



"İQTİSADI İSLAHATLAR" elmi-analitik jurnal

DETERMINANTS OF GREEN INSURANCE ADOPTION: THE ROLE OF ENVIRONMENTAL

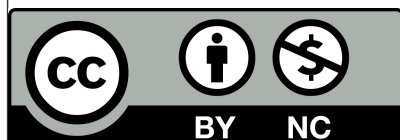


№ 1(14)-2026
səh.

Cristina UNGUR,
Lilia ŞARGU

PhD of Economic Sciences, Scientific Researcher, National
Institute for Economic Research, AESM, Republic of
Moldova

<https://doi.org>



ungur.cristina@ase.md



lilia.sargu@ase.md

DETERMINANTS OF GREEN INSURANCE ADOPTION: THE ROLE OF ENVIRONMENTAL AWARENESS, TRUST AND WILLINGNESS TO PAY FOR SUSTAINABLE PRODUCTS

Cristina UNGUR,

PhD of Economic Sciences, Scientific Researcher, National Institute for Economic Research, AESM, Republic of Moldova

ORCID: 0000-0002-6319-2359

Lilia ŞARGU,

PhD of Economic Sciences, Associate professor, National Institute for Economic Research, AESM, Republic of Moldova

ORCID: 0000-0001-7495-0656

Abstract. The acceleration of climate change and the integration of environmental, social and governance (ESG) principles in the financial sector have led to the development of green insurance as a tool to support economic resilience and the transition to a sustainable economy. However, limited awareness of these products and varying levels of consumer acceptance remain important challenges for market development. The purpose of this study is to examine the role of environmental awareness, trust in insurance companies that invest in green projects, and willingness to pay for sustainable products in shaping consumers' intention to purchase green insurance. The research is based on a survey conducted in the Republic of Moldova among 143 respondents, and multiple linear regression is used to examine these relationships before and after controlling for socio-demographic and insurance-related characteristics. The results show that trust is positively and significantly associated with green insurance purchase intention in the baseline model ($B = 0.315$, $p = 0.012$), whereas environmental awareness and willingness to pay do not show statistically significant effects. After socio-demographic and experiential controls are introduced, the association between trust and purchase intention becomes statistically non-significant ($B = 0.206$, $p = 0.102$), while willingness to pay and environmental awareness also remain non-significant. The findings therefore suggest that the initially observed role of trust is not robust to the inclusion of respondent characteristics and that green insurance purchase intention may depend on a broader set of factors than those captured by the core explanatory variables. The study contributes to the emerging literature on sustainable insurance by providing evidence from a non-probability sample in the Republic of Moldova and offers implications for future research and for the development of consumer-oriented green insurance strategies.

Keywords: green insurance; consumer behavior; environmental awareness; trust; willingness to pay; purchase intention.

JEL Classification G00, G22, G52

Introduction

Climate change, the intensification of extreme weather events and the orientation of economies towards the principles of sustainable development have led to significant transformations in the financial sector, including the insurance industry. In recent years, the concept of green insurance has begun to gain increasing importance, being promoted as a tool capable of contributing both to reducing economic vulnerability generated by climate risks and to stimulating environmentally responsible investments and behaviors. By integrating environmental, social and governance (ESG) criteria into the design and administration of insurance products, insurance companies are expanding their traditional role of risk management, becoming active actors in supporting the transition to a green and resilient economy.

In this context, the success of implementing green insurance products depends not only on their technical characteristics, but also on the degree to which consumers are willing to adopt them. The specialized literature highlights the fact that the intention to adopt is influenced by a series of cognitive and behavioral factors, such as the level of awareness of environmental issues, trust in financial institutions and the willingness of consumers to bear additional costs for sustainable products. However, research dedicated to green insurance remains limited, especially in emerging economies and in countries in the process of approaching European sustainability standards. In the Republic of Moldova, studies on consumer perception of green insurance are still in their infancy, which justifies the need to investigate the factors that influence the intention to adopt these products and provides

premises for formulating recommendations addressed to both insurance companies and decision-makers involved in promoting sustainable development.

Literature review

The concept and evolution of green insurance

In recent years, climate change, environmental degradation and the intensification of natural risks have led to a paradigm shift in the financial sector, and the insurance industry is increasingly recognized as an important actor in promoting sustainable development. While in the past the main role of insurance companies was limited to the transfer and compensation of risks, today they are considered institutions capable of actively contributing to reducing economic vulnerability and accelerating the transition to a low-carbon economy by developing products and services compatible with the principles of sustainability (Insurance Industry in the Scope of Sustainable Development, 2023; O'Sullivan, 2024). The concept of sustainable insurance has evolved significantly in the last decade, being based on the principles promoted by the Principles for Sustainable Insurance (PSI), developed under the auspices of the United Nations Environment Programme. According to this approach, sustainability is not just a feature of the insurance product, but an organizational strategy that involves the systematic integration of environmental, social and governance (ESG) factors into all company activities, including product design, risk assessment, underwriting, customer relations, claims management and performance reporting (Stricker et al., 2022). Thus, green insurance is no longer viewed exclusively as financial protection instruments, but as mechanisms capable of stimulating sustainable investments and responsible consumer and business behaviors.

Numerous recent studies highlight that the integration of ESG criteria is becoming one of the major strategic directions of the insurance industry. Systematic analyses conducted by Marti et al. (2024), Sood and Özen (2024), as well as Aburto Barrera and Wagner (2023) show that the implementation of ESG criteria contributes to strengthening organizational resilience, improving risk management and increasing long-term performance. At the same time, these studies highlight the existence of important challenges regarding the standardization of ESG practices, the development of evaluation indicators and their integration into the operational processes of insurance companies.

A special role is played by climate risk management. Pfeifer and Langen (2021) demonstrate that climate change influences both the structure of insurable risks and traditional actuarial valuation models, which requires the adaptation of products and underwriting policies. In the same direction, Summerhayes et al. (2023) believes that the insurance sector must assume a leadership role in managing the climate crisis and biodiversity loss, contributing both to financing the green transition and to stimulating preventive measures and sustainable investments.

