РОЗДІЛ 3. ФІНАНСИ, БАНКІВСЬКА СПРАВА, СТРАХУВАННЯ ТА ФОНДОВИЙ РИНОК

BEHAVIOURAL ASPECTS OF INVESTMENT DECISIONS
ПОВЕДІНКОВІ АСПЕКТИ ПРИЙНЯТТЯ ІНВЕСТИЦІЙНОГО РІШЕННЯ

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Behavioural finance theory suggests that patterns of overconfidence, overreaction and overregulation are common to many investors, and that such groups can be large enough to prevent a company's share price from reflecting economic indicators. Modern empirical studies show that investment decisions are influenced by a number of subjective factors. These subjective factors are behavioural biases. They provide a number of new approaches to explaining investment activity. The article studies the influence of behavioural factors on the investment decisions of managers, especially on the investment decisions of corporate relations subjects. It was found that knowing the main reasons for irrational actions of corporate relations subjects, it is possible to predict and control such situations and, as a result, to avoid negative consequences of irrational behaviour.
Key words: *behavioural finance, corporate finance, investment decision, investment behaviour.*

Поведінкові фінанси є сучасним напрямком у фінансовій науці, який спрямований на поєднання теорії поведінкової та когнітивної психології із традиційною галуззю економіки та фінансів. Основна мета цього напрямку полягає в поясненні причин, які зумовлюють прийняття людьми ірраціональних фінансових рішень. Згідно з гіпотезою ефективного ринку, конкуренція між інвесторами, які прагнуть досягти надвисоких прибутків, приводить ціни до їхнього "правильного" значення. Однак інвестори демонструють нераціональну поведінку, коли неправильно сприймають та оцінюють доступну інформацію для формування своїх очікувань щодо майбутньої діяльності компанії та можливих вигід. Регулярні відхилення цін виникають тоді, коли велика група інвесторів поділяє конкретні ірраціональні систематичні дії. Метою статті є узагальнення ключових підходів до поведінкових аспектів прийняття інвестиційних рішень та виявлення закономірностей і поведінкових факторів у процесі прийняття інвестиційних рішень. У роботі використано методи діалектичного аналізу, синтезу та логічного узагальнення, порівняння та формалізації. Сучасні емпіричні дослідження свідчать, що на прийняття інвестиційних рішень впливає ряд суб'єктивних факторів. Ці суб'єктивні елементи представляють собою поведінкові упередження, що відкриває нові можливості для розуміння сутності інвестиційної діяльності. У даній статті розглядається вплив поведінкових факторів на прийняття інвестиційних рішень. Встановлено, що визначення основних причин нераціональної поведінки інвесторів дозволяє прогнозувати та ефективно керувати такими ситуаціями, сприяючи уникненню негативних наслідків ірраціонального підходу. Доведено, що під впливом кризових явищ та економічної/політичної нестабільності в країні, інвестори змінюють свою модель поведінки, проявляючи більшу обережність і надаючи перевагу меншим обсягам інвестування та гарантованому доходу. Невпевненість і небажання ризикувати в умовах невизначеності пов'язані з психологічними аспектами, такими як неприйняття втрат і упередженість щодо майбутнього. Водночас війна в Україні створила певні можливості для інвесторів, наприклад, купувати акції компаній, які, наразі втратили в ціні, але, ймовірно, відновляться у післявоєнний період.
Ключові слова: *поведінкові фінанси, корпоративні фінанси, інвестиційне рішення, інвестиційна поведінка.*

The problem statement. The modern economy is developing in a very dynamic way. As a result, empirical research is intensifying, which in turn has led to the emergence of new theories that explain economic and managerial processes outside the classical paradigms. Behavioural finance helps to explain market reactions in situations where classical finance is powerless.

Behavioural finance, which deals directly with the preferences, decision-making strategies and behaviour of individuals, is a relatively new and difficult area to study [9]. This is due to the complexity of formalising the research conducted, as well as the need to take into account a very large number of factors that determine the behaviour of individuals and can increase the impact on the result through the emergence of a synergy effect [10].

At the same time, behavioural finance can help manage the negative consequences of misperceptions and illusions, predict the actions of market participants, and develop effective investment strategies that maximise the impact of invested capital. This makes the study relevant and timely.

