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APPLICATION OF BEHAVIORAL ECONOMICS APPROACHES IN MODERN ORGANIZATIONS

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The article considers topical issues of implementation of behavioral economics models in modern organizations. Rapid changes in social and economic life, which create uncertainty and reduce predictability of processes, global competition and other factors that characterize the new economy, have a significant impact on the psychological characteristics of human perception and judgment, emotional and cognitive factors of behavior and economic decision-making, market participants. It is noted that behavioral economics provides important knowledge for a better understanding of financial and economic mechanisms, motivates critical perception of information and helps to make the right decisions and build their behavior more effectively. The components of behavioral economics are analyzed, namely: processes of preparation, analysis, measurement, accumulation, identification, presentation and interpretation of non-financial data, based on which the management of enterprises and ministries can make both operational and strategic decisions to influence the development of these organizations or industry in general. Various psychological effects associated with irrational attitudes of economic agents have been studied, and it has been proved that financial and economic, as well as managerial decisions are influenced by situational judgments and emotions. The key features that need to be considered in the general modeling of the behavior of economic agents are formulated. In real life, a person can not behave, adhering to the rigid limits of economic rationality. Rationality and irrationality complement each other, which allows the decision-making model to approach the real behavior of economic agents in the paradigm of the new economy, thus avoiding the erroneous dichotomy between classical and behavioral finance or neoclassical and behavioral economics in general.

ЗАСТОСУВАННЯ ПІДХОДІВ ПОВЕДІНКОВОЇ ЕКОНОМІКИ В СУЧАСНИХ ОРГАНІЗАЦІЯХ

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Ключові слова:
поведінкова економіка,
поведінкові фінанси,
обмежена раціональність,
теорія перспектив,
економічні агенти, фреймінг

У статті розглянуто актуальні питання впровадження моделей поведінкової економіки у сучасних організаціях. Встановлено, що швидкі зміни в суспільному та економічному житті, які створюють невизначеність і зменшують передбачуваність процесів, глобальна конкуренція та інші фактори, що характеризують нову економіку, мають суттєвий вплив на психологічні особливості людського сприйняття та судження, емоційні та когнітивні чинники поведінки й прийняття економічних рішень суб'єктами ринку. Зазначено, що поведінкова економіка дає важливі знання для кращого розуміння фінансово-економічних механізмів, мотивує до критичного сприйняття інформації і допомагає приймати правильні рішення та ефективніше вибудовувати свою поведінку. Проаналізовано складові частини поведінкової економіки, а саме: процеси підготовки, аналізу, вимірювання, накопичення, ідентифікації, уявлення та інтерпретації нефінансових даних, ґрунтуючись на яких керівництво підприємств та міністерства можуть приймати, як оперативні, так і стратегічні рішення, що дозволяють впливати на розвиток цих організацій чи галузі загалом. Досліджено різні психологічні ефекти, що пов'язані з нераціональними

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установками економічних агентів, і доведено, що на фінансово-економічні, а також управлінські рішення впливають ситуативні судження та емоції. Сформульовано ключові особливості, на які необхідно звертати увагу при загальному моделюванні поведінки економічних агентів. У реальному житті людина не може поводи себе, дотримуючись жорстких меж економічної раціональності. Раціональність та ірраціональність доповнюють одна одну, що дає змогу моделі прийняття рішень наблизитися до реальної поведінки економічних агентів в парадигмі нової економіки, тим самим уникнути помилкової дихотомії між класичними та поведінковими фінансами або неокласичною і поведінковою економікою в цілому.

Statement of problem

Behavioral economic theory symbolizes the changing stereotypes of classical economists, using in their analysis the results of psychological research on the processes of individual irrational financial decisions in various economic and social spheres.

Classical and neoclassical economic theories, which still remain mainstream, are based on the fact that all participants in economic relations behave rationally. In other words, all their actions and decisions are conditioned by the fact that everyone is guided by their own benefit. But in everyday life we do not develop a detailed analysis of possible income or expenses.

In the vast majority of situations, people are prone to current emotions and their own feelings at a particular time. Obviously, irrational behavior is inherent in man more than rational. Theories of behavioral economics are built on this hypothesis – a modern branch of economics, which combines the provisions of economics, psychology, sociology, neurobiology and studies socio-economic problems using non-traditional methods.

