



The Impact of Behavioral Economics on Consumer Decision-Making in The Insurance Industry

ქცევითი ეკონომიკის გავლენა სამომხმარებლო გადაწყვეტილების მიღებაზე
სადაზღვევო ინდუსტრიაში

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ანა საყვარელიძე^{1a}

Ana Sakvarelidze^{1a}

¹ ეკონომიკის სკოლა, კავკასიის უნივერსიტეტი, თბილისი, საქართველო

¹ School of Economics, Caucasus University, Tbilisi, Georgia

Abstract

Introduction: Traditionally, economic theories propose that individuals make decisions based on rational analysis of risks and benefits. However, behavioral economics suggests that cognitive biases and psychological factors can lead to the reactions that deviate from the idea of rationality. This paper investigates how these effects, such as framing, overconfidence, loss aversion can shape consumer choices when we are navigating in the insurance industry. **Methods:** By using a multifarious methodological approach, that analyzes secondary data and different literary sources. **Results:** The analysis reveals that psychological biases such as framing, risk aversion and overconfidence significantly influence behavior in the insurance industry. These biases lead to consumers to make decisions that diverge from the traditional rational model. **Conclusion:** The following research concludes that mental shortcuts and emotions impact how we choose insurance rather than pure logic. To help consumers make better decisions insurance companies should consider these behaviors for more efficient market in the future.

Keywords: Behavioral Economics, Consumer Decision-Making, Insurance Industry, Cognitive Biases, Risk Perception, Policy Design.

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აბსტრაქტი

შესავალი: ტრადიციულად, ეკონომიკური თეორიების მიხედვით, ინდივიდები იღებენ გადაწყვეტილებებს რისკებისა და სარგებლის რაციონალური ანალიზის საფუძველზე. თუმცა, ქცევითი ეკონომიკა ვარაუდობს, რომ კოგნიტიურმა მიკერძოებამ და ფსიქოლოგიურმა ფაქტორებმა შეიძლება გავლენა მოახდინონ რაციონალურობის იდეაზე. ნაშრომის მიზანია ქცევითი ეკონომიკის გავლენის შესწავლა სადაზღვევო ინდუსტრიაში გადაწყვეტილების

^a annasakvarelidze65@gmail.com <https://orcid.org/0009-0005-5347-794X>



მიღებაზე. **მეთოდოლოგია:** მრავალმხრივი მეთოდოლოგიური მიდგომის გამოყენებით, გაანალიზდა მეორადი მონაცემები და სხვადასხვა ლიტერატურული წყაროები. **შედეგები:** ანალიზი ცხადყოფს, რომ ფსიქოლოგიური მიკერძოება, როგორცაა ჩარჩოს ეფექტი, რისკის არმიღება და გადაჭარბებული თავდაჯერებულობა, მნიშვნელოვნად მოქმედებს სადაზღვევო ინდუსტრიაში მომხმარებლის ქცევაზე. ეს მიკერძოება იწვევს მომხმარებელთა გადაწყვეტილებების მიღებას, რომლებიც განსხვავდება ტრადიციული რაციონალური მოდელისგან. **დასკვნა:** შემდეგი კვლევა ასკვნის, რომ არა სუფთა ლოგიკა, არამედ გონებრივი მიკერძოება და ემოციები გავლენას ახდენს იმაზე, თუ როგორ ვირჩევთ დაზღვევას. იმისათვის, რომ მომხმარებლებმა უკეთესი გადაწყვეტილებები მიიღონ, სადაზღვევო კომპანიებმა უნდა განიხილონ შემდეგი ქცევები მომავალში და ხელი შეუწყონ ეფექტური ბაზრის განვითარებას.

საკვანძო სიტყვები: ქცევითი ეკონომიკა, მომხმარებელთა გადაწყვეტილების მიღება, სადაზღვევო ინდუსტრია, კოგნიტური მიკერძოება, რისკის აღქმა, პოლიტიკის დიზაინი.

