Economic sciences

UDC 368:330.101.541

Zdor Kateryna

Department of Business Economics and Entrepreneurship

Kyiv National Economic University named after Vadym Hetman,

Catholic University of San Antonio in Murcia

ORCID: 0009-0009-0257-8600

DOI: https://doi.org/10.25313/2520-2057-2026-5-12047

BEHAVIORAL ECONOMICS IN INSURANCE: HOW UNDERSTANDING HUMAN DECISION-MAKING REDUCES LOSS AND INCREASES CLIENT TRUST

Summary. *The relevance of the study is due to the fact that in insurance practice, there is an increasing discrepancy between the assumptions of rational behavior on which classical actuarial models are based and the actual logic of insurers' actions. Cognitive biases, information asymmetry, and low levels of institutional trust lead to instability in insurance portfolios, an increase in the frequency of small and disputed claims, and higher administrative costs, which makes it necessary to turn to the tools of behavioral economics.*

The purpose of the article is to justify the possibilities of applying behavioral economics approaches in insurance from the perspective of reducing the loss ratio of insurance operations and strengthening customer confidence by taking into account the specifics of human decision-making in conditions of risk and uncertainty.

The research methods include logical and analytical analysis, systematization of behavioral economics principles, a structural and functional approach to assessing insurance processes, and theoretical modeling of the relationships between policyholder behavior, product design, and pricing policy.

The results of the study show that behavioral factors influence not only the choice of insurance product, but also the nature of its use, the frequency of claims, and the structure of insurance portfolios. It has been established that at the aggregate level, these effects translate into increased losses, higher transaction costs, and reduced predictability of financial results. It has been proven that adapting insurance products, tariff decisions, and communication approaches with behavioral insights in mind makes it possible to correct the behavior of policyholders without harsh administrative intervention.

The conclusions are that behavioral tools should be considered as an element of the modern insurance risk management model, rather than as an auxiliary psychological factor. A conceptual model for integrating behavioral insights into insurance activities aimed at stabilizing portfolio indicators and increasing customer confidence is proposed.

Prospects for further research are related to quantitative verification of the effectiveness of behavior-oriented tools in various insurance segments, the combination of behavioral and actuarial risk assessment models, and analysis of their long-term impact on the financial stability of insurance companies.

Key words: *insurance behavior, cognitive biases, moral hazard, information asymmetry, behavioral insights, risk management, pricing policy, consumer confidence in financial services, insurance portfolios.*

Introduction. The modern insurance market operates in conditions of growing uncertainty, increased frequency of risky events, and declining institutional trust in financial intermediaries, which particularly exacerbates the problem of effective management of insurance portfolios' profitability and stability. Traditional insurance approaches, based on the assumption of rational consumer behavior, are increasingly proving to be limited, as the actual decisions of policyholders are influenced by cognitive biases, emotional reactions, information asymmetry, and social context. Ignoring behavioral factors leads to

the spread of opportunistic behavior, moral hazard, underinsurance, or refusal of insurance protection, which results in increased insurance payments, deterioration of insurance companies' financial results, and weakening of customer confidence.

In this context, there is a scientific problem of integrating behavioral economics tools into insurance theory and practice in order to gain a deeper understanding of individuals' decision-making processes in conditions of risk and uncertainty. This problem is directly related to important scientific tasks of developing modern models for assessing insurance demand, refining the mechanisms for forming insurance expectations and risk perception, and improving theoretical approaches to the analysis of trust as an economic category in the financial sector. At the same time, it is of significant practical importance for insurance companies, since taking into account the behavioral characteristics of customers creates the conditions for reducing losses, minimizing manifestations of dishonest behavior, increasing the effectiveness of insurance products and communication strategies, and forming long-term trust-based relationships between insurers and consumers of insurance services.

An analysis of current research on behavioral economics in insurance allows us to identify four interrelated scientific areas. The first area focuses on the theoretical and methodological foundations of behavioral economics and its role in financial security and the institutional environment of insurance. In the work of N. M. Vdovenko and Y. A. Perehuda, behavioral manifestations of the shadow economy are interpreted as a factor in increasing systemic financial risks and reducing the effectiveness of financial instruments for sustainable development, among which insurance plays a key stabilizing role [17]. T. Demkura and I. Markovych analyze the concepts of choice architecture and nudging, arguing that adjusting the context of decision-making can reduce the irrational behavior of economic agents without administrative pressure, which forms the conceptual basis of behavioral approaches in insurance [3]. O.