The principles of behavioral economics have long been used in EU stock and financial markets, applied in regional and local development policy in the United States. In Ukraine, the behavioral economy is currently in its infancy, so the urgent scientific task is to develop behavioral principles to ensure the competitiveness of the national market and economic system as a whole, which is consistent with the human-centered model of the new economy.

Today, even after scientists have received several Nobel Prizes in behavioral economics and finance, this theory is still very controversial. Some scholars still refuse to acknowledge its existence.

However, it is behavioral economic theory that forces us to look at the understanding of rational and irrational, productive and unproductive phenomena of market behavior in a new way.

Analysis of recent studies and publications

D. Kahneman, A. Tversky, Herbraith Simon, R. Thaler, R. Schiller are considered to be the founders of behavioral finance. J. Ackerloff, N. Barberis, W. DeBondt, R. Vishny, T. Odean, J. Ritter, M. Stetman, H. Sheffrin, A. Schleifer, and others studied the aspects of behavioral finance and their evolution.

The study is based on the theory of economic behavior, which was founded by such scientists as G. Akerlof, M. Armstrong, G. Becker, P. Blau, M. Weber, C. Hill, D. Kahneman, G. Katona, J. Coleman, T. Parsons, L. Robbins, H. Simon, R. Thaler, G. Tarde, G. Tverky, A. Tversky, E. Fama, R. Florida, A. Furnham and others.

In Ukraine, this trend is represented by the works of P. Ilyashenko, M. Kuzhelev, N. Karpyshyn, T. Kizima, M. Lipich, V. Ushkalyova, L. Shirinyan and others.

Relevance, theoretical and practical significance and insufficient development of these problems led to the choice of research topic.

Objectives of the article

The purpose of the article is to develop conceptual provisions and build behavioral models of economic agents in the new economy.

In accordance with the purpose of the work, the following tasks were set: to clarify the conceptual and terminological apparatus of the study of human economic behavior; to systematize scientific approaches to determining the features of the new economy and to outline its impact on the formation of behavioral models of market participants; identify and analyze the system of factors influencing the type of behavior of labor market participants.

The main material of the research

The classical paradigm of financial decision-making is based on the concept of «rationality» and implies that a person who makes decisions must act absolutely objectively and logically, have a clear goal, have information and perform all actions that will maximize the results of their own activities. This model encompasses a number of specific theories, the main assumptions of which are that market participants act rationally, and their main goal is to maximize profits.

Real people, in order to navigate with maximum reliability in conditions of uncertainty, have a ready-made set of rules of conduct, and not universal ones, but applicable to the most common situations in economic life.

The models used in standard finance assume that economic agents have such superpowers as unlimited cognitive skills and absolute willpower on the one hand, and on the other hand, agents are limited solely by their own personal interests. These three unlimited traits (rationality, willpower, and self-interest) form the basis of the so-called «economic man» (ironic *Econs* used), which is a model used to approximate the behavior of real people and build economic models. Instead, proponents of behavioral economics take the results of research in psychology and sociology seriously and emphasize that the behavior of real people (the term *Humans*) differs significantly from the economic human model. This difference, no matter how trivial it may seem, has important consequences, as real people tend to make systematic and predictable mistakes.

When making a decision with a small list of well-understood options, there is a careful study of the properties of each of them and the possibility of making concessions. With the growth of alternative choices, the decision-making process becomes much more complicated. Therefore, to facilitate the work, individuals often resort to the use of a simplifying strategy of choice, which involves the establishment of only key important parameters, with which the alternative is compared. All other unimportant choice parameters are neglected.

He tried to explain the irrationality of human actions in the early 40s of the XIX century. Charles Mackay. In «The Most Common Mistakes and Crowd Madness», he explains the phenomenon of «price speculative bubbles», which destabilize stock markets (one of the first manifestations of irrational behavior, called the «crowd effect»). Today, «behavioral economics» is a set of quite different approaches to theories, concepts, hypotheses, some of which are given in table. 1.

