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THE IMPACT OF FINANCIAL LITERACY ON THE DEMAND FOR REAL ESTATE INSURANCE IN LATVIA

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Abstract. The studies published between 2018 and 2023 extensively investigate the impact of different factors on the decision to purchase real estate insurance. Only a small number of these studies examine the effects of financial literacy on the demand for property insurance. This paper aims to explain the impact of financial literacy on the demand for real estate insurance and to identify measures that can be taken to develop financial literacy to boost the demand for real estate insurance services in Latvia. The paper hypothesizes that developed financial literacy has a positive impact on the demand for real estate insurance. To achieve the aim of the article and to test the hypothesis, several tasks have been set: to describe the development trends of the real estate insurance market in Latvia to conduct a survey of policyholders' individuals on real estate insurance services in Latvia; to conduct interviews with real estate insurance specialists. The article applies qualitative (monographic method) and quantitative (structured survey of respondents, descriptive statistics, ANOVA test, dynamics, and structure indicators) research methods. The novelty of this article lies in the fact that the impact of financial literacy on the demand for real estate insurance services in Latvia is investigated. The impact of financial literacy on the demand for real estate insurance has not been widely studied in Latvia or other countries of the world. Individual-level factors influencing the decision to purchase real estate insurance, such as property type, property risk exposure, property value, access to finance, mortgage credit, risk perception, previous risk experience, and savings, have been extensively studied. The study concludes that financial literacy is a factor influencing the overall demand for property insurance in Latvia.

Key words: financial literacy, demand for property insurance, non-life insurance.

Introduction. Insurance functions as a mechanism through which policyholders transfer risks from themselves to financial institutions (Absalom 2022, p. 73). This process essentially involves shifting risks from real estate owners to insurance providers. The demand for non-life insurance is influenced by macroeconomic factors, including public income, education level, inflation, interest rates, and urbanization (Malakauskiene, Lakštutiene, Watkowska 2022; Alghusin, Kasasben 2019; Iyodo, Samuel, Adewole 2022; Lee, Cheng, Chong 2018; Sharku, Garbova, Vullnetari 2021; Banerjee, Majumdarb 2018; Dragos, Mare, Muresan 2022). At the individual level, various factors affect the decision to purchase property insurance, including property type, risk exposure, property value, affordability, mortgage status, risk perception, prior experiences with risk, and personal savings (Lee, Ma, Li 2022; Holzheu, Turner 2018; Landry, Turner 2020; Robinson, Botzen 2019; Botzen, Kunreuther, Mitchel-Kerjan 2019; Kei 2021; Robinson, Botzen, Duijndam, Molenaar 2021). Despite the extensive research conducted on the factors influencing the acquisition of real estate insurance from 2018 to 2022, few studies have examined the role of financial literacy in shaping this demand. Notably, it has been reported that 26% of Europeans purchase the first available motor or property insurance product they encounter (Čurak, Pepur, Kovač 2020, p. 362).

This paper aims to assess how financial literacy influences the demand for real estate insurance and to identify strategies to enhance financial literacy, thereby stimulating demand for real estate insurance services in Latvia. The proposed hypothesis suggests that financial literacy positively affects this demand. To achieve this goal and test the hypothesis, the research tasks include analysing factors affecting the demand and supply dynamics in the real estate market, outlining trends in the Latvian real estate insurance market from 2017 to 2021, surveying individual policyholders, and interviewing real estate insurance professionals.

Both qualitative and quantitative research methods were employed, including structured questionnaires, descriptive statistical analysis, ANOVA testing, and the calculation of dynamics and structural indicators. The qualitative research involved a compilation and critical analysis of studies on factors affecting demand for real estate insurance, along with expert interviews.

Factors Influencing Real Estate Insurance Decisions

J.Y. Lee, F. Ma, and Y. Li (2022) identify that property owners' decisions regarding wildfire risk mitigation are influenced by various factors, including property type, value, financing options, mortgage status, risk perceptions, and past experiences (Lee, Ma, Li 2022, p. 1528). C.J. Kei (2021) underscores that awareness of potential risks, risk perception, and pricing play crucial roles in the decision to obtain real estate insurance (Kei 2021, p. 77). T. Holzheu and G. Turner (2018) emphasize the influence of economic development, exposure to real estate risks, the availability of mortgage credit, and savings on the decision to purchase real estate insurance (Holzheu, Turner 2018, p. 42). Increased exposure to real estate risks tends to heighten risk perception, which, in turn, boosts the demand for real estate insurance services (Holzheu, Turner 2018, p. 42).