Hladchuk substantiates the possibilities of implementing behavioral science approaches directly in insurance activities, emphasizing their importance for reducing moral hazard, increasing the validity of tariff decisions, and improving the quality of communication with policyholders [9]. Further research in this area should focus on formalizing methods for taking behavioral factors into account in state regulation and strategic management of the insurance market.

The second research area covers the study of the behavior of insurance service consumers and the processes of transformation of insurance culture. O. V. Ponomarenko analyzes the evolution of insurance culture, establishing that low levels of trust, limited financial literacy, and negative previous experiences form persistent behavioral barriers to the development of insurance [13]. A. Sakvarelidze examines the influence of behavioral factors on decision-making in the insurance industry and argues that heuristics, emotions, and subjective risk perception often dominate rational calculation in determining the choice of insurance products [16]. N. Xodjaraxmanova deepens the psychological dimension of this issue, showing that excessive optimism, the illusion of control, and the status quo effect lead to insufficient propensity to insure and increase the likelihood of loss-making behavior by customers [18]. Further research in this area should focus on developing behavior-oriented programs to improve insurance culture and public trust in insurance institutions.

The third research area is related to the use of behavioral economics tools to manage losses and risks in insurance activities. P. B. Graminha (P. B. Graminha) and co-authors (et al.) use the example of auto insurance to prove that cognitive biases of policyholders are directly related to the frequency of insurance claims and the level of portfolio losses, and that taking them into account allows for improved customer segmentation and pricing policy [7]. G. Baranauskas (G. Baranauskas) and co-authors (et al.) analyze the decision-making process of customers on digital insurance platforms, finding that information transparency, interface design, and personalization significantly influence the trust and

behavioral responses of policyholders [1]. R. Ranjan explores behavioral finance trends in the banking sector, the results of which are relevant to insurance given the similarity of consumer financial behavior models and risk management mechanisms [15]. Further research in this area should focus on developing behavior-oriented models for predicting losses and optimizing insurance portfolios.

The fourth area covers the cross-sectoral and managerial aspects of behavioral economics that determine the decisions of both policyholders and professional participants in the insurance market. M. Hanlon and co-authors (et al.) summarize the results of research in behavioral accounting economics, proving that the individual decisions of managers and financial analysts significantly affect the financial results of organizations, in particular insurance companies [8]. M. Escobar-Anel (M. Escobar-Anel) and co-authors (et al.) analyze behavioral portfolio insurance strategies, showing that combining classical risk management models with behavioral assumptions increases the effectiveness of financial protection in conditions of uncertainty [5]. Z. Zhang and co-authors (et al.) examine the risk behavior of insurance companies during periods of economic uncertainty and argue that insurers' management decisions are also sensitive to behavioral biases, which is reflected in the level of risk taken [19]. A. Buttenheim (A. Buttenheim) and co-authors (et al.) summarize the fundamental principles of behavioral economics, forming the basis for interdisciplinary analysis of financial decisions, including in the field of insurance [2].

Despite active development of research in the field of behavioral economics and insurance, a number of aspects remain insufficiently studied. In particular, in most existing works, behavioral factors are analyzed fragmentarily, without clearly tracing their impact on the profitability of insurance portfolios and the financial results of insurers. The mechanisms of transition from individual cognitive biases to aggregate portfolio effects have been studied to a limited

extent, and the problems of integrating behavioral tools into product, tariff, and communication decisions, taking into account moral hazard, consumer distrust, and regulatory restrictions, have not been sufficiently systematized.

The proposed study aims to fill these gaps through a comprehensive analysis of the insurance decision-making process in relation to the economic results of insurance activities. In this work, behavioral insights are considered as an element of the insurance risk management system, which allows us to justify practical mechanisms for reducing losses and increasing customer trust.

