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## The role of education on consumer behavior on the insurance market

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### Abstract

Education has an extremely important role as it influences the insurance purchase decision. On the insurance market in Romania, there is a discrepancy between the high potential demand and the rather low real demand. This discrepancy can be explained by a series of economic reasons, as well as by the lack of education in the field. Within more extended research regarding the behavior of the insurance services' consumer and the factors influencing it, we have studied the way in which insurance services are perceived by potential clients and the role education plays in this.

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### 1. Introduction

The behavior of the consumer of insurance services is influenced to a large extent by numerous factors that can be classified in several categories: situational factors (factors appearing in all the phases of the decisional process: before the acquisition of the insurance policy, during the acquisition and after the purchase), factors related to the marketing activity of insurance companies (among which we can mention the impact of the promotional politics of insurance companies, the characteristics of the insurance products and distribution of insurance services, factors related to the premiums paid and the payment facilities offered by the insurance companies, factors related to the influence of the personnel of insurance companies), factors from the external environment (natural, demographical, economical, legislative and technological factors), elements related to the sociological particularities of consumers (in this category, culture, social class, reference group and family are important factors) and factors reflecting the individual characteristics of potential insurance consumers, such as age, stage in the life cycle, gender, employment, economic status and last but not least: the education of the person.

In this paper, we have focused on the influence of individual characteristics of potential insurance consumers.

Employment is one of the most important factors influencing insurance coverage, but education is interactive with other occupational characteristics, and is associated with differences in employment earnings and benefits due to resulting labor market choices. The potential consumers with elementary education have average revenues lower than the revenues of potential consumers with higher education. So, prior researches have shown that fully employed persons with higher levels of formal education are more likely to have insurance (Dewar, 1998).

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Income is another important factor influencing insurance coverage. Income elasticity and risk aversion are two crucial parameters for the acquisition of insurance and some studies in the field of health insurance have demonstrated that in the case of constant relative risk aversion and an income elasticity lower than 1, the demand for insurance decreases with income (Jacob & Lundin, 2005). Other researches have demonstrated that risk preferences and socio-economic status, including income and education, are important predictors of private insurance take-up. (Liu et al., 2011).

An interesting study realized by Blanchard-Boehm, Berry and Showalter (2001) investigates why homeowners do or do not choose to purchase flood insurance and shows that the purchase of insurance hinges on institutional requirements and, in the case that the purchase decision is voluntary, the *perception of risk*, along with *ability to afford insurance* on a fixed income, is a large factor in whether homeowners continue to carry insurance coverage.

Another socio-demographic factor influencing insurance coverage is gender. Different studies have revealed that gender plays a role in earnings differentials and in consequence in the insurance coverage, because even with equivalent education women earn less than men on average (Dewar, 1998, Currie, 1995).

Formal education is also associated with status and with a demand for security and protection of life, health and properties of the individual through insurance. The more educated potential consumers are more likely to purchase insurance as a tool allowing them better access to healthcare and high security for their properties (homes, cars, etc.). This idea is argued also by Sapelli & Vial (2003), as they consider that there is a positive relationship between the probability of purchasing private insurance and education, more educated persons facing lower costs of information when deciding between the complex plans offered by private insurance. In their study, they find that a higher income, younger age, smaller number of dependents, residence in an urban area, higher educational level, and employment with a larger company increase the probability of choosing private insurance. There are major differences in the demand for insurance among those with various educational backgrounds and with different socio-demographic characteristics and those differences are correlated with risk perception. The risk perception has large effects on insurance and risk-taking behavior, in consequence those more educated and more informed are more likely to try to protect themselves by insurance. Those with higher education are more likely to understand the benefits of insurance and to have a preventive behavior and, in consequence, to use insurance as a protecting tool for them, their families and their properties.

There are few economic researches regarding the impact of education on risk perception and on insurance demand. This research aims at studying the consumer behavior of the insured and to analyze if the education of consumers plays an important part in the decision to purchase insurance and to assess its importance compared to other factors like income, age and gender.

## 2. Objectives, hypotheses and methodology of the research

The Romanian insurance market had and continues to have a similar evolution to the Romanian economy, being heavily influenced by changes in the environment. Even if now it is strongly integrated in the international economic system, in the field of services the Romanian market has a huge development gap to bridge to reach the average level of the European Union (Ioncica et al., 2010). The potential of the Romanian insurance market is high, due to the large number of people (the population of Romania in 2009 was of 21.46 million people, decreasing to 21.41 million people in 2010, being on 7<sup>th</sup> place in European Union) and properties (8.38 million properties), but the real demand is quite low. In 2008, the insurance premiums reached the highest level in Romania: 3.15 billion USD, but due to the crisis dropped to 2.59 billion USD in 2010, equivalent of 8.3 billion lei (CSA, 2011), a small drop in the world premiums of 2010 of 4339 billion USD (Swiss Re, 2011).