ციტატა: ანა საყვარელიძე. ქცევითი ეკონომიკის გავლენა სამომხმარებლო გადაწყვეტილების მიღებაზე სადაზღვევო ინდუსტრიაში. ჯანდაცვის პოლიტიკა, ეკონომიკა და სოციოლოგია, 2024; 8 (2). <https://doi.org/10.52340/healthecosoc.2024.08.02.08>

Introduction

In traditional economics environment many theories highlight the idea that individuals have the ability to process information rationally, act in their self-interest and make decisions in order to maximize their wealth or income. The emergence of the behavioral economics in the insurance sphere revealed different approach connected to human decision-making process. In reality cognitive biases, emotional factors and social norms guide the actions of individuals which can from time to time deviate from the rational model.

The exploration of behavioral factors influencing insurance decisions is vital in today's rapidly evolving economics landscape. Individuals face increasing number of uncertainties from natural disasters, financial instability and economic crisis. Connected to this idea, plentiful studies have identified market anomalies that contradict traditional economic theories indicating that investors and consumers often react irrationally to news and events. It leads to the mispricing of assets and variety of financial choices especially in uncertain environment (Shiller, 2005). Despite the numerous theories, such as Rational Choice Theory and Efficient Market Hypothesis, which highlights rational decision-making based on the obtainable information, the rational choice model does not fully capture human behavior.

The controversy about scientific evidence for the influence of the behavioral economics on insurance purchasing decisions has raged unabated for over a century. A lot of scholars and observers have already drawn attention to the paradox and have raised questions connected to this topic. A distinctive study showed that 45% of respondents exhibited overconfidence in their ability to assess risks, which caused the higher likelihood of underinsuring or foregoing insurance altogether (Buzatu, 2013). Furthermore, it is important to understand the psychological and social patterns in this sector and provide efficient insights for policy makers and regulatory bodies to contribute to a more resilient economy and society.

The following paper aims to examine the connection between behavioral factors and insurance purchasing decisions, specifically in both developed and developing countries. In depth, study seeks to examine the impact of risk perception, social influences and cognitive biases on the consumer behavior. Ultimately, the following research pursues to contribute to the evolvement of effective insurance strategies and improving financial security for individuals in developed and developing economies.

Research Questions:

1. What are the main behavioral factors that influence insurance purchasing decisions among customers in developed countries?
2. How does risk perception and psychological factors alter the likelihood of individuals purchasing insurance?
3. How can insurance companies and regulatory bodies effectively address the following circumstances and make improvements?

Methodology

In the following study, we examine the effect of behavioral economics on the insurance decision making process by conducting a systematic in-depth review of the secondary literature and case studies. Several peer-reviewed articles, scientific journals and books were retrieved from reputable academic databases, specifically Google Scholar, ResearchGate and ScienceDirect. The following articles were selected based on their relevance, actuality and importance to the intersection of behavioral economics and insurance sector.

The inclusion criteria for the selected studies are publications within recent years that are peer-reviewed. The vast majority of studies are largely based on the quantitative and observational studies. Additionally, they focus on behavioral economics and insurance sector and the researches are written in English. The study fully relies on the combination of existing research in the following field. Its main goal is to provide the understanding of the current state of knowledge and introduce some new viewpoints regarding this topic. Ethical considerations were minimal since publicly available secondary data was used and proper citations were provided for academic integrity.

Literature Review

Insurance decision-making has evolved beyond traditional economic frameworks to incorporate behavioral aspects that significantly influence coverage and purchasing choices. Recent researches have showed how behavioral factors, including risk perception, emotions, loss aversion and framing effects shape insurance demand. There are several key puzzles in insurance markets, particularly regarding insufficient coverage demand and the impact of behavioral biases on decision-making.

Behavioral economics challenges the idea that consumers are purely rational individuals and their decisions are not influenced by the mental shortcuts or heuristics. All of these factors can lead to less-than-optimal outcomes, which makes this narrative pivotal for the insurance industry. How can a deeper understanding of human behavior help both insurers and consumers to make informed decisions? This question lies at the core of debate between researchers which can enhance the consumer outcomes and ensure ethical practices in the future.

