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Attitudes and decisions of the motor insurance buyers in Poland

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Motor insurance constitutes the most popular type of insurance products purchased in Poland and consequently the largest part of non-life insurance sector. In this paper the selected results of the questionnaire survey concerning attitudes and choices of the motor insurance buyers on the Polish market are presented. First, the current situation on the Polish motor insurance market is discussed. Next, the scope of the motor insurance held by respondents, their forms and used distribution channels are analysed. The stress is put on the level of the customers' loyalty to the current insurer, as well as the factors influencing the choice of a specific insurance company and its offer. Finally, the analysis concerning the statistical interdependencies between selected characteristics of the respondents is carried out. The conducted research can be useful for the insurance companies, interested in improving their motor insurance offer, as well as the insurance intermediaries serving individual customers.

JEL Classifications: G22, D14

Keywords: Motor insurance, insurance market, questionnaire survey, distribution channel, correlation analysis

Introduction

Motor insurance represents the most important area of the non-life insurance business in European countries accounting for nearly 30.3% of total non-life premium income. In 2008, motor insurance premiums were estimated to have totalled 126.5 bn EUR, against 129 bn EUR in 2007. It was the first nominal decrease at EU level in the last decade, but the fourth consecutive decrease in real terms. It reflected both the strong competition between motor insurers and the decrease in new car sales as a result of the economic slowdown (CEA, 2010). In 2009, the premiums collected by motor insurers in Europe declined by 1.8% compared to the previous year. However in 2010, the amount of premiums increased to the level of 125 bn EUR, what represents a 1.3% annual growth (CEA, 2011). Taking into account the above mentioned strong competition in this sector, from the insurers' point of view it is very important to identify various, quantitative and qualitative factors that may influence the customers decisions concerning the purchase of motor insurance products. In time of economic crisis, such activity taken up by the insurers becomes particularly significant and may influence the profitability of conducted business. It should be emphasized, that the demand for voluntary motor insurance (e.g. CASCO insurance) is especially sensitive to the current financial situation of the households (see e.g. Outreville, 2012).

The purpose of this paper is to examine the attitudes and choices of the motor insurance buyers in Poland as well as the main factors affecting their decisions. The presented

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analysis is based on selected data received from the questionnaire survey focused on various aspects of motor insurance and the behaviour of customers. First, a brief description of the Polish motor insurance market is presented. Next, the scope of the motor insurance held by respondents, their forms and methods of purchase (distribution channels) are analysed. The attention is paid to the “allegiance” of the customers in relation to the current insurer, as well as the factors influencing the choice of a specific insurance company and its offer. Then, the statistical analysis of the scope of purchased voluntary motor insurance, the motives of purchase and assessment of the quality of insurance services in relation to the selected socio-economic characteristics of the respondents is carried out.

Characteristic of the Polish motor insurance market

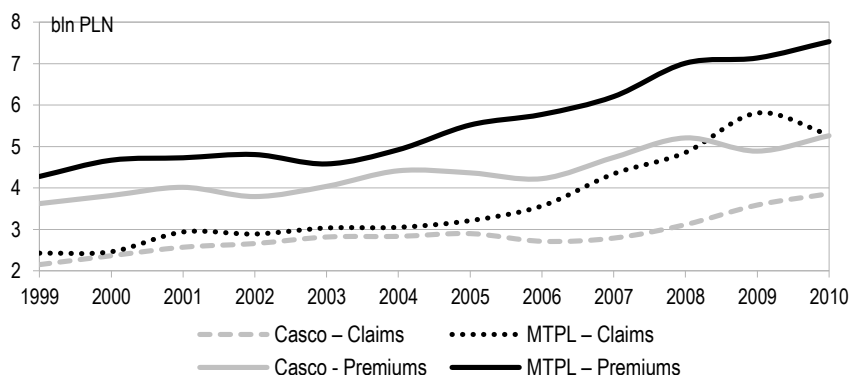
In recent years the Polish motor insurance market has experienced many changes, especially in the functioning of compulsory motor third part liability (MTPL) insurance, what leads to many discussions on the present shape of the system, legal regulations and possible market trends. Among the most important factors that influence the situation in the motor insurance sector in Poland there are changes in national law. These new regulations are adapted to the EU directives and include the following (Kwicien and Poprawska, 2011):