The insurance demand in Romania is focused on areas with a high economic potential and on the above-average income population. Thus, most gross premiums were underwritten in 2010 in the Bucharest area: 49.93%.

In Table 1, the structure of the active population in Romania function of the educational level in 2009 is presented. From the total employment of 9.2 million persons: 15.45% had tertiary education, 59.68% had medium education (post high school or technical foremen education, high school, vocational) and 24.87% had low education (secondary school, primary or no education). By gender, in the case of men, 13.73% had tertiary education, 63.41%

had medium education and 22.86% had low education and, for women, 18.84% had tertiary education, 59.06% had medium education and 22.10% had low education.

Table 1. Employment structure, by educational level, by age group and by sex in 2009

Educational level	Total employment (thousand persons)	Total 15-64 years (%)	15-24 years (%)	25-34 years (%)	35-44 years (%)	45-54 years (%)	55-64 years (%)	65 years and over (%)	Male (thousand persons)	Female (thousand persons)
<b>Total</b>	<b>9243</b>	<b>95.3</b>	<b>8.1</b>	<b>26.8</b>	<b>27.7</b>	<b>21.3</b>	<b>11.4</b>	<b>4.7</b>	<b>5100</b>	<b>4143</b>
Tertiary	1428	99.5	4.2	41.0	27.0	19.0	8.3	0.5	700	728
Medium	5516	99.3	8.0	25.8	33.4	23.7	8.4	0.7	3234	2282
Low	2299	82.8	10.8	20.2	14.4	17.1	20.3	17.2	1166	854

Source: National Institute of Statistics, 2010, p. 99.

In this context, we have studied in 2009-2011 in the UEFISCSU project 915 / 2009 the consumer behavior on the Romanian insurance market and the factors influencing it by exploiting primary sources of information using qualitative research (semi-guided interviews) and quantitative research (survey). The aim of qualitative research is to understand and explain various phenomena and the survey has the role to quantify the information and generalize the results at the level of the entire population studied (Cătoiu et al., 2009). In this view, both qualitative and quantitative researches are necessary, because they complement each other (Bălan, 2009, Petrescu, 2005).

In this paper, we are presenting the information related to the perception of insurance and the socio-demographic factors influencing it. We wanted to establish whether the education of consumers plays an important part in the purchase decision and to assess its importance compared to other factors like revenues, age and gender.

The hypotheses of the research were: 1) the rather low interest in purchasing insurance is mainly due to misunderstanding the role and necessity of insurance, due to a lack of education in the field, 2) risk assessment is often done intuitively, as the level of knowledge is low, 3) the new methods of learning and communication (such as the Internet) facilitate the process of education and the understanding of insurance.

We have used qualitative research, interviewing 59 subjects who own insurance policies (over 18 years old). The selection of the subjects interviewed was made by using selection questionnaires, and the interviews were conducted by using a conversation guide. The sample of subjects interviewed, although reflecting the structure of the population studied, cannot be considered as representative. The way in which insurance services and insurance companies are perceived by consumers was studied, by using tests and techniques specific to qualitative research: free word association, the sentence completion test etc. The information obtained from semi guided interviews is usually analyzed by following the main themes which appear in the conversation, by noticing the discourse structure of the subject interviewed and using lexical analysis (Ganassali, 2007).

The ideas from the qualitative research can be tested and measured using quantitative research. The survey is the most frequently used quantitative method of research, and the questionnaire is by far the most common instrument used to collect primary data (Kotler & Keller, 2006). The responses obtained in the qualitative research have been taken into account when we have elaborated the questionnaire. The survey was conducted on a sample of 1068 persons, with a probability of 95% and a margin of error of +/-3%. In 2011, the interviews took place in April - May, mainly in the urban area. The research was conducted based on a face-to-face interview with the subject.

### 3. Results of the direct market research

#### 3.1. Results of the qualitative research

By analyzing the answers given by persons owning at least an insurance contract, we can conclude that the respondents are familiar with the concepts of insurance, life insurance, general insurance and insurance contract. The definitions are often incomplete, referring to a single aspect of the insurance activity. For the vast majority of respondents, the concept of insurance is related to the idea of protection, the role of insurance being, according to the subjects interviewed, to offer indemnity, protection (*'safety measures for he future'*), to cover damages, to permit the recovery of losses. Only a very small part of the subjects interviewed see in insurance an investment tool.

