

# **Emotional Drivers of Financial Decision-Making: Unveiling the Link between Emotions and Stock Market Behavior**

**Pr. Alain Finet<sup>1\*</sup>, PhD. Kevin Kristoforidis<sup>2\*</sup>, Julie Laznicka (Doctoral Researcher)<sup>2\*</sup>**

<sup>1,2</sup> Health Institute, Financial Management Department, University of Mons, Mons, Belgium

\* Correspondence:

[alain.finet@umons.ac.be](mailto:alain.finet@umons.ac.be);

[kevin.kristoforidis@umons.ac.be](mailto:kevin.kristoforidis@umons.ac.be);

[julie.laznicka@umons.ac.be](mailto:julie.laznicka@umons.ac.be).

## **Abstract**

The assumption that investors are rational on the stock market is based on assumptions that have been widely criticized by behavioral finance. Behavioral finance has demonstrated the presence of behavioral and cognitive biases, as well as emotions, which may influence the judgment of stock market traders, particularly small investors unfamiliar with the financial markets. The aim of this article is to provide a framework for understanding the emotions felt by individual investors in a bearish stock market. For this purpose, we use experimental finance and methodological elements from qualitative research and, more specifically, the analysis of written documents. This method appears to be rarely used in academic studies, despite the fact that it allows us to get closer to the reality of human emotions and their mutual influence on decision-making. We analyzed the emotional patterns developed by eight students enrolled on a university management course who were asked to trade continuously for three days. At the end of these days, they wrote down in their own words (i.e. without the intervention of the organizers) everything they had felt during the experiment. Using reading guidelines from the literature on emotions, the different passages transcribed were analyzed to determine the corresponding emotion. Our results confirm the strong presence of negative emotions, which may have led to abandonment and withdrawal as time passed and the disappointments experienced. The results obtained are obviously strongly conditioned by the negative stock market context prevailing during the experiment. Our findings - even if they

correspond to a particular context and a small sample size - could provide a useful reference for understanding how market sentiments could develop on a large scale.

**Keywords:** Emotions, Individual Investors, Qualitative Research, Decision-Making

## 1. Introduction

Building on economic psychology, which aims to understand irrational behavior, the decisions of economic agents cannot be reduced to the rationality of homo economicus (1). According to Chanut et al., the limits of perfect rationality are rarely discussed in economics and are relatively overlooked in management studies (2). Despite being questioned, the perfect rationality model has not been fundamentally replaced. Based on this observation, this article aims to focus on decision-making in the field of trading. In this context, we consider individual investors characterized by a chronic lack of reference in the stock markets and who rely on signals that they might mistakenly interpret as information (3). The individual investor must therefore develop a personal framework intended to guide them toward adopting a specific investment strategy. This framework will be shaped by various aspects of the investor's personality: their knowledge, expectations, risk preferences, moods, and emotions. In this paper, we will focus on emotions: the inexperienced investor may be particularly under the influence of negative emotions, leading to the emergence of behavioral biases commonly identified in financial markets (4-5). By moving away from the assumption that economic agents are rational, we argue that emotions help understanding behaviors that fall outside the scope of rationality (6). The article is structured as follows: in section 2, we introduce definitions of emotions and focus on the links between emotions and decision-making processes. In section 3, we present a series of elements that can be used to understand the behavior of individual investors on stock markets. At the end of this presentation, we discuss the extent to which these investors could be subject to emotional influence. In the fourth section, we present our methodological approach and the selected measurement tools. In section 5, the results are presented, including the context in which the experiment took place. Section 6 will focus on the conclusions and avenues for future research.

## 2. Literature Review

### 2.1. Emotions and decision-making processes: what are we talking about?

Many authors have provided definitions of emotions, ranging from highly specific to more general perspectives. According to Petit, emotions are intense affective experiences with a clear cause (7). They can be seen as physiological reflexes, non-cognitive phenomena, involuntary and purely affective states, or as biologically basic and instinctive response patterns (8). Emotions are typically described by five key characteristics: a facial, vocal, or postural expression; a motivation that leads to a tendency to act; a bodily reaction; a feeling; and a cognitive evaluation (9). These traits help

clarify the connections between emotions and the decision-making process. Lazarus identified three main categories of emotions: nine negative emotions (anger, fear, anxiety, guilt, shame, sadness, envy, jealousy, and disgust), four positive emotions (happiness, pride, relief, and love), and three ambiguous emotions (hope, compassion, and gratitude) (10). Additionally, six primary emotions have been identified by researchers in the field of emotions: happiness, surprise, sadness, anger, disgust, and fear (11). Other classifications have also been developed, including Harmon-Jones and al., which contains eight discrete emotions: anger, sadness, disgust, fear, anxiety, happiness, relaxation, and desire (12). Basic emotions are considered universal because the facial expression associated remains relatively similar across individuals (13). The valence of emotions plays a key role in investment decisions. Positive emotions favor more conservative behavior (14), as investors perceive the situation as under control and not requiring further intervention (15). On the other hand, negative emotions often lead to more impulsive choices and a decrease in patience (16). In general, the positive valence of emotions increases with returns in a bull market (17), which reinforces the confidence and optimism of individual investors (18). In contrast, negative emotions can cause investors to make less judicious decisions (19) or even to withdraw completely from the stock market, thereby contributing to a decline in returns (20).

The influence of emotions on decision-making in uncertain contexts has been extensively studied in economic and financial literature. Anger, for example, leads to optimistic judgments and promotes bold decisions (21-22). This emotion is also associated with optimistic expectations and impulsive choices (23), while reducing the perception of risks (24). Furthermore, anger stimulates confrontation (25), encourages risk-taking (26-28), and limits information processing by selectively focusing attention. However, it does not affect the speed of decision-making (29). Anxiety, on the other hand, alters perceptions of risks and gains, leading to more cautious and conservative choices (30-31). It has been associated with less risky financial decisions and relatively low returns (32-34). In contrast, sadness leads to riskier choices compared to other emotions (35). Fear generates an increased perception of risks and leads to more cautious decisions (21-23; 26-28), thus decreasing the effectiveness of individual investors' decisions (36). Finally, disgust manifests as a risk-avoidance mechanism, limiting both exposure to risks and potential gains, while being linked to risk aversion (37). Regarding positive emotions such as happiness, desire, and relaxation, their impact on the decision-making process is more moderate (38). According to Gosling and Moutier, these emotions increase risk propensity, especially when there is a high probability of gain, particularly in loss situations (39). Positive emotions are also positively correlated with returns in a bullish market (17). Although negative emotions provoke a greater variety of reactions in uncertain situations, several studies suggest that the discomfort caused by these emotions pushes individuals to reduce their intensity and duration (40). Based on the concept of cognitive flexibility, Karboul and Zouaoui suggest that complex decisions involve an interplay between rationality and irrationality, with individuals oscillating between these two

modes depending on the situation (41). Cognitive flexibility thus allows individuals to manage decision-making contexts, with emotional responses strongly influenced by cognitive evaluations of decisions (42). Damasio explained that decisions are often guided by the desire to avoid unpleasant consequences and to seek more advantageous solutions (43). Similarly, individuals seek to avoid decisions that may lead to regrets (44). Stevenson and Hicks proposed a decision-making model in which the thoughts of decision-makers play a central role, enhancing decision satisfaction and minimizing regrets when a decision is not optimal (45).

