of information and the psychological and emotional aspects of investors. Understanding these influential factors can empower investors and financial professionals to make more informed and rational decisions.

For stakeholders in financial markets, the insights from this research hold important managerial implications. Recognizing the critical role of information transparency, financial institutions can strive to improve the accessibility and reliability of information provided to investors.

Enhanced disclosure practices and transparent reporting can foster trust and confidence among investors, potentially leading to more informed investment decisions.

Moreover, understanding the psychological and emotional aspects of investors can aid financial managers in devising strategies that cater to investors' emotional needs. Educating investors about the impact of emotions on decision-making and encouraging a balanced, long-term perspective may help reduce impulsive actions during market fluctuations.

From a scientific standpoint, this study contributes to the existing body of knowledge on financial decision-making. By providing a systematic literature review on the identified factors, this research serves as a foundational reference for further empirical studies in this field. Future researchers can build upon this analysis to explore additional variables, conduct cross-cultural studies, and investigate the factors' dynamics over time.

The findings of this study offer several perspectives for future research and applications. Further investigations can explore the interplay between different factors and how they jointly influence investment decisions. Additionally, considering studies from diverse linguistic backgrounds and regions can broaden the understanding of decision-making in financial markets globally.

While this study has revealed valuable insights, it also prompts further questions to deepen our comprehension of financial decision-making, especially in the Moroccan context. Exploring the existence and impact of additional, more significant factors can enhance our understanding of investors' behaviors and decision processes, ultimately contributing to the development of more robust investment strategies.

It is essential to acknowledge the limitations of this study. The predominance of French-language articles might restrict the generalizability of the findings. Future research can overcome this limitation by incorporating studies in other languages to capture a broader spectrum of perspectives.

In conclusion, this research brings significant value to all stakeholders interested in financial markets. The identification of influential factors, the establishment of a comprehensive database, and the potential for guiding financial decisions offer practical benefits. Moreover, the scientific implications lay the groundwork for further investigations and advancements in the understanding of financial decision-making. As the financial landscape continues to evolve, research endeavors like this will continue to shape and enrich our understanding of decision-making processes in the dynamic world of financial markets.

Annex 1 : References used to analyze the main determinants influencing the investor

Authors	factors
Choo 2002 ; Citroën 2009	In a context of uncertainty, information that can modify an individual's state of knowledge would therefore contribute to improving his decision-making.
Harcourt et al 1967	the investor takes into account his expected return, but in return for a risk.
Chandra, 2008	Understanding how people think, which is aided by the study of cognitive psychology
Markowitz (1952), Sharp (1964) et Fama (1970)	Rationality which is the basic concept of all financial decision optimization models
Schwartz et Aronson (1967)	show the existence of significant industrial effects of debt ratios that they interpret as evidence in favor of optimal debt ratios.
Dane & Georges (2015) Andrade et Ariely (2009) Schleifer et Vishny, 1989 Bellalah et al., 2010 Martinez, 2004 Fan Yu, 2005	Information asymmetry
Pfefer & Salancik 1978 ; Choo & Auster 1994, Drevon, Maurel & Dufour 2016 ; Drevon 2017, Herbert Simon 1977	Information, experience and intuition of the decision maker and the social context.
Bentle et Seidenglanz, 2008 ; Bentle et Seiffert, 2009, Benjamin Fung 2014, Jean-Pierre Allegret Camille Cornand, 2006, Bunting 2004, (see das Neves & Vaccaro, 2013, Schmitz, Raggo, & Bruno-van Vijfeijken, 2012, Cazavan-jeny, 2004 ; Churyk, 2005 ; Garcia- Meca et Martinez, 2007	Information transparency

(Chang et al., 2012). Baker et Wurgler (2007) Brown et Cliff (2005) Lee et al., (2002) Baker et Wurgler (2006) Ben-Rephael et al., (2012) Wang et Sun (2004)	The feeling
JiaoJiao, King et Mertens (2012) Jönsson, Jansson et von Koch (2012)	IFRS
Syed et Bansal, 2018	overconfidence and optimism, heuristics, faith, pessimism, herd behavior and confirmation bias
Jayaraman, Vasanthi et Ramaratnam (2012)	Psychology
Right et Bower Roy Baumeister David Hirshleifer 2001 (Nosfinger, 2001) Ball, 2009 ; Hart, 2009 ; Zingales, 2009	Emotions and behavioral biases
Ajzen	attitude towards the behavior, subjective norms, the control he will have over the behavior

Annex 2 : References used for systematic literature reviews

Authors	Factors
Cazavan-jeny, 2004 ; Churyk, 2005 ; Garcia- Meca et Martinez, 2007 Bellalah et al. 2010 ; Megna et Klock, 1993, 2000 ; Chauvin et Hirschey, 1994 ; Lev et Sougiannis, 1996 ; Barth et Karsznik, 1999 ; Barth et al. 2000 ; Lev et al. 2003 ;	Information Transparency
Jayaraman, Vasanthi et Ramaratnam (2012)	Psychological
Wang et Sun (2004) Dane & Georges (2015) Andrade et Ariely (2009) Syed et Bansal, 2018 Roy Baumeister 1998	Emotions and behavioral biases
JiaoJiao, King et Mertens (2012)	IFRS
Chang et al. 2012 ; Baker et Wurgler (2007) Brown et Cliff (2005) Right et Bower ont en parlé en 1992 Ben-Rephael et al. (2012) Baker et al., (2006) Wang et Sun (2004)	Feeling

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