The purpose of the article is to justify the possibility of applying behavioral economics approaches in insurance to reduce the level of insurance losses and increase customer confidence by taking into account the peculiarities of human decision-making in conditions of risk and uncertainty.

To achieve the goal, the article sets the following tasks:

1. Analyze the process of insurance decision-making by individuals and the impact of behavioral factors on the formation of insurance demand and the profitability of insurance portfolios.
2. Identify the possibilities and limitations of adapting insurance products, tariff and communication solutions, taking into account moral hazard, information asymmetry, and regulatory requirements.
3. Justify practical recommendations for the application of behavioral insights in insurance to reduce losses and increase customer confidence.

Features of the insurance decision-making process by individuals and its impact on the choice, use, and renewal of insurance protection. The process of making insurance decisions by individuals is shaped by limited rationality and is determined not only by objective characteristics of risk and the cost of the insurance product, but also by subjective perceptions of probabilities, previous experience, emotional state, and social context. In real life, policyholders' behavior is dominated by assessments based on intuitive judgments, availability and loss heuristics, which leads to systemic deviations

from rational choice models. This manifests itself both at the stage of the initial choice of insurance protection and in its subsequent use and review of the terms of the contract. Insurance decisions are often made reactively, under the influence of recent negative events or information signals, while in periods of stability there is an underestimation of risks and a tendency to refuse insurance coverage. Thus, behavioral characteristics directly affect demand, the structure of insurance portfolios, and the financial stability of insurance companies (Table 1).

Table 1

Key features of the insurance decision-making process by individuals and their impact on insurance behavior

Behavioral characteristic	Characteristics of impact on decisions	Consequences for the choice and use of insurance protection
Availability heuristic	Risk assessment based on vivid or recent events	Situational increase in demand after crises and disasters, decline in interest during stable periods
Loss aversion	Preference for avoiding potential losses over gaining benefits	Choice of basic coverage, unwillingness to expand insurance programs
Overestimation of unlikely events	Disproportionate attention to rare but high-profile risks	Demand for incorrectly structured or economically inefficient products
Status quo and inertia	Tendency to maintain the current contract without analyzing alternatives	Untimely renewal of insurance protection and loss of relevance of coverage
Trust and social influence	Focus on the advice of others and the insurer's reputation	The decisive role of communication, brand, and service experience

Source: compiled by the author based on [2; 3; 9; 10; 16; 18]

In modern insurance practice, the behavioral mechanisms systematized in Table 1 are empirically confirmed and have a direct impact on the economic performance of insurance companies. In particular, it has been established that

the way information about risk and possible losses is presented significantly changes consumers' willingness to enter into an insurance contract and choose the level of coverage. Empirical data show that focusing the customer's attention on potential losses in the absence of insurance increases the likelihood of purchasing a policy, but at the same time forms a more emotionally driven and therefore less stable demand that is sensitive to information shocks and crisis events [10]. In practice, this means that after high-profile emergencies or information waves, demand for insurance may rise sharply but decline rapidly without structural changes to the product. Equally important is the behavioral dimension of moral hazard, where the availability of insurance coverage changes the very behavior pattern of the insured person. It has been proven that insurance has an impact not only through price incentives, but also through a psychological sense of security, which can lead to excessive or irrational use of insured services [6]. In the health insurance segment, this manifests itself in an increase in the frequency of claims and expenses under conditions of minimal financial participation by the client, which directly increases the loss ratio of insurance portfolios. The practical consequence of these effects has been the introduction of co-payment mechanisms, deductibles, and behavior-oriented contracts aimed at correcting not only the financial but also the behavioral incentives of policyholders. The examples given show that ignoring the behavioral characteristics of insurance decision-making leads to structural imbalances between customer expectations and the economic logic of insurance products. At the same time, integrating behavioral insights into the design of insurance programs, communication, and portfolio management allows for more predictable insurance behavior, reduces the frequency of irrational decisions, and increases customer trust by better aligning the product with their actual patterns of choice and use of insurance protection.