Belissa et al. (2020) argue that risk aversion enhances insurance demand while doubt aversion reduces it based on their study of Ethiopian farmers' index-based insurance decisions. Researchers studied Ethiopian farmers to understand how they make decisions about buying weather-related insurance. The outcome deviated from the traditional economic model which was the basis of the insurance industry for past decades. They found that farmers who worry more about risks are more likely to buy insurance to protect themselves from bad weather and natural disasters. However, many farmers refuse to purchase insurance policies since they are uncertain about the feasibility of the tragic events occurring (Corcos, Montmarquette, & Pannequin, 2020).

Additionally, author demonstrates that emotional responses affect insurance purchasing decisions - fear increases willingness to pay for insurance while anger substantially decreases it. The researchers conducted an experiment and created simulation of terrorist attacks to examine how emotions influence insurance purchasing behavior and public spending decisions. Their findings demonstrate that emotional states and traumatic response to tragic events significantly impact insurance decision-making (Corcos, Montmarquette, & Pannequin, 2020).

Sum and Nordin (2018) make a similar point in their study that insurance purchasing decisions are heavily influenced by the emotional factors. Studies show that people are willing to pay more for insurance when they have strong emotional attachments to the insured objects. More specifically, people with the greater affection for an item anticipate more pain from its loss, which makes them willing to pay higher premiums for the insurance in order to protect the following object and create the sense of consolation for themselves. This hypothesis was evidently shown in specific historical scenarios, such as increased terrorism insurance purchases near the World Trade Center after 9/11 terrorist attack. Additionally, people are most likely to buy insurance coverage immediately after experiencing or witnessing natural disasters. However, this tendency decreases as memories of the individual fades (Md.Sum & Nordin, 2018).

Conversely, Harrison (2013) believes that traditional models of risk preferences, rationality and subjective beliefs can adequately explain consumer behavior without invoking behavioral anomalies. This suggests that consumers often act in ways that align with established economic theories, such as Expected Utility Theory (EUT), rather than exhibiting irrational behavior. The author explains that in the Expected Utility Theory model individuals choose the option which maximizes their expected utility and their decisions reflect their rational preferences and risk tolerance (Harrison, 2023).

The author points out that introducing behavioral factors can complicate the analysis without necessarily providing additional explanations. This complexity may lead to confusion and can cause the misinterpretation of real-world scenario and actual consumer behavior, which makes it more challenging to create actionable insights. By focusing on the data at the individual level, researchers can identify patterns that align with rational decision-making and can reduce the need to incorporate behavioral factors (Harrison, 2023).

Buzatu (2013) disagrees with this statement and thoroughly explains that insurance decisions can be made impulsively and irrationally which goes beyond the traditional economic approach and it is heavily impacted by the factors such as risk perception, loss aversion, lack of information, uncertainty, framing, biases and behavioral patterns. For example, high transaction costs associated with gathering insurance information can deter individuals from purchasing it. He highlights that "overestimation of insurance premium and the existence of high costs... will inevitably lead to giving up insurance" (Buzatu, 2013).

He also discusses the concept of "mental accounts" where individuals perceive income constraints as an irrational reason to forego insurance. In this case, he discloses the thoughts of the following individuals: "If I cannot afford insurance means that I do not 'allow' the asset maintenance in the current form". Additionally, Buzatu appreciates the Insurance Supervisory Commission's initiative in regulating insurance intermediaries and processes. He strongly believes that corroborated evidence speaks volumes about this topic and it needs to be studied in depth in the future. He suggests that in this case, well-equipped insurance agents are integral messengers of the necessary insurance information and the bridge between the insurance businesses and customers (Buzatu, 2013).

Dragos, Dragos, and Muresan (2020) emphasize that perceptions of insurance products significantly affect purchasing behavior. There is a substantial gap between the intention to make an insurance purchase and to take action to fulfil the following process. The main facilitator in narrowing this gap is the combination of psychological factors and cognitive biases. Authors argue that when consumers perceive insurance primarily as protection rather than an investment, their likelihood of purchasing policies significantly increases (Dragos, Dragos , & Muresan, 2020).

