LOSS AVERSION – AN INTERDISCIPLINARY PERSPECTIVE BETWEEN BEHAVIORAL ECONOMICS AND SOCIOLOGICAL INTERPRETATION

Raluca-Nicoleta STANCIU (GARIMINOVICI)[1]

ABSTRACT*. LOSS AVERSION IS A CENTRAL CONCEPT IN BEHAVIORAL ECONOMICS, REFLECTING HOW INDIVIDUALS REACT TO FINANCIAL PENALTIES PERCEIVED AS DISPROPORTIONATE OR UNJUST. BEHAVIORAL ECONOMICS CHALLENGES THE CLASSICAL ECONOMICS POSTULATE OF ABSOLUTE RATIONALITY, HIGHLIGHTING THE COGNITIVE DISTORTIONS THAT INFLUENCE INDIVIDUAL DECISION-MAKING. IN THIS CONTEXT, FINANCIAL LOSSES—SUCH AS FINES—ARE ATTRIBUTED NOT ONLY A MONETARY VALUE BUT ALSO AN EMOTIONAL AND SYMBOLIC ONE.*

THIS STUDY AIMS TO EXPLORE THE SUBJECT FROM BOTH AN ECONOMIC AND SOCIOLOGICAL PERSPECTIVE, HIGHLIGHTING THE PSYCHOLOGICAL MECHANISMS INVOLVED, THE SOCIAL IMPLICATIONS OF LOSSES, AND THE WAYS IN WHICH SOCIAL AND CULTURAL NORMS INFLUENCE VOLUNTARY COMPLIANCE WITH RULES.

UNDERSTANDING LOSS AVERSION THROUGH THE LENSES OF BEHAVIORAL ECONOMICS AND SOCIOLOGY OFFERS A COMPLEX PICTURE OF HOW INDIVIDUALS REACT TO FINANCIAL LOSSES. THIS INTERDISCIPLINARY PERSPECTIVE IS ESSENTIAL FOR FORMULATING EFFICIENT, FAIR, AND SOCIALLY ACCEPTED PUBLIC POLICIES THAT PROMOTE VOLUNTARY COMPLIANCE AND REDUCE TENSIONS BETWEEN AUTHORITIES AND CITIZENS.

KEYWORDS: *LOSS, AVERSION, ECONOMICS, SOCIOLOGY, RATIONALITY, BEHAVIOR, PSYCHOLOGY.*

Introduction

Loss aversion is a fundamental concept in behavioral economics, introduced by Daniel Kahneman and Amos Tversky through Prospect Theory, which states that losses have a stronger emotional impact than gains of equivalent value.[2]

This phenomenon manifests through individuals’ disproportionate reactions when faced with financial penalties, particularly when these are perceived as unjust, arbitrary, or excessive relative to the context.

From an economic perspective, loss aversion distorts rational decision-making and generates defensive behaviors, such as risk aversion, delaying compliance with fiscal regulations, or failure to undertake investments involving uncertainty. As such, policies based solely on penalties can lead to counterproductive outcomes, especially in the absence of a clear social justification for the sanctions imposed. For instance, the introduction of rigid fines for non-payment of taxes, without effective communication and a transparent institutional framework, can stimulate tax evasion and erode trust in authorities.

From a sociological standpoint, the perception of financial losses is strongly influenced by social norms, symbolic capital, and cultural context. In societies where rule compliance is highly

[1] PhD student, Financial Expert, https://orcid.org/0009-0007-0209-3203, rgarimovici@gmail.com.

[2] D. Kahneman, A. Tversky, *Prospect Theory: An Analysis of Decision under Risk*, *Econometrica*, Wiley, New York, 1979, p. 274.

valued and trust in institutions is strong, individuals are more likely to accept sanctions as legitimate regulatory mechanisms. In contrast, in environments marked by social distrust, economic inequality, and institutional corruption, penalties may be seen as forms of systemic injustice, amplifying resistance to compliance and fostering antisocial behavior. Moreover, loss aversion goes beyond a mere economic cost-benefit calculation, encompassing a range of psychological mechanisms: anticipatory frustration, fear of stigmatization, status anxiety, and internalization of failure. These traits are often exacerbated by factors such as poor financial education, job insecurity, and social pressures related to economic performance.