## **2.2. Behaviors of individual investors on the stock markets: the emotional drivers**

Behavioral finance suggests that individuals' emotional states and psychological realities significantly influence financial decision-making. However, while emotional responses (which may be adaptive in specific situations) and the development of biases can sometimes be useful, they may prove inadequate in contexts where cognitive functions such as logical reasoning and planning are essential (36). As a result, investors, particularly individual investors, do not always act rationally, as they are shaped by psychological, emotional, and cognitive factors (46). Schinckus using a historical, sociological, and methodological perspective, suggested that behavioral finance could become the dominant paradigm in financial economics (47). In line with the work of Frydman and Camerer, many stock market scenarios are incompatible with the rational application of information and the risk/return trade-off (48). This raises the issue of how market participants understand and interpret information, potentially leading to incorrect risk assessments (49). Tharchen puts forward that behavioral finance offers a more comprehensive understanding of the underlying factors that contribute to both periods of euphoria and abandonment, focusing on individual and social psychology that drives excessive optimism or panic (50). However, by analyzing the theoretical foundations of traditional and behavioral finance, Benjana and Yamani argue that while behavioral finance has become a significant aspect of the field, few has been made for providing solutions to mitigate the impact of behavioral and cognitive biases on investor rationality (51).

In summary, individual investors often struggle to process the intense and rapid flow of information due to their limited cognitive capacities, and "mobilizing the criterion of optimizing rationality seems inadequate for understanding how expectations are formed in financial markets" (52). This article focuses on the influence of emotions on the decision-making processes of small investors. According to us, emotional influence is the central element that shapes behavioral and cognitive biases. Emotional influence would therefore be prior to the biases developed and the decisions induced, and thus understanding the emotions felt provides the closest opportunity to identify the emergence of biases and behaviors.

### **3. Methodological Approach and Selected Measurement Tools**

Our methodological approach draws from experimental finance and is supported by qualitative analytical tools. Below, we outline the reasons for adopting this approach.

Firstly, Ricciardi provides a timeline of academic studies in this area, categorizing each research project according to prominent trends in literature (53). This study identifies key themes, research methodologies, and shows the value of conducting research within experimental finance. For Bloomfield and Anderson, experimentation is an underutilized method in finance, despite its relevance to behavioral finance and bias analysis (54). Such an approach could address several common econometric issues, like omitted or unobserved variables. Experimentation would also extend theoretical models by relaxing some assumptions or investigating situations too complex for quantitative methods. Moreover, controlled manipulations offer the advantage of creating an environment where causal theories can be tested with high validity (55).

In experimental finance, it is crucial to develop a scientifically validated experimental protocol. We have already proposed several frameworks for conducting financial experiments (56). Our previous experiments (57-60) have provided us with opportunities to refine our methodological approach, particularly in addressing emotional dysregulation caused by repeated decision-making (61).

Secondly, our analytical tools are based on qualitative techniques. The literature shows an increasing interest in qualitative methodologies (62), which can take different directions. From a theoretical standpoint, Mwita identifies several potential qualitative methods: interviews, participant observation, questionnaires, and written documentation (63). Specifically, in trading, the meta-analysis by Pérez-Sánchez and Delgado reveals that most qualitative studies gather data on individual investors either through oral interviews (21 out of 25 studies), written documents (3 out of 25 studies), or focus groups (1 study) (64). To strengthen the results of qualitative research, it is often advised to use multiple techniques simultaneously.

Regarding sampling, financial experimentation and the associated bias analysis often involve student populations (22, 65-66). However, in line with Dorn and Sengmueller, students who are not financially involved might tend to overplay, as the experiment could feel "playful" or even "entertaining," leading to overconfidence (67). The purpose of the reward offered was to mitigate this limit.

Our experiment was conducted over a three-day period of continuous trading, from January 27 to January 29, 2025. As put forward by Claudon and Weber, the objective was to place participants in an emotionally charged environment, close to emergency management, with the intention of shaping, reinforcing, or amplifying some psychological biases (68-69). The sample consisted of eight students—seven men and one woman—reflecting the trends in the literature, which underscores a predominant male interest in stock market activities or those with a strong

entertainment aspect (70). These participants were selected from the business management program at the University of Mons (Belgium), with the criterion that they had completed a second-year financial course, ensuring a level of financial knowledge. Participants were compensated hourly for the duration of the experiment, and an additional reward was offered for the highest portfolio value at the end of the experiment, with a maximum prize of 200 euros at the winner’s discretion.

The stock market platform for the experiment was ABC Bourse, which allows users to create stock market simulations for predefined periods. The students started with a virtual portfolio of 100,000 euros and were restricted to trading stocks from the CAC 40 index (the 40 largest companies by market capitalization on the French stock market). This selection was made to ensure a reasonable level of familiarity with the stocks involved. To eliminate any initial bias in the investment choices, the portfolio was entirely composed of cash at the start of the experiment. There was no restriction on the number of transactions each participant could make. The platform provided hourly rankings of participants. Each student was assigned a trading journal in which they documented the type of transaction (buy or sell), the company name, the number of shares bought or sold, the financial value of the transaction, and the updated cash balance in their portfolio following the transaction. At the end of the experiment, the participants were asked to write down their emotional feelings, emphasizing the most significant emotional moments or, at least, those they perceived as such. Our approach follows the work of different authors who demonstrate the importance of written documents for understanding emotions and their effects (71-72). These different written documents were analyzed through reading grids from reference articles in the field of emotions. We will take into consideration the questionnaire of discrete emotions developed by Harmon-Jones et al., and covering eight emotional positions (fear, happiness, disgust, anxiety, relaxation, desire, anger and sadness) (12). For each emotion analyzed (Table 1), we give below the details of the different scientific references used in order to translate the verbatim into an emotion:

**Table 1: Reference Material Used for Analysing Written Documents**

<b>Emotion</b>	<b>References</b>
Fear	Frey et al. (73) ; Yang et al. (28) ; Pittig et al. (74) ; Visser-Keizer et al. (75) ; Koizumi et al. (76).
Happiness	Deurkar et al. (77) ; Stevenson & Hicks (45) ; Kumalasari et al. (78) ; Yildiz & Eldeleklioglu (79) ; Bubić & Erceg (80).
Disgust	Chapman & Anderson (81) ; Oaten et al. (82) ; Han et al. (83) ; Schnall (84).
Anxiety	Hartley & Phelps (85) ; Treffers et al. (86); de Visser et al.(87) ; Maner et al. (88) ; Noval (89) ; Yang et al. (90) ; Sun et al. (91).
Relaxation	Anderson (92) ; Keinan (93) ; Martin & Delgado (94).
Desire	Forsythe et al. (95) ; Lucey & Dowling (96), Rouch & Rouch (97), Krizan & Windschitl (98).
Anger	Stemmler (99) ; Lerner & Tiedens (24), Garfinkel et al. (100).
Sadness	Yang et al. (2017) ; Raghunathan & Pham (31) ; Lerner et al. (102) ; Fischhoff & Broomell (103) ; Suo et al. (104), Subra (105).

#### 4. Results and Findings

The experiment took place over three days, during which the general stock market trend was negative, even if losses were relatively small. Data on the evolution of the CAC40 over the period are given below (Table 2), along with data on the evolution of the American and Japanese stock market indices, to give a broader view of the stock market environment.

A number of news had a negative impact on the behavior of the French stock market (and other markets) over the three days. On January 27, it was related to Deepseek, a Chinese competitor to American companies active in the Artificial Intelligence field. On January 28, the day was largely influenced by the news of Deepseek's arrival and the consequences for American companies in the Artificial Intelligence market. On January 29, LVMH annual results were announced (lower than expected). The Fed's announcement on 01.29 that it would maintain interest rates had largely been anticipated by the markets.

**Table 2: CAC 40, DJ30, NASDAQ 100 and TOPIX Performance over the Experimentation Period**

Date	27 Jan 2025	28 Jan 2025	29 Jan 2025	Total
CAC 40	-0,0003	-0,00012	-0,0032	-0,0036
DJ 30	0,0065	0,0031	-0,0031	0,0065
NASDAQ 100	-0,0297	0,0159	-0,0024	-0,0162
TOPIX	0,0026	-0,0004	0,0068	0,009

Although the losses on the index were relatively small - even if they were constant during the experiment - the participants seemed to have found the financial disappointments very hard to bear. As we will suggest after analyzing the different written documents provided by the students, there seems to have been a very personal identification with the valuation of the portfolio.