In the context of behavioral factors, trust and other emotional factors play a pivotal role in the insurance sector. Studies have shown that poor experience and a lack of trust in insurance companies can significantly hinder purchasing intentions. Trust is important in developed and developing markets where past experiences with insurers can shape consumer confidence and future purchasing behavior. In

contrast, individuals with higher trust are more likely to intend to buy and actually purchase insurance. (Dragos, Dragos , & Muresan, 2020).

Bednarz, Lewis, and Sadowski (2025) argue that creating cognitive biases and emotional factors such as incentive-based programs are deeply rooted in behavioral economics principles. They aim to modify consumer behavior through rewards and psychological nudges. For example, Vitality's model effectively illustrates how insurance companies develop behavioral insights to influence consumer choices which leads to improved health outcomes and reduced risks for both individuals and insurers (Bernarz, Lewis, & Sadowski, 2025).

The Vitality scheme exemplifies "wellness capitalism," where financial incentives are structured to encourage policyholders to engage in healthier lifestyles. The authors note that this approach consists of a combination of data collection, behavioral nudging, and personalized feedback mechanisms to drive consumer engagement and purchasing decisions (Bernarz, Lewis, & Sadowski, 2025).

Specifically, participants can earn Vitality Points through various health activities, which in turn helps them to earn discounts on insurance premiums and gives them significant financial or moral incentives to continue this process. This framework aligns with the behavioral economics concept of "loss aversion," where the fear of losing potential rewards motivates individuals to alter their behaviors favorably. As a result, consumers take actions that minimize the feasible loss even when those actions may not be the most rational in terms of long-term gain (Bernarz, Lewis, & Sadowski, 2025).

Serfilippi, Carter, and Guirking (2020) discuss the concept of valuing certainty, framing effects, emotional factors and their importance in connecting behavioral economics and insurance purchasing decisions. The authors highlight that those traditional economic theories, such as Expected Utility Theory (EUT), often fail to perceive the complexities of human behavior when dealing with risk and uncertainty. In this case, Allais paradox is the great illustration of that fact that individuals tend to overvalue certain outcomes compared to uncertain ones. Even if the risky option could give a larger reward people often prefer a guaranteed smaller gain. This observation leads to conclusion that people might undervalue insurance products which involve a certain cost in exchange for uncertain benefits. This results in the lower demand for such products than predicted by Expected Utility Theory (Serfilippi , Carter, & Guirking, 2020).

According to the field experiment conducted in Burkina Faso, authors suggest that farmer's willingness to pay increases by about 10% when insurance premiums are framed as uncertain (rebate framing), specifically in the standard contracts. This increase in willingness to pay is due to the phenomenon of discontinuous preference for certain (DPC). The following term refers to a behavioral trait where individuals are more willing to take risks when the outcome is inexact compared to situations when the result is certain. In layman's terms, when people are offered a guaranteed outcome, they are more cautious and take guarded decisions while taking risks. However, when individuals are faced with uncertainty, such as gambling or taking investment decisions, they may become more risk preferring in the hope that they will have a higher reward. For these farmers, the certainty of the premium payment is particularly burdensome, while vagueness alleviated the drain (Serfilippi , Carter, & Guirking, 2020).

Prominently, understanding these behavioral patterns and tendencies carries a valuable meaning and importance for designing insurance products that better meet the needs of the consumer, particularly in low-income countries. Understanding behavioral patterns, cognitive biases, psychological factors and choosing the appropriate framing for the insurance contracts and policies can increase consumer uptake, upsurge the investment in this sphere and improve the overall well-being of the society in the near future (Serfilippi , Carter, & Guirking, 2020).

Limitations

While the following research paper provides a comprehensive review of the existing literature on the connection between consumer decision-making in insurance sector and behavioral economics,

several limitations must be acknowledged. These include the limited scope of literature presented since the review primarily focuses on studies published in the past decade. Furthermore, the following paper includes relatively small sample size of secondary literature. Additionally, the research is based on numerous scientific researches and it does not include primary data collection and analysis. The following reliance on the existing literature means that the findings are influenced by the limitations, biases and methodologies of the previous studies.