Analysis of recent research and publications. The behavioural aspects of investment decision-making have been actively explored and reflected in theoretical developments over the last quarter century. The result has been the emergence of a distinct branch of financial theory, called "behavioural finance", which seeks both to complement classical theories and to offer new concepts for the analysis, diagnosis and prediction of the behaviour of agents in the investment market. There are many theoretical and practical studies on how behaviour affects

investment decisions. In particular, we can highlight the achievements of foreign scientists – R. Thaler, I. Werner, V. Griever, E. Kaplanis, H. Levy, M. Sarnat, P. Serka, L. Tezar, K. French, and domestic scientists – T. Kizima, V. Korneev, K. Malyshenko, Y. Polishchuk, O. Tereshchenko, etc.

The article aims to identify patterns and behavioural factors in the investment decision-making process and to summarise the main approaches to the behavioural aspects of investment decision-making.

Presentation of the main material. Today, more and more researchers and investors are abandoning the classical model of management and investment decision-making in favour of a behavioural model. The reason for this is that classical investment strategies (J. Fama's efficient market hypothesis and random walk theory, Markowitz's portfolio theory (MPT) and stock market optimisation models, expected utility theory (EUT)) assume rational investor behaviour even in the face of risk and uncertainty, logic and validity of actions in making investment decisions [11]. The ideologues of the classical model assume that the same information is available to all market participants, but at the same time they do not take into account the irrational behaviour of investors, changes in their preferences, i.e. possible deviations from the indifference curve up to its radical change [2]. Behavioural theories are therefore coming to the fore in investment decision making. They better assess the real situation in the market, try to identify systematic deviations in human behaviour from the model of rational decision making, and create new financial theories that take these deviations into account [3]. As a result, if behavioural theories are understood and applied correctly, investors can get more out of their investments than if they apply classical financial decision-making theories.

The concepts of behavioural finance focus on the behavioural characteristics of market participants in the field of financial activity, such as unlimited rationality, self-control, self-interest, etc. (D. Dreiser, R. Thaler, J.R. Ritter, R. Olsen, M. Stetman, J. King, etc.). At the same time, it is believed that psychological aspects are central to the process of managerial decision making in the area of investment activity. Although no single, universally accepted financial theory has yet been developed that provides a clear answer to the question of what the optimal capital structure of a firm should be and what factors influence it over the life cycle of an organisation, two main methodological approaches to the scientific study of behavioural finance are becoming established in the mainstream of modern financial literature [1]. The first is the psychological vector of the behaviour of Chief Executive Officers (CEOs) in specific market conditions, which forms the basis for the development and implementation of corporate strategies for finance, investment and credit activities in the future. The second direction is based on the empirical identification of deviations of market behaviour of financial relations actors from traditional models with further identification of their causes.

In the context of studying the behavioural aspects of investment decisions, the most practical behavioural finance theories are prospect theory, investor behaviour theory and noise trading theory (Table 1).

There is currently a wide variety of investor behaviour, ranging from those who make very prudent investment decisions to those who make irrational decisions; there are also investors who use relevant, important information and those who use information that is not relevant to their decisions (noise traders), and finally there are so-called well-informed investors (insiders) who use confidential information. It is worth noting that, in practice, there are significant differences between how different investors use information and how they make decisions.

In practice, not all investors have the same technical (electronic) tools or software, or use the same methods for analysing and forecasting financial variables. It is difficult to compare the team (human resources) and the resources available in a large bank or investment fund with an individual investor, even the best equipped one, who is representing his or her own company and managing his or her own personal savings. In a continuous (electronic) notation system, a time interval of one minute can be used to determine the reaction of an instrument's price to information. Receiving the same information from other sources will necessarily be a repetition of the information already announced, and so may be delayed. Some investors may react with a delay for a variety of reasons, including a large amount of information coming from different sources at the same time, or ignoring some information, as well as difficulties in making an immediate decision.

An investor has to make decisions under conditions of uncertainty, taking into account military operations on the territory of Ukraine and a false perception of reality. Under such conditions, it is difficult to predict future events due to the use of limited, unreliable information, which leads to the emergence of the representativeness heuristic and the framing effect. The reluctance to take risks under conditions of uncertainty is caused by internal psychological drivers of risk aversion. There are several biases which combine to explain how irrational investors behave:

1) loss aversion – losses are more important than gains. Kahneman saw this as the most important contribution of psychology to behavioural economics [4];

2) rejection of uncertainty. An investor never knows with certainty the probability of success or failure of a project, nor whether he will be able to recoup his investment [12];

Table 1

Characteristics of the theories of behaviour in the context of investment decision making