As specified in the methodological presentation, at the end of the three-day experiment, the participants were asked to write down the moments perceived as decisive and central for them, as well as all the events that had affected them, both positively and negatively. The participants were free to choose the format, length and degree of detail of their explanation. Each verbatim was analyzed by the authors according to their knowledge in the qualitative domain. The combination of the different opinions resulted in a proposal of emotion associated with the verbatim. This analysis was then completed by the contributions of the bibliographical references included in Table 1 in order to reduce the researchers' possible subjectivity.

**Table 3: Participant 1**

Verbatim	Analysis	Emotion
On 29/01, when we noted and appreciated the fall of the CAC40 and more particularly the downturn of LVMH, which was then one of	The passage corresponds to the emotion of sadness. The regret at not having sold at the right time and the resulting financial	Sadness

<p>the only points of recovery in my portfolio. I then regretted not having sold it the day before, when it was at its highest. This mistake then relieved my total security of around €700, which I was unable to cover afterwards.</p>	<p>loss lead to a feeling of disappointment and frustration, which are characteristic aspects of sadness.</p>	
<p>At the very beginning of the experience, having never participated in the experience or in scholarship competitions, it was difficult for me to get used to the interface and to apply the financial negotiation techniques. I also found myself in a position of inferiority compared to others who had already gained substantial experience in this area. In this respect, they were competent in interpreting financial indicators and signals, whereas I was in way over my head.</p>	<p>The passage corresponds to the emotion of anxiety. The difficulty in getting used to the interface, the feeling of being distanced from others, as well as the perception of not being up to the task, generate a form of worry and nervousness in the face of the situation. Anxiety can manifest itself here through the uncertainty related to inexperience and comparison with those who seem more competent. Sadness could also be present, due to the feeling of inferiority, but the aspect related to tension and nervousness makes anxiety the most relevant emotion.</p>	Anxiety
<p>Once again, when LVMH fell, I didn't know whether to sell or wait. Over time, it moved in the wrong direction, which at first annoyed me, thinking to myself that I was never lucky, but then I just accepted it.</p>	<p>The passage corresponds to the emotion of anger. The expression 'what annoyed me at first' shows annoyance and frustration with the situation. The idea of 'I never had any luck' reinforces this feeling of anger, perhaps combined with a feeling of being powerless in the face of the negative turn of events. After that, there is a process of acceptance, which could also reflect a form of sadness or resignation, but the initial emotion of frustration and annoyance clearly points to anger.</p>	Anger
<p>'When I bought Schneider, I thought I had hit the bottom, but I feared that the situation would get worse. And it did. So I took the risk of betting on a rise, which happened on the last day, but the increase did not cover my purchase price. I was reassured because during the breaks, it was a strategy shared by some of my colleagues.</p>	<p>The passage corresponds to the emotion of fear. Fear is present at the beginning, when you 'feared that the situation would worsen', indicating concern about the uncertainty of the market and a fear that the purchase would be a bad decision. Even if the situation changed for the better on the last day, the fact that the increase did not cover the purchase price shows a form of persistent anxiety. There is also a feeling of relaxation or</p>	Fear



	reassurance at the end, when you mention that the strategy was shared by some of your colleagues, which can induce a certain confidence in the decision. However, the main emotion seems to be fear, related to risk-taking and uncertainty about how the situation will develop.	
On the last day, I sold LVMH and Schneider. The experiment was over, the market had taken a downturn, but I wasn't stressed because I knew there was nothing I could do about it. I'd made my peace with it.	The passage corresponds to the emotion of relaxation. Although the market trend was negative, the fact that you no longer felt stress and that you had 'made your peace' shows a state of acceptance and serenity in the face of the situation. This implies a form of letting go, where pressure and worries are released, which is typically associated with relaxation. There is also a slight aspect of sadness, related to the loss of value, but the dominant emotion seems to be relaxation, as you have accepted the situation without trying to change anything about it.	Relaxation
At the end of the first day of my repurchase of LVMH. The next day, the share was performing well. I told myself that I was starting to understand, and I wanted to continue with the other investments.	The passage corresponds to the emotion of desire. The fact that you 'want it to continue for the other investments' shows a desire for positive change and an aspiration to maintain this momentum. In addition, the feeling of beginning to 'understand' the situation suggests a certain excitement and positive anticipation of future opportunities.	Desire
None of my goals have been achieved, disappointment.	The passage corresponds to the emotion of sadness. The fact that 'none of my goals have been achieved' and that this has led to feel 'disappointment' reflects a sense of loss, frustration and regret, emotions typically associated with sadness.	Sadness

**Table 4: Participant 2**

Verbatim	Analysis	Emotion
On the third day, the CAC40 was bearish, I couldn't sell the market, so I remained hopeful that the luxury would return to my entry points.	The passage corresponds to the emotion of desire. Staying in the hope that luxury will return to its entry points shows a desire for improvement, a return to values	Desire

	and a favorable evolution of the market. This emotion of waiting for a positive turnaround translates into a desire for the situation to improve.	
On the third day, the market did not rise despite my hopes. I felt a little disgusted, but it's logical, the price was not showing any bullish signs, there was nothing to hope for.	The passage corresponds to the emotion of disgust. Feeling 'a little disgust' about the situation, especially after hopes have not been realized and the market shows no sign of recovery, indicates a form of disappointment and rejection of the lack of effectiveness in the situation. The disgust here reflects a form of frustration at the lack of positive results.	Disgust
On the third day, in the morning, my analysis and the indicators suggested I sell at 5pm, but that wasn't within the hours of the experiment. It was frustrating.	The passage relates to the emotion of anger. The frustration felt in the situation, where the analysis and indicators told you to sell, but this did not correspond to the hours of the experiment, creates a feeling of annoyance. This feeling of not being able to act according to what you thought was the best decision is characteristic of anger or irritation faced with an external constraint	Anger
On the third day, in the afternoon, the market wasn't going up. It was realistic not to see ourselves going up.	The passage relates the emotion of sadness. The fact that the market was not recovering and that you expressed that it was 'realistic not to see it recovering' indicates a feeling of resignation in the face of the situation, accompanied by a form of disappointment. The awareness that the situation is not likely to improve generates a form of sadness.	Sadness
On the second day, my portfolio was performing well, so my configurations were quite good. I followed the plan, and at the end of the day, once I got home, I saw that I was in first place. I was happy.	The passage relates the emotion of happiness. The portfolio is performing positively, that the plan has been followed, and that you discover that being in first position at the end of the day generates a feeling of satisfaction, which is characteristic of happiness.	Happiness

**Table 5: Participant 3**

Verbatim	Analysis	Emotion
I didn't think the announcement of LVMH's results would result in such a fall. I was a little	The passage reflects the emotion of sadness. The disappointment felt after the announcement of LVMH's results and the	Sadness

disappointed because it was the only real risky move that had been planned in advance.	realization that the risky move did not have the desired outcome reflect a feeling of frustration and disappointment, which are characteristic of sadness.	
The fact that the market remains in a negative trend on the last day.	The passage corresponds to the emotion of anxiety. The market remaining in a negative trend generates a form of uncertainty and concern about the future, which is typical of anxiety. The lack of positive movement in the market creates a stressful and uncertain situation.	Anxiety
When Michelin fell quickly after buying it.	The passage corresponds to the emotion of fear. The rapid fall of Michelin after the purchase suggests immediate concern and fear about the negative evolution of your investment. This fear is related to market uncertainty and the possibility that the situation will worsen further.	Fear
I didn't anticipate anything, I mainly suffered by paying less attention to the shares held.	The passage corresponds to sadness. The fact of 'suffering' the situation and 'paying less attention' to the shares held indicates a feeling of regret and disappointment with how things have been managed. This lack of planning and the resulting negative impact are characteristic of sadness.	Sadness