The impact of cognitive biases and behavioral factors on the profitability of insurance portfolios. The impact of cognitive biases and

behavioral factors on insurance activities is caused by a systemic mismatch between the assumptions of rational behavior embedded in actuarial models and the actual logic of policyholders' actions. In the process of managing insurance portfolios, insurers are faced with the fact that customers' decisions regarding the use of insurance, claims for payments, and contract renewals are influenced not only by economic incentives, but also by subjective perceptions of risk, loss, and the fairness of insurance terms and conditions. Such behavior changes the frequency and cost parameters of insured events, which directly affects the loss ratio and financial stability of insurance portfolios. At the same time, behavioral distortions affect the quality of interaction between the insurer and the insured, either strengthening or, conversely, weakening trust in insurance institutions (Table 2).

Table 2

The impact of cognitive biases and behavioral factors on the loss ratio of insurance portfolios and the interaction between the insurer and the insured

Behavioral factor	Aggregate manifestation in the portfolio	Financial and operational consequences
Tolerance for minor losses	Increase in the number of small claims	Increase in administrative expenses and combined ratio
Behavioral moral hazard	More frequent insurance events after conclusion of the contract	Increase in the frequency of losses without a change in objective risk
Prejudice regarding the "right to payment"	Claims for borderline and disputed cases	Increased settlement and audit costs
Distrust of the insurer	Appeals against decisions, repeated appeals	Extension of settlement cycle time
Referral behavior	Copying the actions of other policyholders	Clustering of claims and peak loads

Source: compiled by the author based on [5; 6; 7; 8; 19]

The dependencies shown in Table 2 reflect not individual deviations in the behavior of policyholders, but cumulative effects that manifest themselves at the level of insurance portfolios and operational processes of insurance companies. Cognitive biases form stable behavioral patterns, which, when repeated on a mass scale, transform into structural changes in the frequency of insurance events, the intensity of claims, and the nature of interaction with the insurer. It is at this level that psychological factors cease to be an individual characteristic of the client and become measurable financial parameters of the insurer's activities. In particular, the increase in the number of small insurance claims, which are often perceived by policyholders as "normal" or "fair" use of the policy, leads to a disproportionate increase in administrative costs and the burden on the claims settlement system. Empirical observations from the property insurance market show that after their first positive experience with a payout, policyholders change their expectations regarding their interaction with the insurer and more often report borderline or insignificant losses, which negatively affects the combined ratio of the portfolio (Global Insurance Market Trends, 2024). In this case, the behavioral effect is indirect but stable, accumulating financial losses in the long term. Equally important is the impact of behavioral factors on the effectiveness of operational interaction between the parties to insurance relationships. Low levels of trust or unformed expectations regarding settlement procedures lead to an increase in the number of clarifications, complaints, and appeals, which prolongs the cycle of insurance claim settlement and increases transaction costs. In the auto insurance segment, according to international reviews, simplifying payment procedures without proper behavioral control is accompanied by an increase in disputed claims and risks of abuse, which requires additional costs for verification and auditing (Óskarsdóttir et al., 2022). Thus, even management decisions focused on customer centricity can have unintended financial consequences if the behavioral response of policyholders is not taken into account.

The ability to adapt insurance products, pricing decisions, and communication approaches to account for customer behavior patterns. The development of behavioral economics has broadened the understanding of insurers' ability to influence performance not only through risk control or customer selection, but also through the targeted adaptation of insurance products, pricing policies, and communication tools to the actual behavior patterns of policyholders. Unlike the stage of decision-making or portfolio loss assessment, in this context, the key aspect is management—the ability of an insurance company to transform behavioral insights into applied solutions that adjust customer incentives and form a more predictable model of insurance service use. This approach allows influencing the quality of the portfolio and the stability of financial results without directly increasing tariffs or strengthening formal control (Table 3).