Most often, these theories and techniques of behavioral economics are used mainly at the macro level. However, they could also be particularly effective at the enterprise level. To do this, it is recommended to take the following steps:

– to introduce a functional approach to the use of basic techniques of influence of behavioral economics, which involves the gradual implementation of basic management functions;

Table 1 – Systematization of theories of behavioral economics

Name of the theory	Authors	The essence of the theory
The theory of mass consciousness	G. Lebon	People in the crowd start behaving the way they used to act alone, which explains the irrationality of decision-making.
The theory of expected usefulness	M. Allais	People are not rational in evaluating possible options, as lack of information and stereotypes of evaluation hinder rational choices. In his work, he denied the basic principles of the "theory of expected utility" and proved its relativity and ambiguity.
Decision analysis theory	G. Rife	When the time comes to make an important decision, we experience different feelings, from self-doubt to self-confidence, from the desire to postpone the decision for later to the desire to pass this stage sooner, from doubt to despair. This causes discomfort, which often pushes us to make hasty decisions.
The theory of limited rationality	S. Herbraith	Due to the limited cognitive abilities of man, his search and making a satisfactory decision is explained by the following stages: -all options are compared with a certain pre-established human level of needs; -in case of finding a satisfactory option, the search for a solution is stopped; -the level of needs can be periodically reviewed by the subject.
Theory of psychological economics	J. Cato	The way people interpret the real environment and how they shape their expectations for the future has a significant impact on the macroeconomic situation in the country. proposed an index of intermediate sentiments.
Choice theory in time	J. Ainslie	Irrationality of decision-making is associated with the choice of time and, as a rule, this behavior is inconsistent.
Perspective theory and cumulative perspective theory	A. Tversky and D. Kahneman	A person makes decisions based on his own perspectives, and these perspectives are always uncertain. Basic principles of the theory: the decision-maker has a certain "level of comparison"; we are more sensitive to losses than to profits of the same size; decision-makers overestimate the low probability and underestimate the high probability of an event. Excessive self-confidence, design bias, and limited attention effects have become part of this theory.
Motivation theory	R. Thaler and K. Sunstein	Most economic operators choose the "lazy" course of action, which is offered by default. Cognitive errors can be predicted, taken into account in economic analysis and try to overcome with special tools.
Adaptive market theory	Andrew Law	Individuals make decisions based on their own experience and their best assumptions about what may be optimal, and they tend to adapt to the market. The main idea of this hypothesis is to apply the principles of evolution (competition, natural selection, adaptation, reproduction, etc.) to financial markets. The key thesis is that market equilibrium is not guaranteed and cannot be achieved.
The illusion of control	E. Langer	Irrational decisions are a consequence of the illusion of control, ie individuals overestimate their ability to control real events and believe that they control the consequences of this event, and therefore may be at higher risk, although in fact they do not have such control.
Hyperbolic discounting		According to hyperbolic discounting, estimates fall relatively quickly for earlier periods of delay (eg, now up to one week), but then fall more slowly for longer periods of delay (eg, more than a few days).
Claims level concept	G. Simon	At every moment of time a person has some idea of what he can (has the right) to expect. There is a vague intuition that this option is above or below an acceptable level for decision making.
X-inefficiencies	Leibenstein	The degree of rationality (thoughtfulness) of human behavior depends on two forces. Physiological and social nature Working in the firm, he primarily strives for optimal comfort, not maximization of the nail.

Source: compiled on the basis of [2; 3; 4; 5; 6].

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– develop a system of principles on which the process of implementing the basic techniques of the impact of behavioral economics in domestic organizations will be based;

– develop measures for individual techniques of influence of behavioral economics;

– to develop a system of indicators for assessing the level of effectiveness of the implementation of behavioral economics techniques in modern organizations.

As you know, any process in the enterprise should be considered from the standpoint of a functional approach. That is, they should first be planned, organize work on their implementation, motivate employees, monitor the stages of their implementation and implementation and regulate the identified deviations. This may also apply to the process of implementing behavioral economics techniques.

Behavioral theories are based on the premise that a firm has many goals [7]. This set of goals includes:

– the interests of workers seeking high wages, good working conditions, safety, etc.;

– interests of managers striving for power, raising their social status, career, income growth;

– interests of shareholders wishing to receive high dividends;

– the interests of the top management of the company, which seeks to improve the economic performance of the company, to increase the prestige of the company.