Additionally, the individual risk attitudes of property owners impact their decisions to purchase real estate insurance products. P.J. Robinson and W.J.W. Botzen (2019) find that perceptions of flood risk form the demand for flood insurance (Robinson, Botzen 2019, p. 2522). Similarly, C. Landry and D. Turner (2020) conclude that risk perceptions significantly influence the demand for flood insurance among U.S. coastal residents (Landry, Turner 2020, p. 16). W.J.W. Botzen, H. Kunreuther, and E. Michel-Kerjan (2019) suggest that real estate owners may opt to purchase flood insurance and take preventive measures to mitigate future risks (Botzen, Kunreuther, Michel-Kerjan 2019, p. 166).

Risk perception remains a pivotal factor in the decision to obtain real estate insurance. According to T. Holzheu and G. Turner (2018), such insurance is often a requirement for mortgage approval. Consequently, where mortgage credit is accessible, the demand for real estate insurance typically increases (Holzheu, Turner 2018, p. 42). They also point out that a lack of financial resources often leads to underinsurance against natural disaster risks, particularly among lower-income households (Holzheu, Turner 2018, p. 40). Savings and insurance can act as substitutes; if households have savings, they may cover losses from their funds, while the absence of savings necessitates insurance to mitigate the consequences of risk events (Holzheu, Turner 2018, p. 42).

Furthermore, recent studies have explored how past experiences with risks affect the demand for real estate insurance. P.J. Robinson and W.J.W. Botzen (2021) indicate that prior loss experiences influence the demand for flood insurance (Robinson, Botzen, Duijndam 2021, p. 2). Research by C. Landry and D. Turner (2020) reveals that expectations regarding risk occurrences affect actions taken by real estate owners to lessen potential consequences, subsequently fostering a positive impact on flood insurance acquisition (Landry, Turner 2020, p. 16). However, none of the aforementioned studies adequately address financial literacy as a determinant in the purchase decision of real estate insurance.

Financial literacy emerges as a significant factor affecting aggregate demand within the non-life insurance market. M. Churak, S. Pepur, and D. Kovach (2020) affirm its influence on non-life insurance demand (Churak, Pepur, Kovach 2020).

Financial Literacy and Property Insurance Claims

The origins of financial literacy can be traced back to the U.S. in 1787, with J. Adams advocating for its necessity to navigate economic challenges caused by a lack of public understanding of credit and currency (Garg, Singh 2018, p. 174). Recent literature primarily defines financial literacy through the OECD's framework, which encompasses awareness, knowledge, skills, attitudes, and behaviors essential for making informed financial decisions that enhance individual financial well-being (Churak, Pepur, Kovach 2020, p. 363; Goyal, Kumar 2021, p. 80; Swiecka, Yesildag, Ozen, Grima 2020, p. 2). Various authors contribute additional definitions, incorporating elements such as basic financial knowledge and the ability to execute simple financial calculations (Goyal, Kumar 2021, p. 81).

According to B. Swiecka et al. (2020), financial literacy is a critical component of sound financial decision-making (Swiecka, Yesildag, Ozen, Grima 2020, p. 2). It comprises three key elements: attitudes toward finance, financial behavior, and financial knowledge (Garg, Singh 2018, p. 175; Swiecka, Yesildag, Ozen, Grima 2020, p. 3). Financial knowledge refers to an individual's understanding of fundamental financial concepts, often synonymous with the term financial literacy (Garg, Singh 2018, p. 176). B.C. Xu et al. (2022) affirm that financial knowledge positively influences awareness of the necessity for insurance (Xu, Xu, Zhao, Zhang 2022, p. 2).

Various studies highlight different dimensions of financial knowledge, with the OECD's Financial Literacy Measurement Survey categorizing it into understanding simple and compound interest, the effects of inflation on prices and investments, and personal finance management. N. Garg and S. Singh (2018) reference a 2012 study illustrating that financial literacy encompasses an individual's knowledge of their financial situation. The authors further explain that financial behavior reflects economic beliefs and expectations regarding outcomes, with financially literate individuals demonstrating improved financial planning and risk management capabilities (Garg, Singh 2018, p. 177).