**Table 6: Participant 4**

<b>Verbatim</b>	<b>Analysis</b>	<b>Emotion</b>
On Monday afternoon, I had anticipated an increase in more local stocks, but I had invested too early, so I ended the day in the red and missed out on opportunities.	The passage reflects anger. The fact that you anticipated the increase in shares but invested too early, resulting in a negative end to the day and missed opportunities, reflects a feeling of frustration and annoyance. This anger is related to the perceived error and the inability to take advantage of the situation as planned.	Anger
On Wednesday, stocks related to luxury plunged. I had a feeling it was going to happen, but I had forgotten that Kering was in my portfolio.	The passage reflects anger. The fact of 'feeling' that the luxury-related shares were going to drop but having 'forgotten' that Kering was in the portfolio, can generate a feeling of irritation or frustration at this negligence or error of judgement. This shows a form of	Anger

	annoyance in a situation where you feel responsible for the oversight and the resulting loss.	
On Tuesday, I started at -€400 and ended the day at €150, having reached highs of €600.	The passage corresponds to the emotion of happiness. Going from a loss of €400 to a gain of €150, with peaks at €600, generates a feeling of satisfaction and happiness related to this significant improvement in the situation. This rapid positive change is typically associated with happiness.	Happiness

**Table 7: Participant 5**

Verbatim	Analysis	Emotion
On day 2, I wanted to invest again in LVMH as a kind of safety investment while waiting for day 3. I hadn't really studied the different information about the company, so I was very surprised when it crashed on day 3 in the morning. I was disgusted because I was expecting a small profit/stagnation. I could have done better on this one.	The passage corresponds to the emotion of disgust. The fact of feeling 'disgusted' after having invested in LVMH without having properly studied the company and having been surprised by the crash in the morning shows a rejection of and frustration with a bad decision. This feeling of disgust is reinforced by the fact that you expected a low profit or stagnation, but that the situation took a much more negative turn.	Disgust
Day 2, early in the day, when Schneider's share price was in free fall. As a result, I increased the gap with the others even more, even though I was determined to do better. Once again, I was disgusted, but this time I told myself it was because of the market and that I couldn't have anticipated such a fall.	The passage relates to disgust. The feeling of 'disgust' is expressed several times, particularly because of the free fall in Schneider's share price and the growing gap with the others. Even if it was due to the market and that it could not have been anticipated, the dominant emotion remains disgust, related to the frustration of not having done better despite the determination.	Disgust
Still suffering from the fall of Schneider, I was a little lost. I tried to recover as best I could. I knew that when the American market opened, I was going to lose even more.	The passage corresponds to the emotion of anxiety. Feeling 'a little lost' and knowing that when the American market opened, you were going to 'lose even more' generated a form of worry and stress. The uncertainty about how the situation would develop, combined with the prospect of further losses, is typical of anxiety.	Anxiety

Day 3 from the start, when LVMH fell. I had no intention of doing the same as Schneider and dropping back to 7%. So I sold it very quickly, even if it meant losing a lot at that moment.	The passage relates to fear. The fear of reliving a situation similar to that of Schneider, where 7% were lost, prompted to take quick action and withdraw LVMH, even if it meant accepting a significant loss. This reaction shows a fear of losing more and a desire to avoid a situation perceived as too risky.	Fear
On day 3, when I saw LVMH fall sharply, Schneider rise sharply and that, despite the rise, I was still in the red, I thought that getting back into the green would be almost impossible.	The passage relates to sadness. Seeing LVMH fall sharply and Schneider rise, while remaining in the red despite this rise, generates a feeling of despair and disappointment. The thought that returning to positive territory would be 'almost impossible' reflects a form of resignation and frustration, characteristic of sadness.	Sadness
I felt that Schneider was going to improve and that he would experience a big positive change. I had even written it down in my notes on the first day. But I wasn't expecting such a strong reaction.	The passage reflects happiness. The certainty that Schneider would develop positively, and the anticipation of a big change, shows a feeling of optimism and excitement. The positive 'overreaction' of the market even exceeds expectations, which probably generates satisfaction and happiness at the success of the prediction.	Happiness
When Schneider went up to +5%, I was glad that, in the end, my predictions were right.	The passage corresponds to happiness. The predictions turned out to be the right ones, especially when Schneider reached +5%, shows a feeling of satisfaction, happiness and success. This reflects a positive emotion related to the confirmation of the expectations.	Happiness

**Table 8: Participant 6**

Verbatim	Analysis	Emotion
During some periods, when the market was generally bearish, and my assets were too. I felt a little frustration, which grew as the situation continued, or even worsened. I also tended to want to reinvest in it, convincing myself that it would cover my losses even without any real reliable indicator that the shares would start to rise again.	The passage corresponds to anger. The growing frustration at the bearish situation, combined with the desire to reinvest to offset losses despite the lack of reliable indicators, suggests a feeling of irritation. This frustration related to uncertainty and the inability to change the situation, as well as the desire to take impulsive measures, is typically associated with anger.	Anger

<p>On the second day, at the opening, the 900 euros I started with on the first day turned into a loss, which was completely out of my control. I was really disappointed to see my efforts from the first day go to such a low level. I felt like I had done it all for nothing. I also regretted not having sold the day before.</p>	<p>The passage reflects the emotion of sadness. The disappointment of seeing efforts from the first day turn into losses, the feeling of having done it all ‘for nothing’ and the regret of not having sold the day before reflecting emotions of frustration, disillusionment and loss.</p>	<p>Sadness</p>
<p>During an overall fall, one of my stocks was badly affected. However, seeing that the indicators seemed to be indicating a recovery, I didn't sell, even though my intuition didn't trust it.</p>	<p>The passage corresponds to anxiety. Although the indicators point to a recovery, the uncertainty generated by your lack of instinctive confidence creates a feeling of nervousness and stress. The anxiety here results from the tension between the decision not to sell despite internal doubts and the uncertainty about the future evolution of the market.</p>	<p>Anxiety</p>
<p>The loss was so significant and persistent that, rather than getting discouraged, we and other participants turned the situation into a joke, which encouraged us to continue investing in it.</p>	<p>The passage corresponds to relaxation. The idea of ‘making fun of the situation’ despite the significant and persistent loss suggests a relaxed approach and an attempt to minimize emotional tension in the face of difficulty. This attitude of putting the situation into perspective, rather than allowing oneself to be overcome by frustration or anger, is typical of relaxation, allowing one to continue to invest without being negatively affected.</p>	<p>Relaxation</p>
<p>I felt a kind of euphoria when all the indicators were green, making me invest a little more impulsively.</p>	<p>The passage corresponds to happiness. The euphoria felt when all the indicators were green reflects a feeling of excitement and happiness, associated with a positive situation and optimism. This emotion is reinforced by investing impulsively, motivated by the feeling of happiness and enthusiasm generated by the good market signals.</p>	<p>Happiness</p>
<p>Although it was often a matter of luck, I always felt a feeling of pride, often interpreting the situation as controlled from the start.</p>	<p>The passage corresponds to happiness. The feeling of pride, even while recognizing that it can often be due to luck, reflects a feeling of satisfaction and contentment with the ability to interpret the situation and feel in control.</p>	<p>Happiness</p>