Additionally, while the paper combines the variety of perspectives from the researchers it may not fully take the regional and cultural differences into consideration when it comes to the consumer behavior in various insurance markets. The future research which incorporates primary data from varied populations could provide a more comprehensive view of behavioral insurance decision-making.

Conclusion

In summation, there is a well-established idea that people make rational choices when purchasing insurance in order to maximize their own benefits and reduce feasible incurred costs. This perspective is grounded in the idea that humans are logical decision-makers who evaluate options carefully to achieve the best outcome. However, the recent evidences show that people can deviate from the rational approach when they are under the influence of emotions, cognitive biases, heuristics and psychological nudges.

This reveals and highlights both sides of the research: while rationality plays an integral role and is a foundation for the actions of human beings, irrational behaviors increasingly shape decision making in insurance domain. This combination makes it clear that understanding insurance decision-making requires looking at both behavioral and rational factors. While significant progress has been made in studying human rationality in the following sphere, it is imperative to focus deeply on behavioral factors. The growing cascade of evidences and increasing relevance of this topic makes it essential to uncover all the nuances of the behavioral influences on the insurance sector.

In the future, it is important to explore this topic further. More experiments and real-life studies are needed to ensure how behavioral patterns develop in different situations and for versatile groups of people. Combining rational and behavioral approaches can provide a more complete picture and help us to perceive both of them in depth. Finally, creating tools or programs can help people to better understand their options and evaluate common biases. All these strategies and actions taken could improve how insurance policies are designed and chosen.

By continuing to study and test these ideas, researchers, businesses and policyholders can provide valuable insights into improving both, insurance products and the decision-making process for consumers, as well as, creating more comprehensive and effective models of consumer behavior in the future insurance industry.

Bibliography

Bernarz, Z., Lewis, K., & Sadowski, J. (2025). 'It's not personal, it's strictly business': Behavioural insurance and the impacts of non-personal data on individuals, groups and societies. *Computer Law & Security Review*, 56, 1-14. doi:<https://doi.org/10.1016/j.clsr.2024.106096>

Buzatu, C. (2013). The Influence of Behavioral Factors on Insurance Decision - a Romanian Approach. *Procedia Economics and Finance*, 6, 31-40. doi:[https://doi.org/10.1016/S2212-5671\(13\)00110-X](https://doi.org/10.1016/S2212-5671(13)00110-X)

Corcos, A., Montmarquette, C., & Pannequin, F. (2020). How the demand for insurance became behavioral. *Journal of Economic Behavior & Organization*, 180, 590-595. doi:<https://doi.org/10.1016/j.jebo.2020.09.001>

Dragos, S. L., Dragos, C. M., & Muresan, G. M. (2020). From intention to decision in purchasing life insurance and private pensions: different effects of knowledge and behavioural factors. *Journal of Behavioral and Experimental Economics*, 87, 1-19. doi:<https://doi.org/10.1016/j.socec.2020.101555>

Harrison, W. G. (2023). The End of Behavioral Insurance. *Handbook of Insurance*, 1-39. Retrieved December 19, 2024, from file:///C:/Users/USER/Desktop/Research%20(Insurance%20Principles)/CEAR-WP-2023-06-The-End-of-Behavioral-Insurance.pdf

Md.Sum, R., & Nordin, N. (2018). Decision-Making Biases in Insurance Purchasing. *Journal of Advanced Research in Social and Behavioral Sciences*, 10(2), 165-19. Retrieved December 19, 2024, from https://www.researchgate.net/profile/Rabihah-Mdsum/publication/324246281_Decision-Making_Biases_in_Insurance_Purchasing/links/5ac6e395a6fdcc8bfc7f866c/Decision-Making-Biases-in-Insurance-Purchasing.pdf

Serfilippi, E., Carter, M., & Guirking, C. (2020). Insurance contracts when individuals “greatly value” certainty: Results from a field experiment in Burkina Faso. *Journal of Economic Behavior & Organization*, 180, 731-743. doi:<https://doi.org/10.1016/j.jebo.2019.07.017>

Shiller, R. J. (2005). *Irrational Exuberance* (Second Edition). Princeton, New Jersey: Princeton University Press. doi:<https://www.jstor.org/stable/j.ctt7st4s>