Table 3

Opportunities for adapting insurance products, rates, and communication solutions, taking into account the behavioral characteristics of customers

Area of adaptation	Implementation tool	Behavioral effect
Product design	Modular coverage structure	Reduced cognitive overload, conscious choice
Pricing policy	Franchises, co-payments, usage-based pricing	Correction of moral and behavioral risk
Terms of the agreement	Automatic renewal with the possibility of adjustment	Reduction of inertial churn and customer loss
Communication	Behaviorally oriented framing of terms	Increased perception of fairness
Service and feedback	Digital channels with transparent payment status	Increased trust and loyalty

Source: compiled by the author based on [1; 4; 9; 10; 14]

The practice of leading insurance companies convincingly demonstrates that adapting insurance products, tariff decisions, and communication approaches

to take into account the behavioral characteristics of customers can significantly change the economics of the insurance portfolio and the structure of risks. In this case, behavioral insights are used not as an auxiliary element of marketing, but as a tool for targeted management of insurance behavior through contract design, incentive systems, and principles of interaction with the policyholder. In the auto insurance segment, one of the most well-known examples of such adaptation is usage-based insurance models, in which the insurance premium is adjusted depending on the actual behavior of the driver. In particular, the Snapshot program is based on the use of telematic data and takes into account driving intensity and style, mileage, frequency of sudden braking, and travel time. According to the insurer's public data, a significant proportion of program participants receive a reduction in their base insurance premium, while risky driving habits are reflected in higher insurance costs [14]. This approach creates a direct financial link between customer behavior and contract terms, with the result that the tariff performs a regulatory function and encourages safer vehicle use. For the insurer, this means a reduction in the frequency of insurance claims and greater predictability of portfolio results.

A similar logic of behavioral adaptation can be seen in the field of health and life insurance within the models of so-called "shared-value insurance." The Vitality program, developed by the Discovery group, integrates incentives for healthy behavior directly into the design of insurance products: customers receive both financial and non-financial rewards for regular physical activity, preventive examinations, and healthy habits. According to published materials and analytical reviews, participation in the program is associated with a reduction in mortality and improved health indicators among the insured, which has a positive impact on the long-term dynamics of insurance payments and the financial stability of portfolios [4]. In this case, the insurance product not only compensates for the consequences of risk, but also directly influences its root causes. Communication approaches play an important complementary role in the implementation of such

models. A transparent explanation of the logic behind tariff differentiation, the conditions for their adjustment, and the dependence of premiums on customer behavior reduces the level of information asymmetry and increases the subjective perception of the fairness of insurance decisions. This, in turn, reduces conflict during the settlement of insurance claims and weakens the tendency of policyholders to engage in opportunistic behavior. International experience shows that such approaches make it possible to simultaneously reduce the loss ratio of insurance portfolios and increase customer confidence without resorting to strict administrative control or mechanical increases in insurance premiums.

Introduction of behavioral tools in insurance activities. The introduction of behavioral tools into insurance activities is accompanied by a number of interrelated scientific and practical problems that limit their effectiveness and scalability [9]. First of all, such tools do not eliminate moral hazard, but often transform it into hidden forms: insurers can adapt their behavior to the expectations of insurance algorithms by declaring desirable actions or shifting risky activity to areas that cannot be measured. As a result, behavioral signals lose some of their informativeness, and risk assessment becomes less reliable [7]. Information asymmetry also persists, taking on a new quality in behavioral models. The growth in the volume of behavioral data does not guarantee correct interpretation, as it is difficult to distinguish stable patterns from random or situational reactions, which increases the likelihood of mispricing, unjustified segmentation, and conflicts of interest between the insurer and the insured [8]. A separate problem is consumer distrust of behavior-oriented mechanisms, especially when they involve behavior monitoring and opaque premium adjustment rules. In the absence of clear explanations, such approaches are perceived as excessive control, which reduces customers' willingness to participate in such programs, while regulatory requirements for personal data protection and non-discriminatory pricing further limit the possibilities for large-scale implementation of individualized behavioral models [6].