Name of behavioural theory	The essence
"Prospect theory" - «Certainty effect» - «Loss aversion» - «Ttrap effect»	A preference for a lower but more certain income over a higher but less likely income. Thus, an investor has a preference for events or outcomes that are known in advance over those that are merely probable. In practice, this means that when making decisions where the outcome is uncertain, investors (especially conservative ones) tend to choose those options for the development of events that give them the best chance of avoiding probable losses. The tendency to hold unprofitable assets in their portfolios for too long and to sell potentially profitable assets too quickly is also typical of investors, especially novices.
"The theory of investor behaviour" - «Conservatism effect» - «The effect of competence»	is that people change their beliefs too slowly under the influence of new information. This means that if a person has a pre-formed opinion about a particular object, new information that contradicts the established beliefs is initially greatly underestimated or ignored altogether due to conservative thinking and incorrect application of probability theory models in practice. This effect is manifested both in an inadequate reaction to negative information (which often leads to losses) and to positive information (when the hope of a positive future trend leads to a revaluation of financial instruments and a reduction in the income of their owners). Investors tend to take more risks in areas where they consider themselves to be more competent, regardless of whether their awareness and professionalism can in any way influence the likelihood of a particular outcome.
«The theory of noise trading»	is created by the constant availability of unverified data, rumours and advice from fictitious "experts" in the market. Under such conditions, financial transactions are often made not on the basis of reliable and timely information, but on the basis of "noise". As a result, rational market participants compete with irrational market participants and make additional profits from them. Of course, such profits would not have been made if financial transactions were carried out solely on the basis of reliable information.

**compiled by the author according to [7]*

3) hindsight bias, also known as the "I knew it" effect, which is the tendency to view past events from the perspective of the present when those events have already occurred [6].

The effect of loss aversion changed investor behaviour during the crisis in the direction of risk minimisation (aversion to extreme decisions, i.e. the tendency to avoid extreme options) and result criticism (maximum objectivity and criticism in the calculation of the result indicator) [5]. In making their decisions, investors were influenced by the design effect, i.e., they depended on the form and formulation of the task. Consequently, under the influence of crises, economic and political instability in the country, the behavioural model of investors is changing: they are becoming more moderate (preferring a smaller but more guaranteed income).

Behavioural finance's main achievement is to recognise that in finance, as in all other areas, people make decisions and act under the influence of stereotypes, perceptual illusions, preconceptions, errors in information analysis and common emotions [8].

In contrast to the characteristics of rational behaviour on which classical financial theories are based, behavioural finance identifies the following characteristics of irrational behaviour inherent in modern stock market participants:

– Investors do not follow passive strategies, i.e. the theory of efficient markets;

– Investors do not evaluate risky activities according to the principle of expected utility maximisation;

– Investors forecast uncertain future values, building statistical and probabilistic models on the basis of information relating to a short-term past period, which can in no way serve as a basis for applying the apparatus of probability theory and mathematical statistics;

– Investors may make different investment decisions depending on the form of the task ("design effect");

– Due to their inherent conservatism and the use of the heuristic rule of representativeness, investors either under – or over-react, which has an impact on the pricing of financial assets and, as a result, on the level of returns received by investors.

Conclusions. It is necessary to combine knowledge from psychology, sociology and financial economics to build a valid model of investor behaviour in financial markets. There is currently no definitive theory of behavioural finance. However, increasing attention is being paid to identifying the characteristics of behavioural decision making. Behavioural finance does not assume that every investor is influenced by such illusions. However, through trial and error, investors make an invaluable contribution to the development of a concrete theory of how to avoid mistakes in decision-making, especially in investing.

The impact of crises, economic and political instability in the country is changing the behaviour model of investors: they are becoming more moderate (preferring smaller investments and guaranteed income). The internal psychological drivers of risk aversion – loss aversion, uncertainty and a

retrospective bias - are behind the reluctance to take risks in an uncertain environment. At the same time, the war in Ukraine has created some opportunities for investors, including buying shares of companies that have prospects of recovery in the post-war period due to falling share prices.

Taking into account the limitations of one of the market mechanisms of self-regulation, the behavioural approach involves studying the consequences of investment decisions made under the influence of behavioural factors on the stability of stock markets, and not only on the welfare of individual investors. This aspect is very important because the combination of several effects, such as overreaction and herd behaviour, in the context of limited self-regulatory mechanisms can have significant negative consequences for the stability of stock markets.

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