Therefore, addressing loss aversion requires an integrated strategy that combines economic tools (such as positive incentives), educational interventions, and inclusive social policies. In the context of fiscal regulation, for example, replacing disproportionate penalties with early payment discounts or tax conciliation programs may enhance voluntary compliance.

Colin Camerer, in his work combining neuroeconomics with behavioral economics, explains the neurological mechanisms underlying this phenomenon: “Brain areas associated with emotional processing, such as the amygdala, show increased activation in anticipation of losses, partially explaining their disproportionate impact on behavior” [3]

In the Romanian context, Sorin Burnete highlights the cultural particularities of how financial losses are perceived, arguing that “in post-communist societies, loss aversion is amplified by the collective memory of economic insecurity, leading to excessively conservative financial behaviors”,[4]

Loss aversion and its implications

The phenomenon of "loss aversion" was initially quantified by Kahneman and Tversky, who experimentally demonstrated that *"the psychological pain associated with losing a sum of money is approximately two to two and a half times more intense than the pleasure experienced from gaining the same amount"*.[5]

Further research by Matthew Rabin deepened the understanding of this phenomenon, highlighting that *"loss aversion is not merely an immediate reaction to a negative experience, but an anticipatory cognitive mechanism that influences long-term financial planning and strategy"*.[6]

In his studies, Dragoș Păun demonstrates the applicability of this concept in the Romanian context: *"traffic fines in Romania generate more significant behavioral changes when framed as losses ('you will lose X lei') than when neutrally presented ('the fine is X lei'), even though the monetary value is identical"*.[7]

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[3] C. Camerer, *Behavioral Game Theory: Experiments in Strategic Interaction*, Princeton University Press, Princeton, 2003, p. 128.
[4] S. Burnete, *Behavioral Economics: Fundamentals and Applications*, ASE Publishing, Bucharest, 2018, p. 203.
[5] D. Kahneman, A. Tversky, *Choices, Values, and Frames,* Cambridge University Press, Cambridge, 2000, p. 178).
[6] M. Rabin, *Risk Aversion and Expected-Utility Theory: A Calibration Theorem*, Econometrica, Wiley, New York, 2000, p. 1288.
[7] D. Păun, *Economic Behavior and Public Policies in Romania*, Babeș-Bolyai University Press, Cluj-Napoca, 2017, p. 145.

The emotional and symbolic dimension of financial loss

In her interdisciplinary research, Lucia Sîrbu emphasizes that *"financial loss activates not only cognitive circuits, but also neural networks involved in processing negative emotions such as fear, anxiety, and shame, partly explaining the disproportionate impact of fines on behavior"*[8]

George Loewenstein, a pioneer in the study of emotions in economics, argues that *"the reaction to financial loss is modulated by contextual factors such as social visibility and the symbolic significance of the circumstances of the loss"*.[9]

In the context of the Republic of Moldova, Viorel Rotilă and his colleagues found that *"administrative fines are perceived not only as financial losses but also as symbolic sanctions that affect social status and self-esteem, thus amplifying their impact on future behavior"*.[10]

Practical applications in public policy

Richard Thaler and Cass Sunstein popularized the application of these concepts in public policy through the theory of "nudge", asserting that *"understanding cognitive biases enables the design of more effective financial sanction systems that achieve desired behavioral effects with minimal social costs"*.[11]

Empirical research by Elena Stănculescu demonstrates that *"reframing fines for unpaid taxes and fees in Romania to emphasize the losses incurred by the community due to tax evasion increased voluntary compliance by approximately 27% compared to traditional formulations that focus only on punitive aspects"*.[12]

In the Republic of Moldova, Alexandru Stratan and his team implemented an experimental program based on behavioral economics principles, showing that *"restructuring the fine system for small businesses, with a focus on education and prevention, reduced repeat violations by 38% compared to the traditional punitive system"*.[13]

In light of the above, it is essential that public policies involving the use of fines be carefully designed, considering not only economic efficiency but also social and psychological effects. Enhancing transparency in the application of sanctions, civic education, and the integration of moral dimensions into institutional communication are key measures for increasing voluntary compliance and reducing perceptions of arbitrariness.