One of the most comprehensive approaches is proposed by Stricker et al. (2022), who develop a strategic model for transforming insurance companies across the entire value chain. The authors show that the development of green insurance involves not only the introduction of environmentally friendly products, but also the restructuring of internal processes, the integration of ESG criteria into risk management, the promotion of responsible behavior through pricing and reward mechanisms, and the orientation of compensation processes towards solutions with low environmental impact. In this perspective, the success of the transition to green insurance depends on the ability of companies to build relationships based on transparency, responsibility and trust with all categories of stakeholders. In recent literature, the concept of sustainability in the insurance industry goes beyond the analysis of individual products and aims to evaluate the entire business model of insurance companies. Eling (2024) argues that the sustainability of the industry must be analyzed simultaneously from the perspective of economic performance, social responsibility and environmental impact, emphasizing that insurers must respond to both the challenges generated by climate change and the new expectations formulated by investors, regulators and consumers. The author concludes that the future of the industry will depend on the ability of companies to integrate the principles of sustainable development into organizational strategies and decision-making processes.

However, the literature review reveals that most of the existing research is predominantly oriented towards the organizational and managerial perspective of insurance companies. The focus is on the implementation of ESG principles, climate risk management strategies and business model transformation, while the behavioral dimension of the consumer is insufficiently explored. In particular, there is a small number of empirical studies investigating how environmental awareness, trust in insurance companies and consumers' willingness to pay for sustainable products influence the intention to adopt green insurance. This gap is even more evident in emerging economies and in countries in the process of aligning with European policies on sustainable development, including the Republic of Moldova, which justifies the need for the present research.

Integrating green insurance into the sustainable finance system

The results of the most recent systematic review on the implementation of ESG criteria in the insurance industry highlight an accelerated growth of scientific interest in this topic in recent years. Marti, Bastida-Vialcanet and Marimon (2024) show that most research focuses on corporate governance, climate risk management, financial performance and sustainability reporting, but there is still a small number of studies dedicated to consumer behavior and acceptance of green insurance products. The authors conclude that the current literature is predominantly oriented towards the organizational perspective, and empirical research on the factors influencing the demand for sustainable products is needed.

Recent literature emphasizes that the development of green insurance must be analyzed in the broader context of sustainable finance and the transition to a low-carbon economy. In this approach, green insurance is not only a mechanism to compensate for losses generated by climate risks, but also a financial instrument capable of stimulating responsible investments and changing the economic behavior of the agents involved. Bi Chunxiao, Xie Wenkai and Kuznetsova (2024) highlight the fact that green finance, green insurance and climate policies work complementary in accelerating the transition to sustainable development, simultaneously contributing to reducing environmental risks and strengthening economic resilience. Similar results are presented by Belgacem et al. (2026), who demonstrate the existence of positive relationships between the development of green finance, the expansion of green insurance products, investments in renewable energy and the sustainability performance of the economies analyzed. In the same direction, studies on green investments and corporate social responsibility show that sustainable financial instruments, including insurance products, facilitate the mobilization of capital towards resilient infrastructures and projects compatible with sustainable development objectives (The Role of Green Investment, Climate Change Mitigation Strategies, and Corporate Social Responsibility in Sustainable Infrastructure Development, 2024). A growing research direction in recent literature focuses on the contribution of the insurance industry to social sustainability. D'Amato et al. (2024) argue that the social responsibility of insurance companies is not limited to the financial protection offered to customers, but includes the development of accessible products, the reduction of economic vulnerabilities and the strengthening of financial inclusion. In this perspective, the sustainability of the insurance sector is the result of the balance between economic performance, environmental protection and the creation of social value.

Green insurance as a tool for climate change adaptation

Many authors highlight the fact that the role of the insurance industry goes beyond the traditional function of risk transfer, becoming an essential mechanism for adapting to climate change and reducing economic vulnerabilities. Mills (2007) argues that there is a complementary relationship between adaptation and mitigation measures, and modern insurance systems can accelerate the implementation of both categories of policies by stimulating preventive investments and promoting technologies with low environmental impact. Gaur and Bhatti (2023) argue that the insurance sector contributes to supporting climate policies both by developing products adapted to new risks and by directing capital towards sustainable activities. Similarly, Malik, Verma and Sharma (2023) believe that developing climate resilience involves integrating insurance solutions into national adaptation strategies, as they reduce the economic impact of natural disasters and facilitate the recovery of affected communities. From a complementary perspective, Periasamy and Rajmohan (2026) demonstrate that climate insurance, green bonds and carbon markets form an integrated system of financial instruments capable of simultaneously supporting risk management and financing the green transition.

Current perspectives on the development of green insurance

Nogueira, Lucena and Nogueira (2018) propose one of the first integrative models dedicated to the assessment of sustainable insurance, demonstrating that their development involves the simultaneous integration of economic, social and environmental dimensions in the decision-making processes of insurance companies. The authors highlight the fact that sustainability should not be assessed exclusively through the lens of financial performance, but also through the contribution of insurance products and services to reducing climate risks and promoting sustainable development. The literature published in recent years highlights the fact that the development of green insurance represents one of the most dynamic directions of transformation of the insurance industry. Bera (2025) believes that the expansion of these products is supported by the increasing interest in sustainable investments, climate policies and the development of ESG standards, but also identifies numerous limitations related to the low level of consumer information, the lack of uniform regulations and the difficulties of assessing climate risks. Agrawal, Balusamy and Rathinam (2026) consider that green insurance can become a catalyst for sustainable development by stimulating responsible investments, reducing exposure to climate risks

and promoting sustainable economic behavior. A similar perspective is presented by Yusupov (2025), who analyzes insurance as a support mechanism for the transition to a green economy, highlighting its role in reducing economic vulnerabilities and creating incentives for the adoption of green technologies and investments. Overall, this research confirms that green insurance is no longer a niche of the financial industry, but an important component of international strategies on sustainable development and climate risk management.