The introduction of behavioral tools into insurance activities is accompanied by a number of interrelated scientific and practical problems that systematically limit their effectiveness and scalability [9; 7]. First of all, such tools do not eliminate moral hazard, but often transform it into hidden forms, as insurers are able to adapt their behavior to the logic of insurance algorithms, declaring socially desirable actions or shifting risky activity to areas that are not directly measurable. As a result, behavioral signals lose some of their informativeness, and risk assessment results become less stable and predictable. At the same time, information asymmetry not only persists but also takes on a new quality: the growth in the volume of behavioral data does not in itself guarantee correct interpretation, as it becomes more difficult to distinguish stable behavioral patterns from random or situational reactions. This increases the likelihood of incorrect pricing, unjustified customer segmentation, and exacerbated conflicts of interest between insurers and policyholders [8]. An additional deterrent is consumer distrust of behavior-oriented mechanisms, especially those based on constant monitoring of individual behavior and opaque rules for adjusting insurance premiums, which are often perceived as a form of excessive control. The regulatory environment also imposes significant restrictions: requirements for personal data protection, non-discriminatory pricing, and transparency of insurance terms often conflict with the use of individualized and dynamic behavioral models, forcing insurers to limit their use to pilot or experimental projects [6]. Organizational inertia further complicates implementation: traditional actuarial approaches and loss adjustment procedures are poorly suited to dynamic, context-dependent customer behavior models.

Summarizing the results of the analysis allows us to formulate practical recommendations for implementing behavioral insights into insurance activities, aimed at reducing losses and strengthening customer trust. Their implementation requires not fragmentary solutions, but a holistic logic of interaction between the product, tariff, communication, and behavior of the insurer, which is advisable to

present in the form of a conceptual model. The prerequisite for such a model is the realization that customer behavior does not change under the influence of a single tool, but as a result of a coordinated combination of incentives and restrictions. Accordingly, practical recommendations should be grouped into three areas: insurance product design, tariff-incentive logic, and communication and service environment. It is their coordinated action that shapes the desired behavioral responses and economic results (Fig. 1).

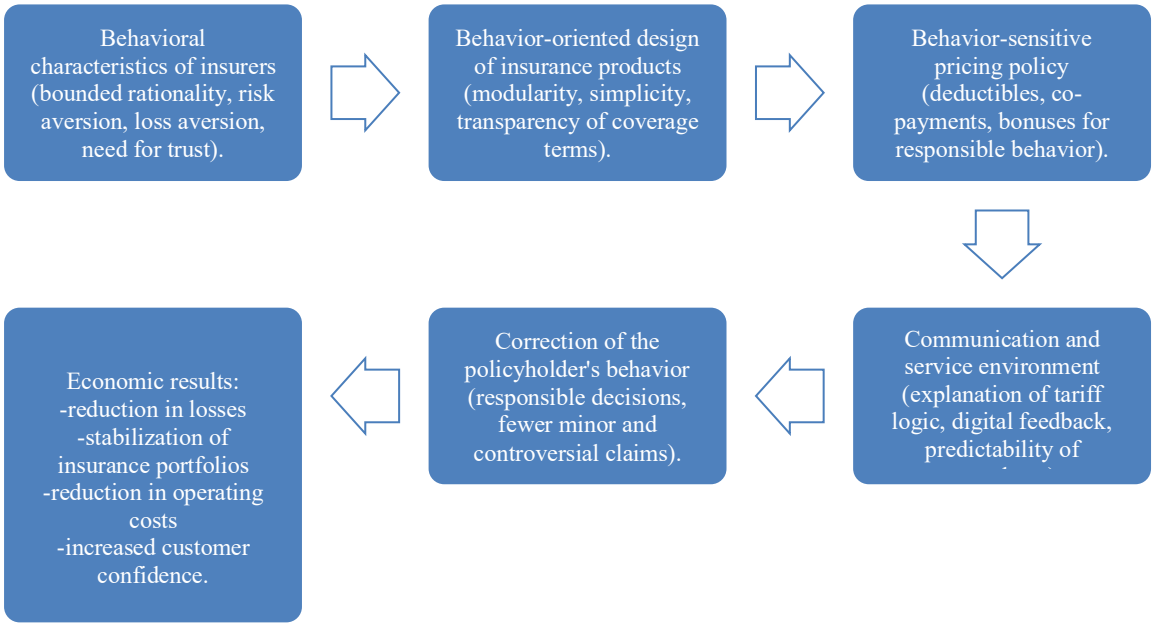


Fig. 1. Conceptual model of using behavioral insights in insurance to reduce losses and strengthen customer trust