In order for the firm to exist as a whole, to be a stable and viable organism, top management must be able to reconcile these private interests and the overall strategic interests of the firm as such. The prosperity of the company depends on the ability of the administration to extinguish differences of interests, to resolve their conflicts in the most painless way, to maintain a stable social environment in the team [8].

Support for solving this problem is provided, on the one hand, by the tools for performing management functions that form the technology for managing a production facility, and on the other hand, by taking into account the behavior of participants in the enterprise's activities when making and implementing management decisions.

According to behavioral theory, all goals must be ordered, following an implicit order of precedence among them.

In the presented model, the goals are not set to maximize the corresponding magnitude (such as profit, sales and market share), but instead the goals are trade-offs negotiated by interest groups (Figure 1).

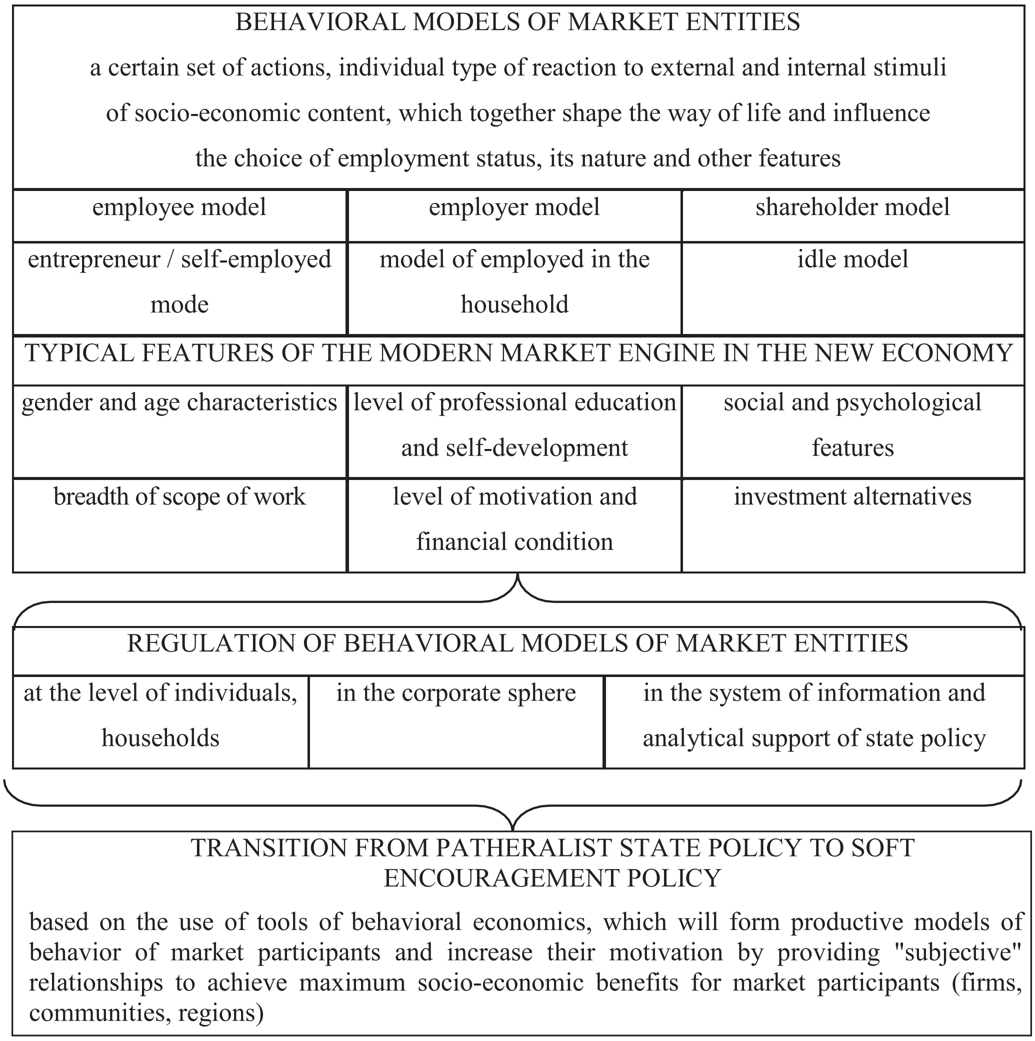

Fig. 1 – Functional idea of how the models of the behavioral economy are promoted by the subjects of the market