Analyzing emerging economies, Lima et al. (2025) emphasize that green insurance can contribute simultaneously to the development of financial markets and the achievement of sustainable development goals, but their success depends on the level of consumer information, trust in financial institutions and the existence of public policies capable of stimulating demand for sustainable products. The authors highlight that the development of these products is significantly more difficult in transition economies, where the level of financial education and awareness of climate issues is still low.

The first research conducted in the Republic of Moldova on consumer behavior regarding sustainable insurance products highlights the existence of a growing interest in these products, but also a low level of knowledge of the concept of green insurance (Ungur & Şargu, 2026). The results suggest that the development of the market depends both on the strengthening of consumer confidence and on the intensification of information and financial education activities. However, the study has a predominantly descriptive nature and does not investigate the relationships between the main factors determining the intention to adopt green insurance. In this context, the present research aims to expand the existing literature by analyzing the influence of environmental awareness, trust in insurance companies and willingness to pay for sustainable products on the intention to adopt green insurance in the Republic of Moldova.

Research method and methodology

This research is quantitative, descriptive and explanatory in nature, being carried out through an opinion poll aimed at assessing the factors that influence consumers' intention to adopt green insurance products in the Republic of Moldova. The choice of a quantitative approach is justified by the objective of the research, which aims to identify the relationships between awareness of environmental issues, trust in insurance companies, willingness to pay for sustainable products and the intention to purchase a green insurance policy. The research has a cross-sectional design, because the data were collected at a single point in time and reflect the perceptions of the respondents at the time of the survey. The analysis aims both to describe the profile of the respondents and to test the relationships between the variables included in the conceptual model.

The data were collected through an online questionnaire developed by the authors and distributed in the Republic of Moldova between November 2025 and March 2026. Participation was voluntary and anonymous, and respondents were informed that the data would be used exclusively for scientific research purposes. The study employed a non-probability sampling approach based on respondents' accessibility and voluntary participation.

The final sample consists of 143 respondents, selected through a non-probabilistic sampling method, based on accessibility and the willingness of participants to answer the questionnaire. Although this type of sampling does not allow statistical generalization to the entire population, it is frequently used in exploratory research on consumer behavior and allows the identification of relationships between the investigated variables.

- The instrument used was a structured questionnaire, consisting of questions on:
- ☐ socio-demographic characteristics of the respondents;
 - ☐ experience in using insurance products;
 - ☐ level of knowledge of the concept of green insurance;
 - ☐ perceptions of climate change;
 - ☐ trust in insurance companies;
 - ☐ willingness to pay for sustainable products;
 - ☐ intention to purchase a green insurance policy.

Most of the variables analyzed were measured using five-point Likert-type scales, where higher values indicate a greater level of agreement of the respondents with the statements evaluated.

The research mainly used variables measured by individual items, selected based on the literature on consumer behavior and sustainable insurance. For this reason, multidimensional scales that would require assessment of internal consistency through Cronbach Alpha coefficient were not constructed.

The proposed conceptual model includes one dependent variable and three independent variables.

Dependent variable	Independent variables	control variables
---------------------------	------------------------------	--------------------------

Intention to purchase a green insurance policy, assessed by the stated probability of purchasing such a product in the next 12 months.	awareness of the impact of climate change on the economy of the Republic of Moldova; trust in an insurance company that invests in green projects; willingness to pay a higher price for a sustainable product.	gender; age; education level; income; residence environment; previous experience with insurance products.
---	---	--

Data processing and analysis were performed using the IBM SPSS Statistics program. The statistical analysis was performed in several stages. In the first stage, descriptive statistics were calculated to characterize the sample and the distribution of responses, using frequencies, percentages, means and standard deviations. In the next stage, the relationships between variables were examined using the Pearson correlation coefficient. To test the influence of the analyzed factors on the intention to purchase a green insurance policy, multiple linear regression was used, which allows estimating the contribution of each independent variable to explaining the variation of the dependent variable. Also, to identify differences between socio-demographic groups, appropriate comparative tests were used (t-test for independent samples and analysis of variance - ANOVA), depending on the nature of the analyzed variables. The statistical significance level adopted in the research was $p < 0.05$.

Based on the specialized literature and the research objective, the following conceptual model was proposed:

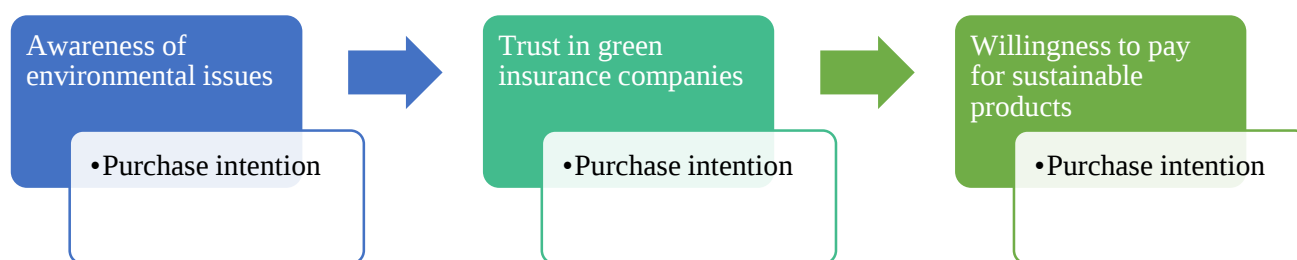


Figure 1 Conceptual model of purchase intention

Based on this model, the following hypotheses were formulated:

- H1. Awareness of environmental issues positively influences the intention to purchase a green insurance policy.
- H2. Trust in an insurance company that implements sustainable practices positively influences the intention to purchase a green insurance policy.
- H3. Consumers' willingness to pay a higher price for sustainable products positively influences the intention to purchase a green insurance policy.