- Extending the territorial scope of insurance cover and at the same time increasing trips abroad of Polish drivers from May 1, 2004;
- Extending the limitation period for claims of victims to the perpetrators and, consequently, to the insurers in respect;
- Increase of the guaranteed sum (policy limit) in the compulsory MTPL insurance - in accordance with the EU directives (in 2004 set as 350 000 EUR for bodily injuries per person and 200 000 EUR for property damages per accident; currently 5 mln EUR for bodily injuries and 1 mln EUR for property damages, both per accident);
- Introducing the right of claiming compensation for pain and suffering by the deceased victim's relatives; the construction is similar e.g. to Italian, the decision about level of monetary compensation is free (no limits or tables) on the basis of the criteria worked out by judicature assessing the size of harm.

Among 35 non-life insurers operating in Poland, 27 have a valid motor insurance license, with 24 of them active on the market. The Polish insurance market is highly concentrated, mainly due to the dominant position of PZU SA (the former state monopolist), which has steadily decreasing, but still nearly 50% market share.

Two of the most important values characterizing the level of development of the insurance market in a given country are the amount of gross written premiums and claims incurred (or paid). Figure 1 presents the above mentioned values calculated separately for MTPL and CASCO insurance in Poland in 1999-2010. Both the gross written premiums and compensations were growing steadily during analysed period, but it can be observed that the rate of this increase has grown in 2005-2006 in the case of MTPL insurance. In 2010, the level of compensations for MTPL was 2.18 times higher and for CASCO insurance 1.8 higher compared to the values noted in 1999. During the same time, gross written premiums increased by only 1.76 times (MTPL) and 1.45 times (CASCO insurance). It should be stressed that the insurance prices in Poland are still at much lower level than in other EU countries - about 120 EUR, comparing to the EU average at the level of nearly 240 EUR and are 3-4 times lower than in Italy and Switzerland (Kwicien and Poprawska, 2011).

FIGURE 1. GROSS WRITTEN PREMIUMS AND CLAIMS INCURRED FROM MTPL AND CASCO INSURANCE IN POLAND IN 1999-2010



Source: Authors' calculations based on data from (Polish Financial Supervision Authority, 2012).

Recently, the motor insurers have introduced further changes in their offers addressed to vehicle owners. More and more insurers promote the purchase of their MTPL or damage insurance typically by adding free assistance or windscreen cover, other types of cover on preferential terms or discount protection. The growing competition between motor insurers contributes to market development, especially in respect of service quality and communication with customers. The insurance companies have also simplified loss adjustment procedures. Typically, the decision concerning an indemnity payment is made on the basis of arrangements made during a phone call with the claimant or pictures sent by e-mail. Some insurers introduced electronic settlement with repair workshops, what resulted in shorter loss adjustment periods.

Analysis of types of purchased motor insurance products, their forms and distribution channels

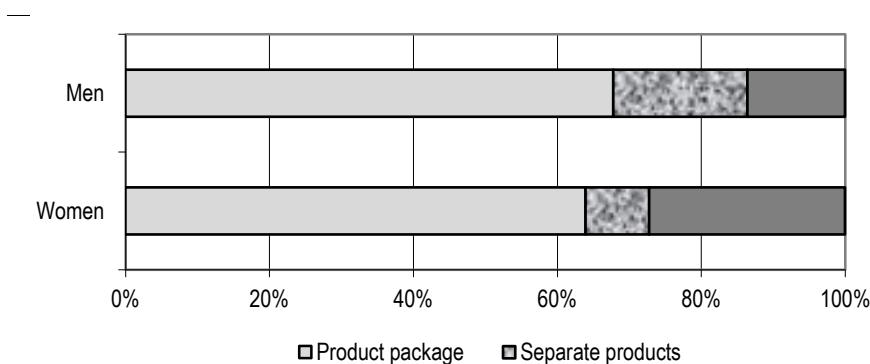
As we mentioned earlier, the analysis was conducted with the use of selected data received from the questionnaire survey. The survey, concerning various aspects of motor insurance, was carried out in spring 2012, among individuals living in southern Poland, in the following provinces: Lower Silesia, Little Poland and Opole region. As a result of the survey 409 completed questionnaires were obtained. This paper presents only a part of the broader research based on our questionnaire survey, therefore this part of the analysis is limited to the respondents who purchased motor insurance (206 persons). It is important to underline that in the considered sample the individuals aged between 21 and 40 years accounted for 78.64%, while people aged 51 or more represented only about 5% of the total number of respondents. These proportions were taken into account in the interpretation of obtained results.