In practice, the coordination of these interest groups causes a number of so-called «effects» that underlie the irrational actions of market participants in conditions of uncertainty and risk. Depending on the goals and in different situations, we can outline the most important of them [9]:

– Recycling effect. Is the perception of the situation different by economic entities, if it is written in different formulations.

– Insulation effect. By simplifying the choice between different perspectives, economic agents ignore commonalities, focusing on differences.

– The illusion of controlling the risk of greater risk in a situation that creates a sense of opportunity to influence the outcome of the operation.

– Competence effect. Economic actors are at greater risk in areas where they are more competent, whether or not their knowledge and experience affect the likelihood of an outcome.

– Information cascade effect. The influence of economic entities affects the opinion of outsiders.

– Trap effect. Describes a situation where an entity has invested money, time, effort in any investment project and decided to continue its development for the sake of its initial investment, although the forecast has seriously deteriorated.

– The effect of conservatism. Manifested in the slow change of objects of their beliefs under the influence of new information.

– The effect of certainty. People prefer situations with lower income than situations with higher income with less chance of receiving it.

– Predisposition effect. There is a tendency for investors to keep their portfolio stocks for a long time, which are not profitable, and to sell profitable stocks too quickly.

– The effect of reflection. This is a positive prognosis, according to which people tend to avoid the risk of negativity and vice versa.

– The effect of «overreaction»: a sharp reaction to new information, regardless of whether it is bad or good.

– Illusion of importance: the subconscious desire of the entity in the financial decision-making process to identify and use for analysis information that directly or indirectly confirms his previously established opinion on any financial instrument or financial relationship of the entity.

– Incorrect perception of chances in the case of recurring events that have the same result: if the same result is repeated many times, the person may choose a second result. However, the probability of both results has not changed over time.

According to the basic theories of behavioral economics, the choice of behavior by market participants is the result of a combination of situational, cognitive, economic, educational factors characterized by heterogeneity, instability and inequality of personal preferences, information asymmetry, acceptance of irrational fact in economic behavior. cognitive bias [10].

Support for solving this problem is provided, on the one hand, by the tools for performing management functions that form the technology for managing a production facility, and on the other hand, by taking into account the behavior of participants in the enterprise's activities when making and implementing management decisions.

The coordination of interests is based on regulatory norms – social standards that reflect the recognized mandatory order, and rules – provisions that reflect the constant correlation of actions and phenomena (instructions for performing any actions). These tools are the main way to keep potential conflicts within acceptable limits, as well as a means of ensuring the processes of emergence and turnover of the rights and obligations of participants.

Conclusions

Behavioral economic theory symbolizes the changing stereotypes of economists' thinking, using in the analysis of the results of psychological research relating to the processes of individual irrational financial decisions.

The study of behavioral finance allows you to assess and predict the investment preferences of institutional investors (financial institutions – professional market participants) and direct investment sentiment of households (non-professional investors), as it determines the level of economic education, financial culture, literacy.

The constructive nature of behavioral doctrine is ensured by the use of tools that allow predicting results even in conditions of uncertainty, instability, asymmetry of information, spatio-temporal variability, as it is based on new approaches to substantiate the motivational nature of man.

According to the latest data, ideology, sociology and psychology have an impact on the economy. A wide range of approaches can promote intellectual diversity, which will eventually lead to better decisions.

It is the basic idea, which, for example, is based on the theory of impulses and is based on the research of many psychologists and economists, such as D. Kahneman, M. Ale, R. Thaler, L. Festinger, G. Simon, breaks the two main myths in classical economic theory, namely: all people make rational decisions that are right for them and all people make those decisions that provide them with maximum benefit. E. Bem-Bawerk wrote that «in important and large matters, the calculation must be very accurate, in matters of medium importance it must be moderately accurate, in the countless mass of trifles of everyday economic life, it must be very superficial».

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