Results and discussion

The characterization of the sample highlights a predominance of female respondents (74.8%), while men represent 25.2% of the total participants. In terms of age, the sample is predominantly made up of young people, 60.1% between 20 and 29 years old, and 24.5% under 20. Thus, over four-fifths of the respondents (84.6%) belong to the age segment under 30, a category associated, in the specialized literature, with a greater openness towards sustainable products and innovations in the field of financial services.

Regarding the level of education, 55.2% of the respondents have secondary education, 41.3% have higher education, and 3.5% have postgraduate studies, which indicates an educational level that allows for an informed assessment of the concepts of sustainability and green insurance.

Table 1. Sample characteristics and control variables

Control variable	Category	Frecvență (n)	Pondere (%)	Interpretation
Gender	Female	107	74,8	The sample is predominantly female, which may influence perceptions of sustainable products and purchasing behavior.
	Male	36	25,2	

Age	< 20 years	35	24,5	Most respondents are young (84.6% are under 30 years old), a category considered more receptive to sustainable products and services.
	20–29 years	86	60,1	
	30–39 years	7	4,9	
	40–49 years	10	7,0	
	50–59 years	4	2,8	
	≥60 years	1	0,7	
Education level	Secondary education	79	55,2	A high level of education favors understanding the concepts of sustainability and green insurance.
	Higher education	59	41,3	
	Postgraduate studies	5	3,5	
Monthly income	< 5,000 MDL	46	32,2	The sample is concentrated in low and middle income categories, a relevant aspect for analyzing the willingness to pay for sustainable products.
	5,001–10,000 MDL	50	35,0	
	10,001–15,000 MDL	23	16,1	
	15,001–30,000 MDL	18	12,6	
	>30,000 MDL	6	4,2	
Residential environment	Urban	101	70,6	Respondents from urban areas predominate, where access to information and financial services is higher.
	Rural	42	29,4	
Experience with insurance products	Have insurance policies	98	68,5	Most respondents have previous experience with insurance products, which lends credibility to assessments of green insurance.
	Do not have policies	45	31,5	

The analysis of income distribution shows that the most numerous categories are represented by respondents with incomes between 5,001 and 10,000 MDL (35.0%) and those with incomes below 5,000 MDL (32.2%). This is important because the level of income can influence consumers' willingness to pay an additional cost for sustainable insurance products. In terms of residence, the majority of respondents come from urban areas (70.6%), while 29.4% live in rural areas. This distribution is relevant because access to information, financial services and innovative products is generally higher in urban areas. Regarding previous experience with insurance products, 68.5% of respondents declare that they have at least one insurance policy, and 31.5% do not currently use such products. This result suggests that most participants have direct experience with the insurance market, which gives a higher degree of relevance to the opinions expressed regarding the intention to adopt green insurance.

Table 2. Influence of control variables on the intention to purchase a green insurance policy

Control variable	Statistical test	Value	p-value	Result
Gender	t-test	2,949	0,004	Significant difference
Age	ANOVA (F)	0,990	0,426	Non-significant
Education level	ANOVA (F)	2,923	0,057	Almost significant
Monthly income	ANOVA (F)	4,583	0,002	Significant difference
Residential environment	t-test	0,714	0,478	Non-significant
Experience with insurance products	t-test	2,032	0,045	Significant difference

Before estimating the regression models, differences in green insurance purchase intention across the main socio-demographic and experiential characteristics were examined. Purchase intention differed significantly by gender ($t = 2.949$, $p = 0.004$), with women reporting a higher mean intention ($M = 2.56$) than men ($M = 1.92$). Significant differences were also observed across monthly income categories ($F = 4.583$, $p = 0.002$), with higher purchase intention reported among respondents in the medium- and higher-income groups compared with those earning less than MDL 5,000 per month.

Previous insurance experience was also associated with purchase intention. Respondents who already held an insurance policy reported a higher mean purchase intention ($M = 2.54$) than those without previous insurance experience ($M = 2.09$), and the difference was statistically significant ($t = 2.032$, $p = 0.045$). In contrast, no statistically significant differences were identified by age ($p = 0.426$) or area of residence ($p = 0.478$). Differences according to education did not reach the conventional 5% significance threshold ($p = 0.057$). These preliminary results indicate heterogeneity in purchase intention across some respondent characteristics and support their inclusion as control variables in the subsequent multivariate analysis.

Table 3. Averages obtained for purchase intention

Variable	Category	Average purchase intention
Gender	Women	2,56
	Men	1,92
Age	<20 years	2,11
	20–29 years	2,43
	30–39 years	2,86
	40–49 years	2,80
	50–59 years	2,75
	≥60 years	1,00*
Education	Secondary education	2,16
	Higher education	2,69
	Postgraduate	2,60
Income	<5,000 MDL	1,78
	5,001–10,000 MDL	2,64
	10,001–15,000 MDL	2,78
	15,001–30,000 MDL	2,89
	>30,000 MDL	2,17
Environment	Urban	2,35
	Rural	2,52
I have policies	Yes	2,54
	No	2,09

Based on the results, it was found that the following control variables will be introduced into the multiple regression model: gender; monthly income; experience with insurance products. These variables demonstrated significant associations with purchase intention and allow for a more precise estimation of the effect of the three main predictors: awareness of environmental issues, trust and willingness to pay for sustainable products.

Table 4. Multiple linear regression on factors influencing the intention to purchase a green insurance policy

Dependent variable: Intention to purchase a green insurance policy in the next 12 months

Independent variable	B	t	p
Awareness of the impact of climate change	-0,125	-1,099	0,274
Trust in a company investing in green projects	0,315	2,541	0,012
Willingness to pay more for a sustainable product	0,104	0,866	0,388
Constant	1,559	4,688	<0,001

The results of the baseline multiple linear regression indicate that the model is statistically significant ($F = 4.549$, $p = 0.004$). The coefficient of determination ($R^2 = 0.089$) indicates that environmental awareness, trust, and willingness to pay jointly account for approximately 8.9% of the observed variation in green insurance purchase intention. The explanatory power of the baseline model is therefore limited, suggesting that purchase intention is

likely associated with additional factors not captured by these three variables. The individual contribution of each predictor is examined below.