In the considered group 22.82% (47 persons) declared purchasing only compulsory MTPL policies. In the area of voluntary motor insurance coverage, the respondents most often bought accident insurance (124 answers representing 60.19% of the total number of examined people), followed by CASCO insurance (41.74%) and assistance insurance (31.07%). Moreover, 14 respondents purchased the Green Card and only one - legal

expenses insurance. None of the respondents declared the purchase of the Guaranteed Auto Protection (GAP) policy.

The analysis of the forms of purchased insurance shows that the majority of respondents (65.05%) uses popular, offered by the insurers product packages, a further 22.82% buys only compulsory MTPL insurance and the remaining 12.13% purchases several motor insurance policies separately, using various distribution channels. Both women and men use the most available product packages (Figure 2). It seems to be interesting that men relatively more often than women decide to purchase separate insurance products (18.64% of the examined women compared to 8.84% of women). On the other hand, women relatively more frequently choose only the purchase of motor liability insurance (27.21% of the examined women in comparison with 13.56% of men).

FIGURE 2. FORMS OF MOTOR INSURANCE PURCHASE ACCORDING TO SEX (IN %)



Source: Authors' calculations.

Taking into account the methods of selling, the dominance of traditional distribution channels can be observed (Figure 3). The largest percentage of the respondents (47.09%) uses the services of insurance agents. The next 29.13% of examined people buys motor insurance products directly at the insurer office. It is also worth mentioning that the analysed respondents relatively often use modern distribution channels, such as the Internet (10.19%) or phone (6.31%). This phenomenon may be related to the age structure of the examined sample, because young people are more likely to make use of these methods of distribution of insurance services. The respondents, who have decided to purchase separate insurance products, used most frequently services offered via phone and (or) through Bancassurance. Moreover, the considerable differences in the selection of distribution channels between men and women were not noticed.

Comparing the results of our analysis to the results of other nationwide surveys concerning motor insurance in Poland, similar trends in the dominance of the traditional distribution channels can be observed. According to the joint report prepared by the Polish Financial Supervision Authority and the Insurance Guarantee Fund (Polish Financial Supervision Authority, 2010), the largest share in gross premiums written, both in CASCO and MTPL insurance, have the insurance agents, especially operating as natural persons. In 2008, they obtained 81.47% of the premiums written in CASCO and 67.7% of the premiums in motor third part liability, respectively. It is also worth mentioning that MTPL policies were relatively often purchased directly at the offices of insurance companies (25.45% of gross written premiums), while in the case of CASCO the insurance brokers represented the second largest distribution channel (13.02% of gross written premiums).

FIGURE 3. DISTRIBUTION CHANNELS OF MOTOR INSURANCE (IN %)



Source: Authors' calculations.

Note: In this question respondents could choose more than one answer.