M. Churak et al. (2020) emphasize the crucial role of financial literacy within the non-life insurance context, asserting that it fosters risk awareness and understanding of associated benefits. Their analysis, referencing a Eurobarometer survey from 2012, reveals that a significant portion of individuals (26%) purchase the first insurance product they encounter (Churak, Pepur, Kovach 2020, p. 362). The authors argue that to enhance non-life insurance demand in Europe, initiatives aimed at improving financial literacy among the population are essential (Churak, Pepur, Kovach 2020, p. 376). Similarly, F. Pitthan and K.D. Witte (2021) affirms the positive correlation between financial literacy and insurance demand (Pitthan, Witte 2021, p. 14).

A 2022 study by J. Shao et al. investigates various factors influencing the demand for real estate insurance against flood risks in Japan, including financial literacy as a contributing factor (Shao, Hoshino, Nakaide 2022, p. 7). Different methodologies are employed to assess financial literacy, including surveys conducted by Japan's Central Bank (Shao, Hoshino, Nakaide 2022, p. 7) and the OECD (OECD INFE, 2011), which utilize statistics on higher education graduates to evaluate literacy levels (Churak, Pepur, Kovach 2020, p. 370). The widely recognized "Big Three" Financial Literacy Questions, designed by A. Lusardi and O.S. Mitchell, serve as a common instrument for assessing financial literacy (Lusardi 2019, p. 2).

The hypothesis asserts that financial literacy positively influences the demand for real estate insurance. Based on theoretical research findings, a conceptual model has been established (see Figure 1).

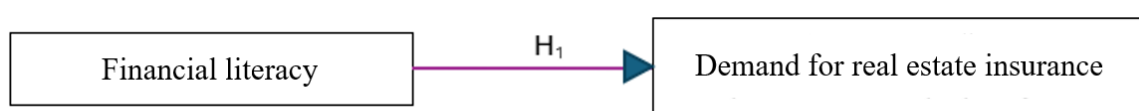


Fig. 1. Conceptual model of the paper

Source: Created by the authors.

The model excludes mortgage credit as an influencing factor for real estate insurance demand since insurance is typically a prerequisite for securing a mortgage. However, mortgage credit is included in demographic inquiries.

Demand for Property Insurance from Respondents' Perspective

A survey conducted from April 1 to April 19, 2023, included 153 respondents. An evaluation of the initial responses indicated that one respondent (respondent No. 50) provided inconsistent answers, resulting in their exclusion from the analysis. Thus, the final sample consisted of 152 valid responses, facilitating the calculation of confidence levels and margins of error, with a confidence level of 90% and a margin of error of 6.2%.

The survey, distributed through the Facebook group “Polls”, which has 1 100 members, assessed demographic characteristics such as sex, age, and residence. To evaluate the demand for real estate insurance, respondents were asked if their homes were insured. The results revealed that 71% (108 respondents) had home insurance, indicating a significant demand for real estate insurance (see Figure 2).

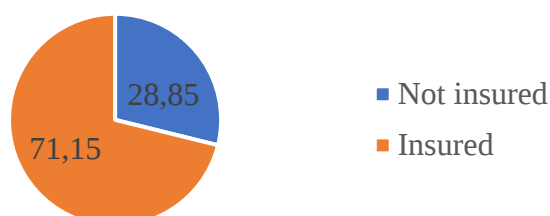


Fig. 2. Real estate insured or not insured (% of total respondents, n=152)

Source: Created by the authors.

Following the assessment criteria established by A. Lusardi and O.S. Mitchell (2011), individuals demonstrating high financial literacy accurately answered all three survey questions. The survey results indicated a medium to advanced level of financial literacy among respondents (see Figure 3).

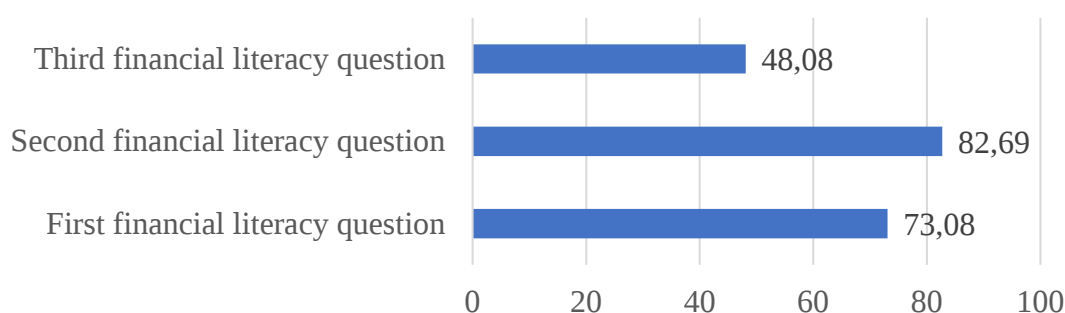


Fig. 3. Correct answers to financial literacy questions (% of total respondents, n=152)

Source: Created by the authors.