Table 5. Model indicators

Indicator	Value
R ²	0,089
Adjusted R ²	0,070
F	4,549
p (model)	0,004
Number of observations	143
Durbin–Watson	1,996

The analysis of the individual coefficients in the baseline model shows that trust in an insurance company investing in green projects is the only core explanatory variable positively and significantly associated with green insurance purchase intention ($B = 0.315$, $t = 2.541$, $p = 0.012$). Holding the other variables in the baseline model constant, a one-unit increase in trust is associated with an estimated 0.315-point increase in purchase intention. This association, however, refers specifically to the baseline specification and should be interpreted in conjunction with the full model that incorporates socio-demographic and experiential controls.

Environmental awareness, measured through respondents' perceptions of the impact of climate change on the economy of the Republic of Moldova, is not statistically significantly associated with purchase intention in the baseline model ($p = 0.274$). Thus, within this model, greater awareness of the economic implications of climate change is not accompanied by a statistically detectable increase in the intention to purchase green insurance.

Similarly, willingness to pay more for sustainable products is not statistically significantly associated with green insurance purchase intention ($p = 0.388$). Therefore, the baseline model does not provide sufficient statistical evidence to conclude that a greater declared willingness to pay for sustainable products is associated with a higher intention to purchase a green insurance policy.

Table 6. Confirmation of hypotheses

Hypothesis	Result
H1. Awareness of environmental issues positively influences purchase intention	Rejected
H2. Trust in green insurance companies positively influences purchase intention	Confirmed but not supported in full model
H3. Willingness to pay more positively influences purchase intention	Rejected

The preliminary analysis showed statistically significant differences in green insurance purchase intention according to gender, income, and previous insurance experience. To examine whether the associations of the three core predictors with purchase intention remained after accounting for respondent characteristics, a full multiple linear regression model was estimated. The model included environmental awareness, trust, and willingness to pay together with the predefined socio-demographic and experiential control variables: gender, age, education, income, area of residence, and previous insurance experience.

Table 7. Multiple Linear Regression

Dependent Variable: Intention to purchase a green insurance policy

Predictor	Coefficient B	t	p
Constanta	2,687	4,854	<0,001
Gender (male)	-0,686	-2,499	0,014
Age	—	insignificant	>0,05
Income < 5,000 MDL	-0,938	-2,796	0,006
Other income categories	—	insignificant	>0,05
Higher education	0,562	2,563	0,012
Postgraduate studies	insignificant		>0,05
Urban environment	-0,383	-1,584	0,116
Experience with insurance products	-0,257	-1,084	0,280
Awareness of the impact of climate change	-0,126	-1,118	0,266

Trust in a company investing in green projects	0,206	1,649	0,102
Willingness to pay for sustainable products	0,098	0,829	0,409

Note: Model statistics: $R^2 = 0.277$; Adjusted $R^2 = 0.179$; $F = 2.820$, $p < 0.001$.

Reference categories for categorical predictors are reported in the table note. Statistical significance was assessed at $p < 0.05$.

The full multiple regression model, which includes both the main explanatory variables and the socio-demographic and experiential controls, is statistically significant ($F = 2.820$; $p < 0.001$). The coefficient of determination ($R^2 = 0.277$) indicates that the model accounts for approximately 27.7% of the observed variation in green insurance purchase intention, while the adjusted $R^2 = 0.179$ indicates a more limited explanatory capacity after accounting for the number of predictors included in the model. Compared with the baseline model ($R^2 = 0.089$), the inclusion of control variables increases the proportion of variance accounted for. Nevertheless, a substantial proportion of the variation in purchase intention remains unexplained, suggesting that additional factors not included in the present model may also be relevant.

Among the control variables, statistically significant differences are observed for gender ($B = -0.686$; $p = 0.014$), with male respondents reporting lower purchase intention than the reference category (women). Income is also relevant for the lowest income category: respondents with monthly income below MDL 5,000 show a significantly lower purchase intention relative to the reference income category ($B = -0.938$; $p = 0.006$). Higher education is positively associated with purchase intention ($B = 0.562$; $p = 0.012$). The remaining control variables, including age, area of residence and previous experience with insurance products, do not show statistically significant associations in the full model.

After the control variables are introduced, none of the three core explanatory variables reaches the conventional threshold of statistical significance. Environmental awareness is not significantly associated with purchase intention ($B = -0.126$; $p = 0.266$), and willingness to pay for sustainable products also remains non-significant ($B = 0.098$; $p = 0.409$). Trust retains a positive coefficient ($B = 0.206$), but its association with purchase intention no longer reaches statistical significance ($p = 0.102$). This differs from the baseline model, in which trust was positively and significantly associated with purchase intention ($B = 0.315$; $p = 0.012$). Thus, the initially observed association between trust and purchase intention is not robust to the inclusion of socio-demographic and experiential controls.

The change between the two model specifications suggests that the relationship between trust and purchase intention should not be interpreted independently of respondent characteristics. The inclusion of gender, income, education and other controls reallocates part of the variation initially associated with trust in the baseline model. At the same time, the absence of statistical significance for trust in the full model should not be interpreted as evidence that trust is irrelevant to green insurance adoption; rather, the present data do not provide sufficient evidence of an independent association once the control variables are taken into account.

Accordingly, the hypotheses were assessed primarily on the basis of the full model. H1, concerning the positive association between environmental awareness and purchase intention, and H3, concerning willingness to pay, are not supported. H2 receives support in the baseline model, where trust is positively and significantly associated with purchase intention, but this association does not remain statistically significant in the full model. H2 is therefore not supported in the final model. This finding points to the sensitivity of the trust–purchase intention relationship to model specification rather than to a stable independent association.