**Table 9: Participant 7**

<b>Verbatim</b>	<b>Analysis</b>	<b>Emotion</b>
On Tuesday afternoon, around 3pm, I was surprised by the correction on Schneider, when I thought the floor had been reached. From that moment on, I no longer made rational decisions: everything was based on impulse.	The passage relates to the emotion of fear. The surprise at Schneider's correction and the fact that you no longer made rational decisions, but that everything became based on impulse, suggest an emotional reaction of panic or uncertainty. This fear probably stems from the feeling of loss of control in the face of an unpredictable and stressful situation.	Fear
When the market opened on Wednesday at 9am, I thought I had hit rock bottom, but no: I completely lost it as soon as it opened. I was surprised, and my impulsiveness only increased.	The passage corresponds to fear. The feeling of 'drowning' as soon as the market opened and the surprise at the situation, as well as the increase in impulsivity, show a state of panic and anxiety. Fear is clearly present here, driven by the fear of the situation worsening and the inability to anticipate how the market will evolve.	Fear
On 29/01, after selling everything at a loss everywhere, I didn't know what to do. I felt a sense of feeling powerless in the face of the situation. It didn't matter what decision I made because it seemed like a bad one.	The passage corresponds to the emotion of sadness. The feeling of helplessness in the face of the situation, as well as the uncertainty and the perception that all decisions seemed wrong, reflect a form of resignation and despair. This emotion of sadness stems from frustration and the loss of control over the situation.	Sadness
After buying the same share (Schneider) for the third time because I thought the lower limit had been reached, I began to have increased doubts about Schneider's ability to recover very quickly. I felt like I had completely lost control.	The passage corresponds to the emotion of anxiety. The author expresses doubts and a loss of control in the face of the investment situation, which is typical of anxiety. The uncertainty as to the company's ability to recover quickly and the feeling of loss of control create tension and worry, which are characteristic of anxiety.	Anxiety
On Wednesday afternoon, after an overall loss of more than €2000 and a falling stock market, I knew it was over for me and that I	The passage corresponds to the emotion of sadness. The author expresses a feeling of resignation and failure in the face of a	Sadness

would have to do something to overcome this failure.	significant financial loss, which indicates a state of discouragement.	
On Tuesday, I anticipated an increase in Schneider's share price. This occurred a few dozen minutes later. I was very happy, positive and confident about the rest of the experience.	The passage corresponds to happiness. The author expresses a feeling of satisfaction after correctly anticipating the evolution of the stock market, feeling positive and confident about the future.	Happiness
When I was third in the rankings with very volatile positives, I had hopes of moving up quickly to reach first place. However, this drove me to take even more risks.	The passage corresponds to desire. The author expresses the hope of quickly moving up the rankings and reaching first place, which reflects a strong desire to succeed and achieve a goal.	Desire

**Table 10: Participant 8**

<b>Verbatim</b>	<b>Analysis</b>	<b>Emotion</b>
I invested in expensive shares compared to the first day. I thought they would go up sharply, like the day before, but it was a big mistake because they fell sharply. Given the quantities purchased, I suffered heavy losses.	The passage corresponds to fear. The author describes a situation in which he took a risk thinking that the shares would go up, but this led to a sharp fall and significant losses. The feeling of regret and anxiety about the negative consequences of this decision is typical of fear, especially the fear of financial loss.	Fear
When I wanted to buy specific securities, I hesitated in the hope that they would fall, because I thought they were too expensive. Unfortunately for me, they quickly increased, and it was too late to invest.	The passage corresponds to anger. The author expresses a feeling of frustration and regret after hesitating to invest, believing that prices would fall, but ultimately seeing the securities increase. This situation of lost opportunity can lead to anger for oneself for not having acted sooner.	Anger
Through intuition and analysis, I realized that it was better to sell Teleperformance, Vinci, Stellantis and Axa, given their high volatility, both up and down.	The passage corresponds to anxiety. The author makes the decision to sell shares because of their high volatility, which suggests a concern about risks and a desire to reduce uncertainty. Anxiety is related to the management of uncertainty and risk, which seems to be the case.	Anxiety
It was when I invested at the wrong time in LVMH, in large quantities, as well as in L'Oréal, thinking that the situation would be similar to the first day. Unfortunately, these investments caused me a big loss, even	The passage corresponds to sadness. The author expresses a sense of regret and disappointment after investing at the wrong time and suffering a large loss.	Sadness



though they were my main source of earnings at the beginning.		
The same case as for LVMH and L'Oréal. I did the same thing with Hermès, but the quantities were not significant, so my loss was slight, whereas I thought the stock was going to perform positively.	The passage best corresponds to the emotion of disgust. The author seems to feel a sense of disappointment and discontent with his investment choices, especially since he had positive expectations that were not realized, even if the loss was less significant.	Disgust
The rise in the share prices of LVMH and L'Oréal at the right time. I couldn't wait to sell them to put my profit aside.	The passage corresponds to desire. The author expresses a desire to sell his shares quickly in order to cash in his profits, which reflects a strong desire to capitalize on the rise in prices and secure his profits.	Desire

**Table 11: Summary of Emotions**

Emotion	Fear	Desire	Disgust	Anger	Anxiety	Relaxation	Happiness	Sadness	Total
1	1	1		1	1	1		2	7
2		1	1	1			1	1	5
3	1				1			2	4
4				2			1		3
5	1		2		1		2	1	7
6				1	1	1	2	1	6
7	2	1			1		1	2	7
8	1	1	1	1	1			1	6
<b>Total</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>6</b>	<b>2</b>	<b>7</b>	<b>10</b>	<b>45</b>
<b>Percent.</b>	<b>13,33%</b>	<b>9%</b>	<b>9%</b>	<b>13,33%</b>	<b>13,33%</b>	<b>4,44%</b>	<b>15,55%</b>	<b>22,22%</b>	

Reading the comments, although in theory this is not the case, we realized that relaxation was comparable to a negative emotion; in fact, the participants told us that they had reached such a level of sadness and disgust that they preferred to relax and give up any attempt to cut their losses. Overall, our results show a strong prevalence of negative emotions (75% of emotions had a negative meaning). The explanations lie in the negative configuration of the market during the three days, even if the bearish movements were on a small scale. We also observed a very personal appropriation of a portfolio which was, however, only virtual. The participants were emotionally very affected by the losses incurred and, even though a reward was promised at the end of the experiment to the best performing portfolio, they did not try to improve the situation by trading aggressively during the last day. A kind of discouragement and abandonment has developed in the audience, which is almost perceptible and has led to a lack of involvement in the experiment. In a

bear market, the question is no longer about being the best, but about being less bad than the others. In other words, the reward would be achieved through a passive strategy, since the risks taken seem to result in financial losses. This behavior also helps to limit regrets. The accumulation of negative experiences does indeed cause emotional discomfort and withdrawal (106). This last observation is reinforced by the number of transactions made throughout the experiment (Table 11) : we observe a significant drop in transactions on the last day (the number of transactions on the third day represents less than 20% of the total transactions), when three participants made almost no more financial movements.

**Table 12: Trading Strategy during the Experimentation**

	<u>Total D<sup>1</sup></u>	<u>B<sup>2</sup></u>	<u>S<sup>3</sup></u>	<u>Total D<sub>2</sub></u>	<u>B</u>	<u>S</u>	<u>Total D<sub>3</sub></u>	<u>B</u>	<u>S</u>	<u>Total</u>	<u>B</u>	<u>S</u>
<b>1</b>	21	12	9	18	15	3	8	5	3	47	32	15
<b>2</b>	28	17	11	8	4	4	7	3	4	43	24	19
<b>3</b>	17	15	2	4	1	3	2	1	1	23	17	6
<b>4</b>	49	28	21	14	10	4	12	9	3	75	47	28
<b>5</b>	17	11	6	20	10	10	16	7	9	53	28	25
<b>6</b>	13	10	3	2	1	1	0	0	0	15	11	4
<b>7</b>	13	9	4	9	6	3	1	0	1	23	15	8
<b>8</b>	11	10	1	9	3	6	16	8	8	36	21	15
<b>Total</b>	<b>169</b>	112	57	<b>84</b>	50	34	<b>62</b>	33	29	315	195	120

### 5. Conclusions and Avenues for Future Research

The most recent financial theories stress the importance of psychological and emotional factors in understanding investor behavior. However, psychological and financial perspectives require the use of different tools that are often used by people with very different intellectual backgrounds. This article aims to bring together different schools of thought by using qualitative tools to explore the emotional patterns of individual investors on the stock markets. Our results demonstrate the influence of emotions that are defined as negative on the development of a feeling of abandonment and withdrawal, even though the financial portfolios are virtual. According to us, understanding how stock markets work involves the use of tools that do not leave out individuals' personality traits and their emotional feelings, as is often the case in quantitative studies. By increasing the size

<sup>1</sup> Day

<sup>2</sup> Buy

<sup>3</sup> Sell

of the sample and the duration of the experiment, the results could be more easily generalized. If the emotional paralysis and abandonment phenomena were to be more widely confirmed, this would imply that emotions must be taken into consideration in order to understand the speculative bubbles' processes of development and explosion.