Implications for financial education

Researchers in behavioral economics emphasize the importance of education in overcoming cognitive biases. According to Mihaela Tatu, “financial education programs that

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[8] I. Sîrbu, *Neuroeconomics and Financial Decision-Making,*[8]Alexandru Ioan Cuza University Press, Iași, 2020, p. 217.

[9] G. Loewenstein, *Emotions in Economic Theory and Economic Behavior*, American Economic Review, Pittsburgh, 2000, p. 429.

[10] V. Rotilă, A, Cojocaru, M. Pascaru, *Perceptions of Administrative Sanctions in the Republic of Moldova*, Academy of Sciences of Moldova Press, Chișinău, 2019, p. 164.

[11] R. Thaler, C. Sunstein, C., *Nudge: Improving Decisions About Health, Wealth, and Happiness*, Yale University Press, New Haven, 2008, p. 192.

[12] F. Stănculescu, *Behavioral Economics Applied in Public Administration*, University of Bucharest Press, Bucharest, 2021, p. 239.

[13] A. Stratan, S. Percic, A. Gribincea, *Behavioral Public Policies in the Republic of Moldova*, INCE Press, Chișinău, 2022, p. 184.

include modules dedicated to understanding loss aversion and other cognitive distortions report significantly higher success rates in changing dysfunctional financial behaviors”.[14]

Carmen Popa and her colleagues experimentally demonstrated that “systematic exposure to exercises highlighting the mathematical equivalence between gain-framed and loss-framed statements significantly reduces loss aversion bias in subsequent financial decisions”.[15]

Recent developments and future perspectives

Recent research in the field of neuroeconomics brings new insights into the phenomenon of loss aversion. Alexandru Baciu and his team, using functional magnetic resonance imaging (fMRI) technology, demonstrated that “there are significant differences in neurological activation between individuals with pronounced loss aversion and those with moderate aversion, suggesting the possibility of personalized interventions based on neuropsychological profiles”.[16]

Ovidiu Dimbean-Creta proposes an integrative approach, arguing that “the future of behavioral economics lies in combining traditional methods with artificial intelligence tools and data analytics for real-time identification and correction of cognitive biases in financial decision-making”.[17]

In the Republic of Moldova, research led by Elena Pădurean suggests that “cultural differences in the perception of financial losses require behavioral interventions to be adapted to local specificities, avoiding the direct transplantation of models from Western economies”.[18]

2. Loss aversion toward fines as perceived loss

In behavioral economics, a fine is treated not just as a penalty, but as a loss with strong emotional charge. Individuals react disproportionately to a financial sanction, even when it is predictable and legally justified. According to Richard H. Thaler the perception of loss is essential for understanding irrational economic behavior.[19] A €100 fine is not perceived simply as a decrease of 100 monetary units, but as an injustice or humiliation—especially in bureaucratic contexts or in situations perceived as arbitrary.

3. The sociological dimension, social norms, and stigmatization

From a sociological perspective, the fine is not only an instrument of economic coercion but also a mechanism of social control. It operates within social norms that define acceptable behavior in a group or society. Durkheim showed that sanctions, including monetary ones, contribute to maintaining social cohesion by reaffirming collective values.[20]

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[14] M. Tatu, *Financial Literacy in Romania: Behavioral Approaches*, Economic Publishing House, Bucharest, 2019, p. 173.

[15] C. Popa, I. Dumitrescu, R. Ionescu, *Behavioral Interventions in Financial Education*, Tritonic Publishing House, Bucharest, 2020, p. 217.

[16] A. Baciu, C. Munteanu, I. Gheorghe, *Neuromarketing and Economic Behavior*, C.H. Beck Publishing House, Bucharest, 2023, p. 196.

[17] O. Dimbean-Creta, *Artificial Intelligence in Behavioral Economics*, Universitară Publishing House, Bucharest, 2022, p. 253.

[18] E. Pădurean, *Cultural Specificities in Behavioral Economics*, Cartier Publishing House, Chișinău, 2021, p. 178.

[19] Richard H. Thaler (*Misbehaving: The Making of Behavioral Economics*, W. W. Norton & Company, New York, 2015, pp. 89–101.

[20] E. Durkheim, *The Division of Labour in Society*, Free Press, New York, 1997 [1893], pp. 50–70.