These findings provide a more nuanced perspective on previous research. Stricker et al. (2022) emphasize the importance of trust and transparency for the development of green insurance. The present results are partially consistent with this perspective, since trust is positively associated with purchase intention in the baseline model, although this relationship is attenuated after respondent characteristics are controlled for. Marti et al. (2024) show that existing research has focused more extensively on ESG implementation at the organizational level than on consumer responses. The present study contributes to this emerging consumer-oriented perspective by examining environmental awareness, trust and willingness to pay simultaneously and by showing that their relationships with purchase intention may depend on the socio-demographic and experiential composition of the analyzed sample.

The findings should be interpreted in the context of an emerging green insurance market. Since the study specifically involved respondents familiar with the concept of green insurance, the results capture the attitudes and stated purchase intentions of this particular group rather than the level of awareness of green insurance among the general population of the Republic of Moldova.

Taken together, previous studies do not provide unequivocal evidence that environmental awareness, trust, and willingness to pay translate directly into green insurance purchase intention. Their effects appear to depend on

product characteristics, institutional credibility, consumer resources, and market context. This inconsistency provides the theoretical rationale for examining the three mechanisms simultaneously in the Moldovan context.

Research limitations

This research provides insight into the factors influencing the intention of consumers in the Republic of Moldova to adopt green insurance, but the results should be interpreted taking into account several methodological limitations.

First, the research is based on a sample of 143 respondents, selected through a non-probabilistic method. Although the sample size is adequate for descriptive analyses and linear regression models, it limits the possibility of generalizing the results to the entire population of the Republic of Moldova. In addition, the sample structure is dominated by young people and respondents from urban areas, which may influence perceptions of sustainability and purchasing behavior.

Second, the research has a cross-sectional nature, capturing the opinions and intentions of respondents at a single point in time. Consequently, the relationships identified between variables highlight statistical associations, without allowing conclusions to be drawn regarding causal relationships. The evolution of consumer perceptions and changing purchase intentions as the green insurance market develops requires longitudinal investigations.

A further limitation concerns the eligibility criterion applied in the survey. Participation was limited to respondents who were familiar with the concept of green insurance. Consequently, the findings reflect the perceptions and stated intentions of a relatively informed group and cannot be generalized to consumers with little or no prior familiarity with green insurance products. At the same time, familiarity with the concept does not necessarily imply previous experience with such products; therefore, the study captures stated purchase intentions rather than actual green insurance purchasing behavior.

Another limitation concerns the explanatory capacity of the regression model. Although the full model accounts for 27.7% of the observed variation in purchase intention ($R^2 = 0.277$), its adjusted R^2 is 0.179, indicating that a substantial proportion of the variation remains unaccounted for. Purchase intention may therefore be associated with additional factors not included in the present model, such as financial literacy, perceived climate risk, previous claims experience, insurer reputation, institutional trust, perceived product benefits, price sensitivity, and social influences. Future research could incorporate these factors and examine their contribution using larger and more heterogeneous samples.

Despite these limitations, the study contributes to the development of the literature on green insurance by providing empirical evidence regarding the perceptions and intentions of consumers in the Republic of Moldova. The results obtained can constitute a starting point for future research based on larger and more representative samples, more complex explanatory models and comparisons between markets at different stages of development of sustainable insurance products.

Conclusions

This research aimed to identify the factors influencing the intention of consumers in the Republic of Moldova to adopt green insurance products, by analyzing the relationship between climate change awareness, trust in insurance companies investing in green projects and willingness to pay for sustainable products. The results obtained contribute to the emerging literature on sustainable insurance and provide an image of the current level of development of this segment on the national market.

The descriptive analysis highlights the fact that the green insurance market in the Republic of Moldova is at an early stage of development. A significant proportion of respondents declare that they do not know the concept of green insurance or only partially associate it with the principles of sustainability. Also, most respondents perceive green insurance more through the lens of investments in ecological projects than as tools for managing climate risks, which indicates the existence of a deficit of information and education regarding the role of this type of product.

The inferential analysis provides a more nuanced picture of the factors associated with green insurance purchase intention. Trust in insurance companies investing in green projects is positively and significantly associated with purchase intention in the baseline model; however, this association does not remain statistically significant after socio-demographic and experiential controls are introduced. In the full model, gender, the lowest income category, and higher education show statistically significant associations with purchase intention, whereas the three core explanatory variables do not reach the conventional significance threshold. These findings suggest that purchase intention within the analyzed sample is associated with respondent characteristics and that the relationships between sustainability-related attitudes and green insurance purchase intention may depend on the broader socio-demographic context.

In contrast, awareness of the impact of climate change on the economy of the Republic of Moldova and the declared willingness to pay a higher price for sustainable products did not register significant effects on purchase intention in the estimated model. This result highlights the existence of a gap between favorable perceptions regarding environmental protection and their transformation into actual consumption behavior, an aspect also reported in the specialized literature on consumer behavior towards sustainable products.

From a practical perspective, the findings suggest that the development of the green insurance market in the Republic of Moldova may benefit from an integrated approach involving insurance companies and relevant regulatory authorities. Measures aimed at strengthening consumer confidence, improving transparency regarding investments in green projects, developing products accessible to different income groups, and promoting financial education and information about green insurance may support greater consumer engagement with these products. At the same time, the integration of ESG principles into insurers' development strategies may contribute to product differentiation and strengthen their positioning in an emerging sustainable insurance market.

Overall, the study indicates that green insurance purchase intention cannot be attributed to a single determinant and is likely to reflect a broader combination of attitudinal, socio-demographic, economic, and market-related factors. The findings provide preliminary empirical evidence from respondents familiar with the concept of green insurance in the Republic of Moldova and may serve as a reference for the development of consumer-oriented insurance strategies and future research on sustainable insurance adoption. From a policy perspective, improving information, transparency, financial literacy, and the institutional conditions supporting sustainable financial products may facilitate the gradual development of this market in the context of the Republic of Moldova's transition towards European sustainability standards.