In any case, we could combine the recommended protocol and the analysis tools with other ones, namely quantitative methodologies. Another approach would be to use multiple qualitative methods, such as semi-structured interviews and focus groups. Finally, collecting written reports as the experiment progresses would reduce the risk of forgetting the emotions experienced.

In our opinion, this work constitutes a first step that could lead, for example, to a better understanding of biases and their effects. Once researchers accept the relevance of an interpretivist and inductive approach to the analysis of stock markets, new research avenues are opened up.

## References

1. Roland-Lévy C, Kmiec R. La crise et ses représentations: L'apport de la psychologie économique. *Idées Économiques et Sociales*. 2016;(1):23-9. doi:10.3917/idee.183.0023
2. Chanut V, Guibert N, Rojot J, Dubois PL. Les limites de la rationalité limitée? Un essai de réflexion en sciences de gestion. *Management & Avenir*. 2011;48(8):97-117. doi:10.3917/mav.048.00973
3. Black F. Noise. *J Finance*. 1986;41(3):528-43. doi:10.1111/j.1540-6261.1986.tb04513.x
4. Kaustia M, Alho E, Puttonen V. How much does expertise reduce behavioral biases? The case of anchoring effects in stock return estimates. *Financ Manage*. 2008;37(3):391-412. doi:10.1111/j.1755-053X.2008.00018.x
5. Feng L, Seasholes MS. Do investor sophistication and trading experience eliminate behavioral biases in financial markets? *Rev Financ*. 2005;9(3):305-51. doi:10.1007/s10679-005-2262-0
6. Bergeron H, Castel P, Dubuisson-Quellier S, Lazarus J, Nouguez E, Pilmis O. *Le biais comportementaliste*. Paris: Sciences Po (Les Presses de); 2018.
7. Petit E. *Économie des émotions*. Paris: Éditions La Découverte; 2015. 125 p.
8. Rosenberg M. Reflexivity and emotions. *Soc Psychol Q*. 1990;53(1):3-12. doi:10.2307/2786865
9. Sander D. *Le monde des émotions*. Paris: Éditions Belin; 2015. 205 p.
10. Lazarus RS. From psychological stress to the emotions: A history of changing outlooks. *Annu Rev Psychol*. 1993;44:1-21. doi:10.1146/annurev.ps.44.020193.000245.
11. Ekman P. Are there basic emotions? *Psychol Rev*. 1992;99(3):550-3. doi:10.1037/0033295X.99.3.550
12. Harmon-Jones C, Bastian B, Harmon-Jones E. The discrete emotions questionnaire: A new tool for measuring state self-reported emotions. *PLoS One*. 2016;11(8):e0159915. doi:10.1371/journal.pone.0159915
13. Sander D, Scherer K. *Traité de psychologie des émotions*. Paris: Dunod; 2009.

14. Gabbi G, Zanotti G. Sex & the City. Are financial decisions driven by emotions? *J Behav Exp Financ.* 2019;21:50-7. doi:10.1016/j.jbef.2018.10.005
15. Van Dijk WW, Van der Pligt J. The impact of probability and magnitude of outcome on disappointment and elation. *Organ Behav Hum Decis Process.* 1997;69(3):277-84. doi:10.1006/obhd.1997.2688
16. Herman AM, Critchley HD, Duka T. The role of emotions and physiological arousal in modulating impulsive behaviour. *Biol Psychol.* 2018;133:30-43. doi:10.1016/j.biopsycho.2018.01.014
17. Wang H, Zhang J, Wang L, Liu S. Emotion and investment returns: Situation and personality as moderators in a stock market. *Soc Behav Pers.* 2014;42(4):561-9. doi:10.2224/sbp.2014.42.4.561
18. Grecucci A, Sanfey AG. Emotion regulation and decision making. In: *Handbook of Emotion Regulation.* 2nd ed. New York: Guilford Press; 2014. p. 345-57
19. Ratner RK, Herbst KC. When good decisions have bad outcomes: The impact of affect on switching behavior. *Organ Behav Hum Decis Process.* 2005;96(1):23-37 doi:10.1016/j.obhdp.2004.09.003
20. Naseem S, Mohsin M, Hui W, Liyan G, Penglai K. The investor psychology and stock market behavior during the initial era of COVID-19: A study of China, Japan, and the United States. *Front Psychol.* 2021;12:626934. doi:10.3389/fpsyg.2021.626934
21. Lerner JS, Keltner D. Fear, anger, and risk. *J Pers Soc Psychol.* 2001;81(1):146-60. doi:10.1037/0022-3514.81.1.146
22. She S, Eimontaite I, Zhang D, Sun Y. Fear, anger, and risk preference reversals: An experimental study on a Chinese sample. *Front Psychol.* 2017;8:1371. doi:10.3389/fpsyg.2017.01371
23. Tsai MH, Young MJ. Anger, fear, and escalation of commitment. *Cogn Emot.* 2010;24(6):962-73. doi:10.1080/02699930903050631
24. Lerner JS, Tiedens LZ. Portrait of the angry decision maker: How appraisal tendencies shape anger's influence on cognition. *J Behav Decis Mak.* 2006;19(2):115-37. doi:10.1002/bdm.515
25. Hutcherson CA, Gross JJ. The moral emotions: A social-functional account of anger, disgust, and contempt. *J Pers Soc Psychol.* 2011;100(4):719-35. doi:10.1037/a0022408
26. Hassan EU, Shahzeb F, Shaheen M, Abbas Q, Hameed Z, Hunjra AI. Impact of affect heuristic, fear and anger on the decision making of individual investor: a conceptual study. *World Appl Sci J.* 2013;23(4):510-4. doi:10.5829/idosi.wasj.2013.23.04.13076
27. Habib M, Cassotti M, Moutier S, Houdé O, Borst G. Fear and anger have opposite effects on risk seeking in the gain frame. *Front Psychol.* 2015;6:253. doi:10.3389/fpsyg.2015.00253