TABLE 1. MOTOR INSURANCE DISTRIBUTION MODELS IN THE SELECTED EUROPEAN COUNTRIES

Country	Direct sale (in %)	Insurance agents (in %)	Insurance brokers (in %)	Other (Bancassurance, post office, etc) (in %)
Austria	40	15	35	10
Belgium	20	10	60	10
Denmark	40	-	15	45
Estonia	30	10	50	10
Finland	70	10	15	5
France	35	35	18	12
Germany	5	40-45	25-30	25
Greece	-	70	18	12
Hungary	13	67	10	10
Ireland	25	5	70	-
Italy	5	85	10	-
Latvia	25-30	45-50	20	10
Luxembourg	-	90	10	-
Netherlands	35	10	55	-
Poland	25	55	15	5
Portugal	10	60	17	13
Slovenia	20	70	8	2
Spain	15	50	20	15
Sweden	10	40	5	45
United Kingdom	44	8	35	13

Source: (Europe Economics, 2009).

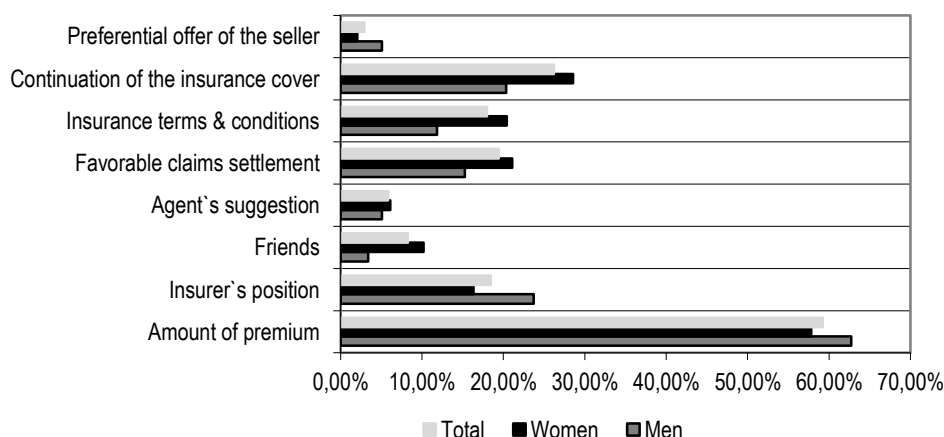
The European countries are characterized by a great diversity of the existing distribution systems and popularity of various ways of motor insurance selling (Table 1). It is not possible to indicate one universal distribution model, what results from the specific conditions of the development of the insurance market in a given country, including the activity of the insurance intermediaries and the development of Bancassurance services. However, we would like to highlight a few aspects of the above diversity. First, insurance agents (tied and multiple) remain clearly the main distribution channel in Germany, Greece, Hungary, Italy, Latvia, Luxembourg, Poland, Portugal, Slovenia and Spain. Second,

in Belgium, Estonia, the Netherlands and Ireland independent intermediaries (insurance brokers) have the largest (50% or more) market share. Direct sale of motor insurance enjoys the greatest popularity in Austria, Finland and the United Kingdom, and the use of other distribution channels, including Bancassurance - in Denmark and Sweden (Europe Economics, 2009).

Selection of the insurance company and its offer

The next part of the conducted analysis was focused on the length of period of cooperation with the current insurer as well as the factors affecting the choice of a specific insurance company and its products. In the analysed sample a high level of loyalty to the current insurer was noted, for both women and men, what may partially indicate their satisfaction with the existing insurance cover. Somewhat more than 40% of all respondents (41.5% of women and 37.29% of men respectively) declared using the services of the current insurer for more than 3 years. The next 17.5% of respondents has not changed the insurer for 3 years. A two-year cooperation with the current insurance company was declared by 25.2% of respondents, and those with the shortest period of existing cooperation with the insurer (up to one year) represented about 17%. Figure 4 shows the factors that were taken into account by the respondents when choosing a motor insurance in a given insurance company.

FIGURE 4. FACTORS INFLUENCING THE CHOICE OF MOTOR INSURANCE
IN A GIVEN INSURANCE COMPANY (IN %)



Source: Authors' calculations.

Note: In this question respondents could choose more than one answer.