References

- Aburto Barrera, L. I., & Wagner, J. (2023). A systematic literature review on sustainability issues along the value chain in insurance companies and pension funds. *European Actuarial Journal*, 13, 653–701. <https://doi.org/10.1007/s13385-023-00349-1>
- Insurance industry in the scope of sustainable development. (2023). Дайджест Финансы. <https://doi.org/10.24891/df.28.2.162>
- Marti, A., Bastida-Vialcanet, R., & Marimon, F. (2024). A systematic literature review: ESG criteria implementation in the insurance industry. *Intangible Capital*. <https://doi.org/10.3926/ic.2426>
- O'Sullivan, N. (2024). Sustainable insurance. In *Elgar Encyclopedia of Sustainable Finance* (pp. 202–206). Edward Elgar Publishing. <https://doi.org/10.4337/9781800880344.ch38>
- Pfeifer, D., & Langen, V. (2021). Insurance business and sustainable development. In *Risk Management*. IntechOpen. <https://doi.org/10.5772/intechopen.96389>
- Sood, K., & Özen, E. (2024). A systematic review of ESG in the insurance industry: Navigating the path to sustainability. *International Journal of Sustainable Development and Planning*, 19(3), 807–821. <https://doi.org/10.18280/ijstdp.190301>
- Stricker, L., Pugnetti, C., Wagner, J., & Zeier Röschmann, A. (2022). Green insurance: A roadmap for executive management. *Journal of Risk and Financial Management*, 15(5), 221. <https://doi.org/10.3390/jrfm15050221>
- Summerhayes, G., Waterford, L., Brook, N., Lawrence, W., & Sedilekova, Z. (2023). Sustainability: The climate and nature crisis – A leadership role for insurance. In K. Sood, S. Grima, P. Young, E. Özen & B. Balusamy (Eds.), *Insurance and Sustainability* (pp. 551–589). Edward Elgar Publishing. <https://doi.org/10.4337/9781802205893.00033>
- Agrawal, S. S., Balusamy, B., & Rathinam, G. (2026). Green insurance: A catalyst for sustainable development. In *Harnessing Data Science for Sustainable Insurance* (Cap. 8). IGI Global. <https://doi.org/10.4018/979-8-3373-1882-0.ch008>
- Barabanova, V. V. (2023). Insurance industry in the scope of sustainable development. Дайджест Финансы, 28(2), 162–178. <https://doi.org/10.24891/df.28.2.162>
- Belgacem, I., Gafsi, N., Mazzitelli, D., & Ed-Dafali, S. (2026). Do green finance, green insurance, and renewable energy really matter for sustainability? *Corporate Social Responsibility and Environmental Management*, 33(3), 4174–4188. <https://doi.org/10.1002/csr.70378>
- Bera, A. (2025). Prospects for the development of green insurance – Opportunities and limitations. *Sustainability and Environmental Economics*, 2025(10), Article 4543325. <https://doi.org/10.5171/2025.4543325>

- Bi, C., Xie, W., & Kuznetsova, N. P. (2024). Green finance and insurance: Driving forces for low-carbon transition and sustainable development. *Academic Journal of Business & Management*, 6(7). <https://doi.org/10.25236/AJBM.2024.060705>
- Chiaromonte, L., Dreassi, A., Paltrinieri, A., & Piserà, S. (2020). Sustainability practices and stability in the insurance industry. *Sustainability*, 12(14), 5530. <https://doi.org/10.3390/su12145530>
- Gaur, A., & Bhatti, S. (2023). Contribution of the insurance sector in sustaining the climate. In K. Sood, S. Grima, P. Young, E. Özen, & B. Balusamy (Eds.), *The Impact of Climate Change and Sustainability Standards on the Insurance Market*. Wiley. <https://doi.org/10.1002/9781394167944.ch11>
- Malik, R., Verma, J., & Sharma, A. (2023). Climate change resilience support in the insurance sector. In K. Sood, S. Grima, P. Young, E. Özen, & B. Balusamy (Eds.), *The Impact of Climate Change and Sustainability Standards on the Insurance Market*. Wiley. <https://doi.org/10.1002/9781394167944.ch8>
- Mills, E. (2007). Synergisms between climate change mitigation and adaptation: An insurance perspective. *Mitigation and Adaptation Strategies for Global Change*, 12, 809–842. <https://doi.org/10.1007/s11027-007-9101-x>
- O'Sullivan, N. (2024). Sustainable insurance. In *Concise Encyclopedia of Corporate Social Responsibility* (pp. 202–206). Edward Elgar Publishing. <https://doi.org/10.4337/9781800880344.ch38>
- Periasamy, P., & Rajmohan, R. (2026). Insurance linked to climate risk, green bonds, and carbon markets: An integrated financial instruments perspective. *International Journal of Scientific Research in Engineering and Management*, 10(1). <https://doi.org/10.55041/IJSREM55927>
- Summerhayes, G., Waterford, L., Brook, N., Lawrence, W., & Sedilekova, Z. (2023). Sustainability: The climate and nature crisis – A leadership role for insurance. In *Research Handbook on International Insurance Law and Regulation* (pp. 551–589). Edward Elgar Publishing. <https://doi.org/10.4337/9781802205893.00033>
- The role of green investment, climate change mitigation strategies, and corporate social responsibility in sustainable infrastructure development. (2024). *Sustainable Development Insights*, 1(1), 1–9. <https://doi.org/10.58812/sdi.v1i01.1461>
- Yusupov, A. (2025). Strakhovanie kak mekhanizm podderzhki perekhoda k «zelenoy» ekonomike [Страхование как механизм поддержки перехода к «зелёной» экономике]. Zenodo. <https://doi.org/10.5281/zenodo.17082577>
- Belgacem, I., Gafsi, N., Mazzitelli, D., & Ed-Dafali, S. (2026). Do green finance, green insurance, and renewable energy really matter for sustainability? *Corporate Social Responsibility and Environmental Management*. <https://doi.org/10.1002/csr.70378>
- D'Amato, V., Di Lorenzo, E., Piscopo, G., Sibillo, M., & Trotta, A. (2024). Insurance business and social sustainability: A proposal. *Socio-Economic Planning Sciences*, 93, Article 101880. <https://doi.org/10.1016/j.seps.2024.101880>
- Eling, M. (2024). Is the insurance industry sustainable? *The Journal of Risk Finance*. <https://doi.org/10.1108/JRF-12-2023-0314>
- Lima, R. P., Rahman, K. S., Sultana, N., & Ahmad, S. (2025). Green insurance: Sustainable development of emerging economy. In V. Sharma, T. Singh, A. de Bem Machado, & R. Rupeika-Apoga (Eds.), *FinTech for Sustainable Finance and a Well-Blue Economy* (World Sustainability Series). Springer. https://doi.org/10.1007/978-3-031-92390-6_3
- Marti, A., Bastida-Vialcanet, R., & Marimon, F. (2024). A systematic literature review: ESG criteria implementation in the insurance industry. *Intangible Capital*, 20(1), 193–214. <https://doi.org/10.3926/ic.2426>
- Nogueira, F. G., Lucena, A. F. P., & Nogueira, R. (2018). Sustainable insurance assessment: Towards an integrative model. *The Geneva Papers on Risk and Insurance – Issues and Practice*, 43(2), 275–299. <https://doi.org/10.1057/s41288-017-0062-3>