Source: author's own work

The proposed model reflects the consistent transformation of behavioral insights into applied management decisions of insurance companies. Its starting point is the behavioral characteristics of customers - risk aversion, bounded rationality, sensitivity to framing, and trust. Within the model, these characteristics are not eliminated but are taken into account as an economic reality. At the product design level, it is recommended to use simple, modular structures of insurance products with a clear distinction between basic and additional coverage. This reduces cognitive load, minimizes false expectations,

and reduces the number of conflicts during claims settlement. In the tariff block, the model provides for the introduction of incentive mechanisms whereby the financial terms of insurance respond to the behavior of the insured over time rather than being fixed statically. This logic allows for the adjustment of moral hazard and reduces the frequency of irrational claims without strict administrative control. The communication and service element of the model performs a stabilizing function. Clear explanations of the reasons for tariff changes, transparency of procedures, and feedback give customers a sense of fairness and predictability in insurance decisions. This reduces information asymmetry and weakens distrust of the use of behavioral tools. The expected results of the model's implementation are a reduction in the frequency of minor and disputed insurance claims, a decrease in administrative costs for settling claims, and improved predictability of insurance portfolio losses. At the same time, long-term customer trust is formed, which manifests itself in higher contract renewal rates, voluntary participation in behavior-oriented programs, and a more stable customer base. Taken together, this allows behavioral insights to be viewed not as an auxiliary tool, but as a component of a modern model of sustainable insurance business development.

Conclusions. The study found that the behavior of policyholders in the process of making and implementing insurance decisions is shaped by limited rationality and deviates significantly from the assumptions of classical insurance models. It has been proven that cognitive biases and behavioral factors directly influence not only the choice of insurance product, but also the subsequent use of insurance protection, the frequency of claims and the structure of insurance claims, transforming at the portfolio level into increased losses and growth in operating expenses. It has been established that it is the cumulative nature of these effects that determines the financial stability of insurance companies and the level of customer confidence. An analysis of the implementation of behavioral tools in insurance activities has revealed a number of key scientific and practical

problems. In particular, it has been confirmed that behavioral mechanisms do not eliminate moral hazard, but often take the form of hidden or strategic adaptation of policyholders' behavior. Complications of information asymmetry have been identified due to the difficulty of interpreting behavioral data, as well as the restrictive influence of consumer distrust and regulatory requirements that inhibit the use of individualized and dynamic insurance models. Based on the generalization of the results, the feasibility of the systematic application of behavioral insights in insurance through a coordinated combination of adapted product design, incentive tariff policy, and transparent communication solutions is justified. It has been proven that this approach allows adjusting the behavior of policyholders without harsh administrative intervention, reducing the number of irrational and controversial claims, and increasing the predictability of insurance portfolios, while building sustainable customer trust in insurance companies. Prospects for further research are related to the empirical measurement of the effectiveness of behavior-oriented tools in various segments of the insurance market, the integration of actuarial and behavioral risk assessment models, and the analysis of the long-term consequences of the interaction between the behavior of policyholders, the regulatory environment, and the financial stability of insurance systems.

References

1. Baranauskas, G., & Raišienė, A. G. (2021). Reflections on the customer decision-making process in the digital insurance platforms: An empirical study of the Baltic market. *Applied Sciences,* 11(18), 8524. https://doi.org/10.3390/app11188524

2. Buttenheim, A., Moffitt, R., & Beatty, A. (2023). *Behavioral economics*. Washington, DC: National Academies Press. https://doi.org/10.17226/26874

3. Demkura, T., & Markovych, I. (2022). Arkhitektura vyboru i pidshtovkhuvannia v povedinkovii ekonomitsi [Choice architecture and nudging in behavioral economics]. *Sotsialno-ekonomichni problemy i derzhava – Socio-Economic Problems and the State,* 2(27), 85–92. https://doi.org/10.33108/sepd.2022.nom2.085

4. Discovery Group. (2024). *Discovery's Vitality shared-value insurance model*. Retrieved from https://www.discovery.co.za/corporate/discovery-shared-value-insurance-model (access date: 26.11.2025).