28. Yang Q, Zhao D, Wu Y, Tang P, Gu R, Luo YJ. Differentiating the influence of incidental anger and fear on risk decision-making. *Physiol Behav.* 2018;184:179-88. doi:10.1016/j.physbeh.2017.11.028
29. Meissner P, Poensgen C, Wulf T. How hot cognition can lead us astray: The effect of anger on strategic decision making. *Eur Manag J.* 2021;39(4):434-44. doi:10.1016/j.emj.2020.09.010
30. Wu G. Anxiety and decision making with delayed resolution of uncertainty. *Theory Decis.* 1999;46:159-99. doi:10.1023/A:1004990410083
31. Raghunathan R, Pham MT. All negative moods are not equal: Motivational influences of anxiety and sadness on decision making. *Organ Behav Hum Decis Process.* 1999;79(1):56-77. doi:10.1006/obhd.1999.2838
32. Gambetti E, Giusberti F. The effect of anger and anxiety traits on investment decisions. *J Econ Psychol.* 2012;33(6):1059-69. doi:10.1016/j.joep.2012.07.001
33. Bishop SJ, Gagne C. Anxiety, depression, and decision making: A computational perspective. *Annu Rev Neurosci.* 2018;41(1):371-88. doi:10.1146/annurev-neuro-080317-062007
34. Gambetti E, Zucchelli MM, Nori R, Giusberti F. Default rules in investment decision-making: Trait anxiety and decision-making styles. *Financ Innov.* 2022;8(1):23. doi:10.1186/s40854-021-00329-y
35. Matsumoto D, Wilson M. Effects of multiple discrete emotions on risk-taking propensity. *Curr Psychol.* 2023;42(18):15763-72. doi:10.1007/s12144-022-02868-8
36. Lo AW, Repin DV, Steenbarger BN. Fear and greed in financial markets: A clinical study of day-traders. *Am Econ Rev.* 2005;95(2):352-9. doi:10.1257/000282805774670095
37. Sparks AM, Fessler DM, Chan KQ, Ashokkumar A, Holbrook C. Disgust as a mechanism for decision making under risk: Illuminating sex differences and individual risk-taking correlates of disgust propensity. *Emotion.* 2018;18(7):942-55
38. Xing C. Effects of anger and sadness on attentional patterns in decision making: An eye-tracking study. *Psychol Rep.* 2014;114(1):50-67. doi:10.2466/01.04.PR0.114k14w3
39. Gosling CJ, Moutier S. High but not low probability of gain elicits a positive feeling leading to the framing effect. *Front Psychol.* 2017;8:81. doi:10.3389/fpsyg.2017.00081
40. Gross JJ, Richards JM, John OP. Emotion regulation in everyday life. In: Snyder DK, Simpson J, Hughes JN, editors. *Emotion regulation in couples and families: Pathways to dysfunction and health.* Washington, DC: American Psychological Association; 2006. p. 13-35. doi:10.1037/11468-001
41. Karboul I, Karoui Zouaoui S. La personnalité: La décision peut-elle être rationnelle, vu la diversité mentale et psychologique des décideurs? *Rev Int Psychosociol.* 2013;19(2):89-104. doi:10.3917/rips1.048.0089
42. Díaz R. What do people think is an emotion? *Affect Sci.* 2022;3(2):438-50. doi:10.1007/s42761-022-00113-w.

43. Damasio AR. L'erreur de Descartes. Paris: Odile Jacob; 1995.
44. George JM, Dane E. Affect, emotion, and decision making. *Organ Behav Hum Decis Process*. 2016;136:47-55. doi:10.1016/j.obhdp.2016.06.004
45. Stevenson S, Hicks RE. Trust your instincts: The relationship between intuitive decision making and happiness. *Eur Sci J*. 2016;12(11):463-83. doi:10.19044/esj.2016.v12n11p463
46. Sakthivelu S, Karthikeyan K. Investors decision-making behaviour in insurance investment preference. *ComFin Res*. 2024;12(4):34-8. doi:10.34293/commerce.v12i4.8151
47. Schinckus C. La finance comportementale ou le développement d'un nouveau paradigme. *Rev Hist Sci Hum*. 2009;(20):101-12. doi:10.3917/rhsh.020.0101
48. Frydman C, Camerer C. The psychology and neuroscience of financial decision making. *Trends Cogn Sci*. 2016;20(9):661-75. doi:10.1016/j.tics.2016.07.003
49. Gabaix X. Comprendre l'irrationalité et les événements extrêmes. *Regards Croisés Écon*. 2011;2(10):63-75. doi:10.3917/rce.010.0063
50. Tharchen T. How can behavioural finance help us in better understanding the recent global financial crisis? *Eur J Bus Manag*. 2012;4(5):7-14.
51. Benjana H, Yamani O. Psychology of investors: Reexamination of traditional finance. *Rev Contrôle Comptabilité Audit*. 2022;6(1):1-22.
52. Bourghelle D, Brandouy O. Sensitivité des marchés financiers aux informations macroéconomiques: Une lecture conventionnaliste. *Écon Conv*. 2006:209-26. doi:10.3917/dec.eymar.2006.02.0209
53. Ricciardi R. A risk perception primer: A narrative research review of the risk perception literature in behavioral accounting and behavioral finance [Internet]. Rochester, NY: SSRN; 2004 [cited 2024 Mar 15]. Available from: <http://ssrn.com/abstract=566802>
54. Bloomfield R, Anderson A. Experimental finance. *Johnson Sch Res Pap Ser*. 2009;(23):1-22. doi:10.1002/9781118258415
55. Libby R, Bloomfield R, Nelson MW. Experimental research in financial accounting. *Account Organ Soc*. 2002;27(8):775-810. doi:10.1016/S0361-3682(01)00011-3
56. Finet A, Kristoforidis K, Laznicka J. How to design a financial market experimentation: The qualitative approach. *Int J Soc Adm Sci*. 2025;[forthcoming].
57. Finet A, Laznicka J, Palumbo H. From which planet do they come from? Biases in trading strategies: Does gender matter? *Int J Bus Manag*. 2024;12(12). doi:10.24940/theijbm/2024/v12/i12/BM2412-002
58. Finet A, Kristoforidis K, Viseur R. De la composante genre dans les activités de trading: Une étude exploratoire. *Rev Sci Gest*. 2022;313:43-51
59. Finet A, Kristoforidis K, Viseur R. Les instruments de prises de décisions en situation de trading: Une étude exploratoire. *Rev Financier*. 2022;44(248):4-18. doi:10.3917/rsg.313.0047

60. Finet A, Kristoforidis K, Viseur R. L'émergence de biais comportementaux en situation de trading: Une étude exploratoire. *Rev Rech Sci Gest.* 2021;146:147-82. doi:10.3917/resg.146.0147
61. Finet A, Laznicka J. Addressing emotional dysregulation in experimental design. *Psychol Behav Sci.* 2025;14(1):7-18. doi:10.11648/j.pbs.20251401.12
62. Severin MI, Raes F, Notebaert E, Lambrecht L, Everaert G, Buysse A. A qualitative study on emotions experienced at the coast and their influence on well-being. *Front Psychol.* 2022;13:902122. doi:10.3389/fpsyg.2022.902122
63. Mwita K. Strengths and weaknesses of qualitative research in social science studies. *Int J Res Bus Soc Sci.* 2022;11(6):618-25. doi:10.20525/ijrbs.v11i6.1920
64. Pérez-Sánchez J, Delgado AR. A metamethod study of qualitative research on emotion regulation strategies. *Pap Psicol.* 2022;43(2):103-9. doi:10.23923/pap.psicol.2989
65. Ackert LF, Church BK, Tompkins J, Zhang P. What's in a name? An experimental examination of investment behavior. *Rev Financ.* 2005;9(2):281-304. doi:10.1007/s10679-005-7594-2
66. Rossignol M, Anselme C, Vermeulen N, Philippot P, Campanella S. Categorical perception of anger and disgust facial expression is affected by non-clinical social anxiety: An ERP study. *Brain Res.* 2007;1132:166-76. doi:10.1016/j.brainres.2006.11.036
67. Dorn D, Sengmueller P. Trading as entertainment? *Manag Sci.* 2009;55(4):591-603. doi:10.1287/mnsc.1080.0962
68. Claudon P, Weber M. Emotion. Contribution to the psychodynamic study of the development of the infant's thought during affective interaction. *Devenir.* 2009;21(1):61-99. doi:10.3917/dev.091.0061
69. Mériade L, Sales JM, Milton A. Emergency management in organisations? The answers provided by Napoleon Bonaparte. *Rev Int Psychosociol Gest Comport Organ.* 2020;(64):165-96. doi:10.3917/rips1.064.0165
70. Barber BM, Odean T. Boys will be boys: Gender, overconfidence, and common stock investment. *Q J Econ.* 2001;116(1):261-92. doi:10.1162/003355301556400
71. Waddington K. Using qualitative diary research to understand emotion at work. In: *A Day in the Life of a Happy Worker.* New York: Psychology Press; 2012. p. 132-49.
72. Scott S. 'I enjoy having someone to rant to, I feel like someone is listening to me': Exploring emotion in the use of qualitative, longitudinal diary-based methods. *Int J Qual Methods.* 2022;21:16094069221074444. doi:10.1177/16094069221074444
73. Frey R, Hertwig R, Rieskamp J. Fear shapes information acquisition in decisions from experience. *Cognition.* 2014;132(1):90-9. doi:10.1016/j.cognition.2014.03.009
74. Pittig A, Brand M, Pawlikowski M, Alpers GW. The cost of fear: Avoidant decision making in a spider gambling task. *J Anxiety Disord.* 2014;28(3):326-34. doi:10.1016/j.janxdis.2014.03.001