Ungur, C., & Şargu, L. (2026). Evaluation of consumer behaviour in the purchase of sustainable insurance products in the Republic of Moldova. In *Proceedings of the International Conference "Modern Finance from the Perspective of Sustainability of National Economies"* (28–29 November 2025, Chişinău). Chişinău: ASEM. ISBN 978-9975-182-15-7. <https://doi.org/10.53486/mfsne2025.23>

Acknowledgments: This study is carried out within the Subprogram 030101 "Strengthening the resilience, competitiveness and sustainability of the economy of the Republic of Moldova in the context of the European Union accession process", institutional funding

YAŞIL SIĞORTANIN QƏBUL EDİLMƏSİNİN DETERMINANTLARI: EKOLOJİ MƏLUMATLIĞIN, ETİMADIN VƏ DAVAMLİ MƏHSULLAR ÜÇÜN ÖDƏMƏYƏ HAZIRLIĞIN ROLU

Cristina UNGUR,
Lilia ŞARGU

Xülasə

İqlim dəyişmələrinin sürətlənməsi və ekoloji, sosial və korporativ idarəetmə (ESG) prinsiplərinin maliyyə sektoruna inteqrasiyası iqtisadi dayanıqlığın dəstəklənməsi və dayanıqlı iqtisadiyyata keçidin təmin edilməsi vasitəsi kimi yaşıl sığortanın inkişafına təkan vermişdir. Bununla belə, bu məhsullar barədə məlumatlılığın məhdud olması və istehlakçıların qəbul səviyyələrinin fərqlənməsi bazarın inkişafı qarşısında mühüm çağırışlar olaraq qalmaqdadır. Bu tədqiqatın məqsədi istehlakçıların yaşıl sığorta almaq niyyətinin formalaşmasında ekoloji məlumatlılığın, yaşıl layihələrə investisiya qoyan sığorta şirkətlərinə etimadın və dayanıqlı məhsullar üçün ödəniş etməyə hazırlığın rolunu araşdırmaqdır. Tədqiqat Moldova Respublikasında 143 respondent arasında aparılmış sorğuya əsaslanır və sözügedən əlaqələri sosial-demoqrafik və sığorta ilə bağlı xüsusiyyətlərə nəzarət edilməzdən əvvəl və sonra qiymətləndirmək üçün çoxsaylı xətti regressiya metodundan istifadə edilmişdir. Nəticələr göstərir ki, ilkin modeldə sığorta şirkətlərinə etimad yaşıl sığortanın satın alınması niyyəti ilə müsbət və statistik baxımdan əhəmiyyətli əlaqəyə malikdir ($B = 0,315$, $p = 0,012$), halbuki ekoloji məlumatlılıq və ödəniş etməyə hazırlıq statistik baxımdan əhəmiyyətli təsir göstərmir. Sosial-demoqrafik və təcrübə ilə bağlı nəzarət dəyişənləri modelə daxil edildikdən sonra etimad ilə satınalma niyyəti arasındakı əlaqə statistik baxımdan əhəmiyyətsiz olur ($B = 0,206$, $p = 0,102$), ödəniş etməyə hazırlıq və ekoloji məlumatlılıq da statistik baxımdan əhəmiyyətsiz olaraq qalır. Beləliklə, əldə olunan nəticələr ilkin mərhələdə müşahidə edilən etimad amilinin respondentlərin xüsusiyyətləri nəzərə alındıqda dayanıqlı olmadığını və yaşıl sığortanın satın alınması niyyətinin əsas izah edici dəyişənlər vasitəsilə əhatə olunan amillərdən daha geniş amillər toplusundan asılı ola biləcəyini göstərir. Tədqiqat Moldova Respublikasında ehtimalı olmayan seçmə əsasında empirik sübutlar təqdim etməklə dayanıqlı sığorta sahəsində formalaşmaqda olan elmi ədəbiyyata töhfə verir və gələcək tədqiqatlar, eləcə də istehlakçı yönümlü yaşıl sığorta strategiyalarının hazırlanması üçün mühüm nəticələr ortaya qoyur.

Açar sözlər: yaşıl sığorta; istehlakçı davranışı; ekoloji məlumatlılıq; etimad; ödəniş etməyə hazırlıq; satınalma niyyəti.

Məqalə redaksiyaya daxil olub: 17.06.2026

Təkrar işlənməyə göndərilib: 30.07.2026

Çapa qəbul olunub: 25.08.2026

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (CC BY-NC 4.0), which permits any non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.