The first question, addressing interest rates' effects on cash deposits, was answered correctly by 73% (111 respondents). Notably, the second question, concerning the impact of inflation on income and savings, received the highest correct response rate at 83% (126 respondents). Conversely, the third question, related to risk diversification, yielded the lowest correct answer rate at 48% (73 respondents).

The distribution of correct answers to the financial literacy test questions is illustrated in Figure 4.

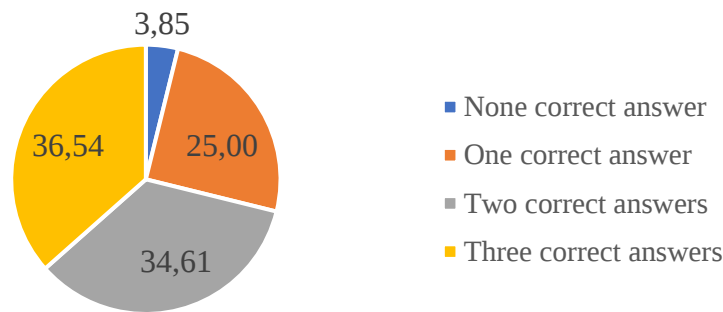


Fig. 4. Correct answers to none, one, two, and three questions on the financial literacy test (% of total respondents, n=152)

Source: Created by the authors.

A majority, 37% (56 respondents), accurately answered all three questions, while 35% (53 respondents) answered two correctly. A small fraction, 4% (6 respondents), did not answer any questions correctly, indicating that 29% of the participants exhibited low financial literacy levels.

To analyze the effect of financial literacy on real estate insurance demand, J. Dudele (2023) performed an ANOVA test using data from the questionnaires. The null hypothesis posited that *advanced financial literacy does not affect the demand for real estate insurance*, while the alternative hypothesis suggested that *advanced financial literacy affects the demand for real estate insurance*. With a significance level of 0.062 ($\alpha = 0.062$) and a confidence level of 94%, the ANOVA results presented in Table 1 indicate that the p-value is significantly lower than the designated significance level (p-value $0.000000000075826 \leq \alpha 0.062$), leading to the rejection of the null hypothesis and confirmation of the alternative hypothesis.

Table 1

ANOVA test for hypothesis testing						
Source of Variations	SS	df	MS	F	P-value	F crit
Between Groups	21.62	1	21.62	58.18	0.000000000075826	3.59
Within Groups	26.75	72	0.37			
Total	48.37	73				

Source: Created by the authors.

Thus, at a significance level of 6.2%, the findings strongly support the assertion that advanced financial literacy impacts the demand for real estate insurance.

Interviews with insurance industry representatives further corroborate that enhancing financial literacy can stimulate demand for real estate insurance. This influence manifests in a greater awareness of the long-term financial implications of insurance decisions. In the context of real estate insurance, financial literacy encompasses risk awareness as well, suggesting that improving financial literacy can facilitate a better understanding of the necessity to diversify risks associated with real estate, thereby transferring those risks to insurance providers and safeguarding individual financial positions.

Conclusions. Through an analysis of studies published from 2018 to 2022, respondent surveys, hypothesis testing via ANOVA, and interviews with insurance professionals, evidence has been estab-

lished demonstrating that financial literacy significantly affects the demand for real estate insurance. Surveys indicate that the financial literacy levels of consumers utilizing real estate insurance services are generally rated as medium. The findings reveal that while a majority of respondents possess medium to advanced financial literacy, with 37% answering all three financial literacy questions correctly, a notable 29% exhibit low financial literacy levels.

Consequently, both theoretical insights and interviews with field experts affirm that financial literacy impacts the demand for real estate insurance. The relationship between financial literacy and real estate insurance demand is evident in the understanding of the long-term financial consequences associated with insurance decisions. In the realm of real estate insurance, financial literacy also reflects an awareness of risks, bolstering the case for transferring those risks to insurance providers to protect individuals' financial well-being in the event of real estate-related risks.

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