75. Visser-Keizer AC, Westerhof-Evers HJ, Gerritsen MJ, van der Naalt J, Spikman JM. To fear is to gain? The role of fear recognition in risky decision making in TBI patients and healthy controls. *PLoS One*. 2016;11(11):e0166995. doi:10.1371/journal.pone.0166995
76. Koizumi A, Mobbs D, Lau H. Is fear perception special? Evidence at the level of decision-making and subjective confidence. *Soc Cogn Affect Neurosci*. 2016;11(11):1772-82. doi:10.1093/scan/nsw084
77. Deurkar P, Kumar N, Kumar A. Does happiness affect decision making in goal setting, risk taking, and profitability situations. *Int J Indian Psychol*. 2021;9(1):233-42. doi:10.25215/0901.027
78. Kumalasari AD, Karremans JC, Dijksterhuis A. Do people choose happiness? Anticipated happiness affects both intuitive and deliberative decision-making. *Curr Psychol*. 2022;41(9):6500-10. doi:10.1007/s12144-020-01144-x
79. Yildiz M, Eldeleklioglu J. The relationship between decision-making and intolerance to uncertainty, cognitive flexibility and happiness. *Eurasian J Educ Res*. 2021;91:39-60
80. Bubić A, Erceg N. The role of decision making styles in explaining happiness. *J Happiness Stud*. 2018;19:213-29. doi:10.1007/s10902-016-9816-z
81. Chapman HA, Anderson AK. Understanding disgust. *Ann N Y Acad Sci*. 2012;1251(1):62-76. doi:10.1111/j.1749-6632.2011.06369.x
82. Oaten M, Stevenson RJ, Tapp C, Case TI, Cousins A. The role of disgust in male sexual decision-making. *Front Psychol*. 2019;9:2602. doi:10.3389/fpsyg.2018.02602
83. Han S, Lerner JS, Zeckhauser R. The disgust-promotes-disposal effect. *J Risk Uncertain*. 2012;44(2):101-13. doi:10.1007/s11166-012-9139-3
84. Schnall S. Disgust as embodied loss aversion. *Eur Rev Soc Psychol*. 2017;28(1):50-94. doi:10.1080/10463283.2016.1259844
85. Hartley CA, Phelps EA. Anxiety and decision-making. *Biol Psychiatry*. 2012;72(2):113-8. doi:10.1016/j.biopsych.2011.12.027
86. Treffers T, Klarner P, Huy QN. Emotions, time, and strategy: The effects of happiness and sadness on strategic decision-making under time constraints. *Long Range Plann*. 2020;53(5):101954. doi:10.1016/j.lrp.2019.101954
87. de Visser L, van der Knaap LJ, van de Loo AJ, Van der Weerd CMM, Ohl F, van den Bos R. Trait anxiety affects decision-making differently in healthy men and women: Towards gender-specific endophenotypes of anxiety. *Neuropsychologia*. 2010;48(6):1598-606. doi:10.1016/j.neuropsychologia.2010.01.027
88. Maner JK, Richey JA, Cromer K, Mallott M, Lejuez CW, Joiner TE, et al. Dispositional anxiety and risk-avoidant decision-making. *Pers Individ Differ*. 2007;42(4):665-75. doi:10.1016/j.paid.2006.08.016



89. Noval LJ. On the misguided pursuit of happiness and ethical decision making: The roles of focalism and the impact bias in unethical and selfish behavior. *Organ Behav Hum Decis Process*. 2016;133:1-16. doi:10.1016/j.obhdp.2015.12.004
90. Yang Y, Yan B, Sun K, Wu D, Wang C, Xiao W. Trait anxiety leads to “better” performance? A study on acute stress and uncertain decision-making. *Behav Sci*. 2024;14(12):1186. doi:10.3390/bs14121186
91. Sun JJ, Wang T, Zhao P, Zhao YQ, Wang L, Ye F. Research progress of shared decision-making in schizophrenia with anxiety. *Neuropsychiatr Dis Treat*. 2024;2095-101. doi:10.2147/NDT.S483126
92. Anderson CJ. The psychology of doing nothing: Forms of decision avoidance result from reason and emotion. *Psychol Bull*. 2003;129(1):139-67. doi:10.1037/0033-2909.129.1.139
93. Keinan G. Decision making under stress: Scanning of alternatives under controllable and uncontrollable threats. *J Pers Soc Psychol*. 1987;52(3):639-44. doi:10.1037/0022-3514.52.3.639
94. Martin LN, Delgado MR. The influence of emotion regulation on decision-making under risk. *J Cogn Neurosci*. 2011;23(9):2569-81. doi:10.1162/jocn.2011.21618
95. Forsythe R, Rietz TA, Ross TW. Wishes, expectations and actions: A survey on price formation in election stock markets. *J Econ Behav Organ*. 1999;39(1):83-110. doi:10.1016/S0167-2681(99)00027-X
96. Lucey BM, Dowling M. The role of feelings in investor decision-making. *J Econ Surv*. 2005;19(2):211-37. doi:10.1111/j.0950-0804.2005.00245.x
97. Rouch D, Rouch D. The social licence for financial markets. Cham: Springer International Publishing; 2020. p. 113-61. doi:10.1007/978-3-030-40220-4\_4
98. Krizan Z, Windschitl PD. Wishful thinking about the future: Does desire impact optimism? *Soc Pers Psychol Compass*. 2009;3(3):227-43. doi:10.1111/j.1751-9004.2009.00169.x
99. Stemmler G. International handbook of anger. In: Potegal GSM, Spielberger C, editors. New York: Springer; 2010. p. 9-24.
100. Garfinkel SN, Zorab E, Navaratnam N, Engels M, Mallorquí-Bagué N, Minati L, et al. Anger in brain and body: The neural and physiological perturbation of decision-making by emotion. *Soc Cogn Affect Neurosci*. 2016;11(1):150-8. doi:10.1093/scan/nsv099
101. Yang Z, Gu Z, Wang D, Tan X, Wang X. The effect of anger and sadness on prosocial decision making: The role of the interpersonal attribution of responsibility. *Acta Psychol Sin*. 2017. doi:10.3724/SP.J.1041.2017.00393
102. Lerner JS, Li Y, Valdesolo P, Kassam KS. Emotion and decision making. *Annu Rev Psychol*. 2015;66(1):799-823. doi:10.1146/annurev-psych-010213-115043
103. Fischhoff B, Broomell SB. Judgment and decision making. *Annu Rev Psychol*. 2020;71(1):331-55. doi:10.1146/annurev-psych-010419-050747



104. Suo T, Jia X, Song X, Liu L. The differential effects of anger and sadness on intertemporal choice: An ERP study. *Front Neurosci.* 2021;15:638989. doi:10.3389/fnins.2021.638989
105. Subra B. The effect of anger on intentionality bias. *Aggress Behav.* 2021;47(4):464-71. doi:10.1002/ab.21964
106. Domeignoz C, Morin E. Les émotions ont leur raison, qu'il convient d'écouter. *Entreprendre Innover.* 2016;(2):7-15. doi:10.3917/entin.029.0007