The majority of the respondents considered that insurance services are necessary during a crisis. The analysis of the answers to the questions related to the risks has proved that the insured are aware of the risks, the main risks mentioned were: natural risks (earthquake and flood), financial risks and risks related to damages to their properties.

The vast majority of the subjects interviewed are able to define insurance, more or less exactly. Most of the subjects interviewed have stated that they read the insurance contract, but they consider that they do not know it fully. Most of the words related to the insurance contract have positive connotations, but we have also observed a negative perception ('too long', 'not negotiable' etc.).

The answers to the question related to the opinion about the insurance products existent on the market have indicated that, overall, insurance services enjoy a positive perception, but, there is a number of insured who do not have a favorable opinion on the insurance products existent, and there is also a significant number of subjects who did not form an opinion due to insufficient knowledge of the supply ('I hardly know them'). Among the subjects interviewed which have at least an insurance policy, only a small number of respondents state that they know insurance services very well, for the vast majority the degree of knowledge being medium or low.

The age and the revenue have been most frequently mentioned by the interviewed persons as factors influencing their decision to buy insurance, and education has also been mentioned by a large number of respondents.

### 3.2. Results of the quantitative research

The *perception about the necessity of insurance* was studied using a five level Likert scale. The results of the survey showed that general perception is positive, the insurance services being perceived as necessary (score 0.82), 62.9% of the subjects agreeing that 'insurance is indispensable', and 11.5% disagreeing.

70% of the subjects interviewed answered that the main reason to buy insurance is the need to protect themselves and only 2% buy insurance as an investment tool. All the consumers that answered that they buy insurance as an investment tool have tertiary education.

The results of the survey indicate that 62% of the subjects have read all the clauses of the insurance contract, but only 31% consider that they know the terms of the insurance contract very well. 35% of the respondents have read only partially the insurance contract and 3% had not read at all the insurance contract.

*In order to find out the interest in purchasing insurance* the subjects were asked if they have the intention to conclude a new insurance contract in the next year. 57% of the subjects have answered that they were interested in purchasing insurance, 35% were undecided and only 8% were not interested in buying a new insurance policy. We have used chi square test in order to see if there is an *influence of education on the interest in purchasing insurance*. The chi square test shows if we can make an association between an independent variable, in this case: revenues, gender, age and education and a dependent nominal variable, the interest in purchasing insurance. The results indicate that we can make an association between the revenues, gender, age and education of the consumers and the interest in purchasing insurance. Then, we have calculated the Cramer coefficient  $\Phi_c$ . The values of  $\Phi_c$  indicate a weak association for gender and a medium-sized association for education, age and a strong association for revenues.

The main sources of information used by insured are in order: the insurance agent (52% of subjects answered that they were informed about the insurance policy and the insurance company from the insurance personnel), family and friends (44%), TV, radio and press (23%) and Internet was used by 25% of respondents as a source of information.

## 4. Conclusion and discussion

The research results have partially inquired the hypothesis that: 'the rather low interest in purchasing insurance is mainly due to misunderstanding the role and necessity of insurance, due to a lack of education in the field', because the subjects understand the role and necessity of insurance. The results of the chi square test indicate that the education of a person plays a part in the interest to purchase insurance. However, one limit of the research is that the population studied was of insured people. In order to verify that hypothesis it is necessary to study also the uninsured population. From the analysis of the answers from the qualitative and quantitative researches we can state

that the hypothesis: ‘risk assessment is often done intuitively, as the level of knowledge is low’ is correct and the research results have confirmed also the hypothesis that: ‘the new methods of learning and communication (such as the Internet) facilitate the process of education and the understanding of insurance’, the Internet being the favorite source of information for young consumers.

In Romania, the difference between the potential demand on the insurance market and the effective demand can be explained in the first place by economic factors: the low level of income of the population. Starting from the idea that those with lower education often fall in the lower socioeconomic groups, different studies have raised the fundamental question of how the public sector should design programs to ensure access to insurance to everyone, and we would like to continue by a rhetorical question “Through legislation and educational programs, can the State facilitate the access to insurance?”. Blanchard-Boehm, Berry and Showalteret (2001) consider that those responsible for disaster management at all levels of government must inform, educate and convince individuals to assume responsibility for their lives and properties. Another important question is related to the private sector and the role of insurance companies. Aerts and Botzen (2011) state that better incentives to reduce risk through undertaking damage mitigation measures can be provided by establishing a long-term relation between the policyholder and the insurer. The long-term relation can be consolidated through education. Education can change the behaviour of the potential insured and mentality can be influenced in turn by education.

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