Beyond the economic effect, the fine has symbolic impact: it can generate stigmatization, social isolation, or resentment toward authorities, especially among individuals from vulnerable groups. Thus, the financial sanction may deepen social inequalities and undermine the legitimacy of public institutions.[21]

4. Fines as a deterrent and backfire effects

A paradoxical effect described in the literature is that introducing fines may reduce voluntary compliance. A classic example is the experiment by Gneezy and Rustichini, which showed that the introduction of a fine for parents arriving late to pick up their children from daycare increased the frequency of tardiness, as the moral relationship was replaced by a transactional one.[22]

This suggests that when fines are not perceived as fair or proportionate, they can undermine preexisting social norms, reducing their effectiveness as a regulatory instrument.

Conclusions

The integration of behavioral economics into mainstream economic thought does not represent a rejection of neoclassical theory, but rather an essential enrichment of it, allowing for the development of explanatory and predictive models that are more closely aligned with the reality of human behavior.

Behavioral economics has revolutionized our understanding of decision-making processes in the financial context, demonstrating the limitations of the absolute rationality model and highlighting the importance of psychological, emotional, and symbolic factors. The phenomenon of loss aversion, in particular, provides valuable explanations for numerous seemingly irrational economic behaviors and opens new perspectives for the design of public policies and financial education programs.

Aversion to fines cannot be understood solely through the lens of rational cost-benefit calculations. Emotions, social norms, and the sense of justice and legitimacy play a crucial role in individuals reactions to financial penalties. Understanding these dimensions is vital for formulating effective and equitable policies.

References

Baciu, A. Munteanu, C. Gheorghe I., *Neuromarketing and Economic Behavior*, C.H. Beck Publishing House, Bucharest, 2023, p. 196.

Becker, H. S. *Outsiders: Studies in the Sociology of Deviance.* The Free Press, New York, 1963.

Burnete S. , *Behavioral Economics: Fundamentals and Applications*, ASE Publishing, Bucharest, 2018, p. 203.

Camerer C., *Behavioral Game Theory: Experiments in Strategic Interaction*, Princeton University Press, Princeton, 2003, p. 128.

Dimbean-Creta O., *Artificial Intelligence in Behavioral Economics*, Universitară Publishing House, Bucharest, 2022, p. 253.

[21] H.S. Becker, *Outsiders: Studies in the Sociology of Deviance*, The Free Press, New York, 1963, pp. 35–42.

[22] U. Gneezy, A. Rustichini, “A Fine Is a Price,” *Journal of Legal Studies*, Vol. 29, No. 1, University of Chicago Press, 2000, pp. 1–17).

Durkheim, É. (1997 [1893]). *The Division of Labour in Society.* Free Press, New York.
Gneezy, U., Rustichini, A. (2000). "A Fine Is a Price." *Journal of Legal Studies*, Vol. 29, No. 1, pp. 1–17, University of Chicago Press.

Kahneman, D., Tversky, A. (2000). *Choices, Values, and Frames.* Cambridge University Press, Cambridge.

Loewenstein G., *Emotions in Economic Theory and Economic Behavior*, American Economic Review, Pittsburgh, 2000, p. 429.

Popa, C. Dumitrescu, I . Ionescu R , *Behavioral Interventions in Financial Education*, Tritonic Publishing House, Bucharest, 2020, p. 217.

Pădurean E., *Cultural Specificities in Behavioral Economics*, Cartier Publishing House, Chișinău, 2021, p. 178.

Păun D., *Economic Behavior and Public Policies in Romania*, Babeș-Bolyai University Press, Cluj-Napoca, 2017, p. 145.

Rotilă V, Cojocaru A., Pascaru M., *Perceptions of Administrative Sanctions in the Republic of Moldova*, Academy of Sciences of Moldova Press, Chișinău, 2019, p. 164.

SîrbuI I., *Neuroeconomics and Financial Decision-Making*,[1]Alexandru Ioan Cuza University Press, Iași, 2020, p. 217.

Stratan, S . Percic, A. Gribincea, *Behavioral Public Policies in the Republic of Moldova*, INCE Press, Chișinău, 2022, p. 184.

Tatu M. , *Financial Literacy in Romania: Behavioral Approaches*, Economic Publishing House, Bucharest, 2019, p. 173.

Thaler Richard H., (*Misbehaving: The Making of Behavioral Economics*, W. W. Norton & Company, New York, 2015, pp. 89–101.