5. Escobar-Anel, M., Lichtenstern, A., & Zagst, R. (2020). Behavioral portfolio insurance strategies. *Financial Markets and Portfolio Management,* 34(4), 353–399. https://doi.org/10.1007/s11408-020-00353-5

6. Graf, M., Baumgardner, J. R., Neumann, U., Brewer, I. P., Chou, J. W., & Fendrick, A. M. (2024). Economic evidence on cost sharing and alternative insurance designs to address moral and behavioral hazards in high-income health care systems: A systematic review. *Journal of Market Access & Health Policy,* 12(4), 342–368. https://doi.org/10.3390/jmahp12040027

7. Graminha, P. B., & Afonso, L. E. (2022). Behavioral economics and auto insurance: The role of biases and heuristics. *Revista de Administração Contemporânea,* 26, e200421. https://doi.org/10.1590/1982-7849rac2022200421

8. Hanlon, M., Yeung, K., & Zuo, L. (2022). Behavioral economics of accounting: A review of archival research on individual decision makers. *Contemporary Accounting Research,* 39(2), 1150–1214. https://doi.org/10.1111/1911-3846.12739

9. Hladchuk, O. (2024). Implementatsiia pidkhodiv povedinkovoi nauky u strakhovii diialnosti [Implementation of behavioral science approaches in insurance activity]. *Ekonomika ta suspilstvo – Economy and Society*, (67). https://doi.org/10.32782/2524-0072/2024-67-27

10. Lahoti, K. R., Hanji, S., Kamble, P., & Vemuri, K. (2023). Impact of loss-framing and risk attitudes on insurance purchase: Insights from a game-like

interface study. *arXiv preprint*, arXiv:2310.13300. https://doi.org/10.48550/arXiv.2310.13300

11. Organisation for Economic Co-operation and Development. (2024). *Global insurance market trends 2024*. OECD. Retrieved from https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/12/global-insurance-market-trends-2024_4804df81/5b740371-en.pdf (access date: 26.11.2025).

12. Óskarsdóttir, M., Ahmed, W., Antonio, K., Baesens, B., Dendievel, R., Donas, T., & Reynkens, T. (2022). Social network analytics for supervised fraud detection in insurance. *Risk Analysis,* 42(8), 1872–1890. https://doi.org/10.1111/risa.13693

13. Ponomarenko, O. V. (2023). Transformatsiia strakhovoi kultury na rynku strakhovykh posluh [Transformation of insurance culture in the insurance services market]. *Zbirnyk naukovykh prats Umanskoho NUS,* 102, 36–47. https://doi.org/10.32782/2415-8240-2023-102-2-36-47

14. Progressive Insurance. (2024). *Snapshot rewards you for good driving*. Retrieved from https://www.progressive.com/auto/discounts/snapshot/ (access date: 26.01.2026).

15. Ranjan, R. (2025). Behavioural finance in banking and management: A study on the trends and challenges in the banking industry. *Asian Journal of Economics, Business and Accounting,* 25(1), 374–386. https://doi.org/10.9734/ajeba/2025/v25i11657

16. Sakvarelidze, A. (2024). The impact of behavioral economics on consumer decision-making in the insurance industry. *Health Policy, Economics and Sociology,* 8(2). https://doi.org/10.52340/healthecosoc.2024.08.02.09

17. Vdovenko, N. M., & Perehuda, Yu. A. (2024). Naslidky vplyvu tinovoi i povedinkovoi ekonomiky na finansovu bezpeku derzhavy cherez finansovi instrumenty staloho rozvytku Ukrainy [Consequences of the impact of the shadow and behavioral economy on state financial security through financial

instruments of sustainable development of Ukraine]. *Akademichni vizii – Academic Visions,* (27). https://doi.org/10.5281/zenodo.11207190

18. Xodjaraxmanova, N. (2025). The psychology of insurance: How behavioral economics unveils consumers' hidden motives. *International Journal of Artificial Intelligence,* 1(2), 1780–1785. Retrieved from https://inlibrary.uz/index.php/ijai/article/view/78183 (access date: 26.01.2026).

19. Zhang, Z., Zhou, P., Li, Y., & Chen, J. (2024). Insurance companies' risk-taking behavior in the face of economic policy uncertainty: A mediated analysis. *Current Psychology,* 43(31), 25531–25550. https://doi.org/10.1007/s12144-024-06183-2