As it results from data presented in Figure 4, traditionally the main factor influencing the choice of motor insurance offer is the price (insurance premium). Subsequently, the respondents took into consideration the continuation of existing insurance coverage, as well as a good experience with the claims settlement process in a given insurance company. Another important factor was the insurance company's position on the market, its image. Terms and conditions of the contract (including the scope of coverage, additional services, etc) obtained only the fifth place according to the number of answers. Surprisingly, none of the respondents considered the advertisement as a factor affecting the choice of motor insurance, however in fact the advertising activity shapes, to a large extent, the image of the insurer in the consumers' consciousness.

During the analysis of the results we also noticed interesting differences in the popularity of particular factors influencing the choice of motor insurance according to sex. Women

taking part in our survey, in addition to the amount of premium, chose relatively often the following answers: continuation of the existing insurance cover (28.57%), good experience with claims settlement (21.09%) and favourable contract terms (20.41%). Additionally, they more frequently than men took into account the opinion of friends in the selection of motor insurance offer (10.2% of women compared to 3.39% of men). In the case of men, the second, after premium (62.71%), most important motive for choosing the motor insurance offer seems to be an insurance company position on the market (23.73% of men compared to 16.33% of women), followed by the continuation of existing coverage (20.34%). Somewhat more often than women they paid attention to a preferential offer available in the car dealerships.

The analysis of factors affecting the choice of a motor insurance offer was also carried out with respect to the period of cooperation with the current insurer. We observed here rather typical attitudes of the buyers. People characterized by a relatively long-lasting cooperation with the current insurer (3 years or longer) to a lesser extent than other respondents were focused on the amount of the insurance premium (of course the premium was still the main factor of their decisions), but they also highlighted the importance of continuation of insurance cover, effective claims settlement process and favourable terms and conditions. In the group of respondents who have not changed the insurer for a year or 2 years, the price of insurance definitely played the dominant role (over 65% of answers), followed by the position of an insurance company on the market. The members of the considered group are relatively more likely to buy motor insurance products due to suggestions of friends and insurance agents, as well as favourable car dealerships offers; however they seldom read and take into consideration terms and conditions of the concluded insurance contracts.

Analysis of the selected statistical interdependencies

In this part of our study the analysis was carried out in order to verify the occurrence of statistical interdependencies in the selected areas. We chose here the following research areas: the purchase of additional, voluntary motor insurance products, the motivation for such purchase and the level of consumer satisfaction with services provided by the insurer. In the analysed interdependencies the following characteristics of respondents were considered: age, sex, place of residence and net monthly income *per capita* in a household.

In order to examine the relations occurring in the above areas we applied the Pearson's correlation coefficient, which is the particular case of the general correlation coefficient (Walesiak, 1996). The Pearson's correlation coefficient is defined by the following formula (Bernstein and Bernstein, 1999; Gatnar and Walesiak, 2004; Ostasiewicz, Rusnak, and Siedlecka, 2001; Sharma, 2007):

$$r_{xy} = \frac{\sum_{i=1}^n (x_i - \bar{x}) \times (y_i - \bar{y})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2 \times \sum_{i=1}^n (y_i - \bar{y})^2}}, \quad (1)$$

Where, r_{xy} - Pearson's correlation coefficient; x_i - value i for the characteristic x ; y_i - value i for the characteristic y ; n - number of observations.

The Pearson's correlation coefficient takes values from the interval [-1; 1]. The closer to 1 the value of the coefficient, the stronger positive correlation between analysed variables. After the correlation coefficient calculation, we examined the statistical significance of the

analysed relations using the measurement error (s_r), which is given by the following equitation:

$$s_r = \sqrt{\frac{1 - r_{xy}^2}{n - 2}}. \quad (2)$$

Next, we determined the null hypothesis $H_0 : r_{xy} \neq 0$ (alternative hypothesis $H_1 : r_{xy} = 0$). This hypothesis was verified using the significance test based on Student's t -distribution with $n-2$ degrees of freedom (in our study the number of degrees of freedom was 204). The statistic t can be expressed as follows:

$$t = \frac{r_{xy}}{s_r}. \quad (3)$$

We assumed the significance level $\alpha = 0.05$. As a result of the above testing, we received statistically significant relations, which allow us to indicate the interdependencies occurring in the considered research areas. In the first examined area (the purchase of additional, voluntary motor insurance products) the following relations were observed:

- Men are more likely to buy accident insurance as an additional motor insurance cover (the value of correlation coefficient between sex and the decision amounted to 0.1642).
- Young drivers (aged 18-20) purchase only MTPL policies, not choosing additional motor insurance products ($r_{xy} = 0.13$).
- Drivers aged 41-50 are more apt to purchase CASCO insurance than other drivers ($r_{xy} = 0.1526$).
- Drivers over 41 years demonstrate buying the Green Card more often than other respondents ($r_{xy} = 0.13$).
- Respondents living in the households with monthly income *per capita* exceeding 2500 PLN are the most interested in purchasing CASCO insurance ($r_{xy} = 0.168$).
- People living in the countryside more often decide not to purchase additional insurance at all ($r_{xy} = 0.141$).

The above relationships confirm some general conclusions. Young drivers and people living in the country relatively often decide to buy only the compulsory MTPL insurance. It may result from purchasing older cars (e.g. used cars imported to Poland after the accession to the EU) due to their newly acquired driving skills and because of the low incomes of the rural population. On the other hand, there are relatively rich respondents, whose social and economic status allows to purchase new expensive cars (drivers over 41 years and with high incomes). These people are most likely to buy CASCO insurance.

In the case of the second considered area (motivation for purchase of additional motor insurance) the following relations were noted:

- In the households where monthly income *per capita* ranges from 1800 to 2500 PLN, the respondents indicate two main factors of their motivation for purchasing additional motor policies: friend's advice ($r_{xy} = 0.13$) and high value of a vehicle ($r_{xy} = 0.169$).
- Residents of medium-sized cities (from 50 000 to 200 000 inhabitants) buy additional insurance policies motivated, to a large extent, by a sense of security ($r_{xy} = 0.14$).

The first indicated relationship may confirm a trend associated with a greater conservatism of the households characterized by medium level of income. The respondents belonging to this group try to protect their new, relatively expensive cars against loss or damages buying CASCO insurance. The second relationship may indicate the need of people living

in medium-sized towns for an additional protection against theft. It results from the lack of additional tools and activities to improve security, as it takes place in large cities (e.g. closed housing estates, municipal police and attended parking lots).

Analysis of the customer satisfaction with the services provided by the insurance companies allowed to observe the following relations:

- There is a positive correlation ($r_{xy} = 0.1298$) between sex (women) and the highest degree of satisfaction with the service process when purchasing insurance.
- During the claims settlement process, respondents living in small cities (less than 50 000 inhabitants) tend to evaluate the provided services as those with an ordinary quality ($r_{xy} = 0.1296$); drivers from the largest cities (over 200 000 inhabitants) are usually the most satisfied with the quality of services ($r_{xy} = 0.1241$).

Conclusion

The conducted analysis was aimed to identify attitudes and choices of the individual customers purchasing motor insurance products on the Polish market, based on data received from the questionnaire survey. The obtained results allow the following general conclusions to be drawn:

- The majority of respondents when buying motor insurance uses the most popular product packages.
- In the area of distribution methods the received results confirm the results of available nationwide surveys indicating the dominance of traditional distribution channels (insurance agents, insurance employees). More interest in modern methods of sales (Internet and phone) may result from the relatively large proportion of young people in the analysed sample.
- About 40% of the respondents has not changed the insurance company for more than 3 years, this phenomenon indicates a relatively high level of loyalty to the current insurer. In addition to the amount of premium, the main factors influencing the choice of a motor insurance offer are: continuation of the existing insurance cover, good experience with the claims settlement process and the insurance company's image. These results show that the customers are willing to continue the cooperation with an insurer, not only because of the amount of premium and possible discounts, but also because of other elements which constitute the broadly defined quality of an insurance service.
- Only 18% of the respondents, when purchasing motor insurance, takes into consideration terms and conditions of the insurance cover. It unfortunately confirms the fact that most people in Poland do not read an insurance contract before signing it.
- The conducted analysis of statistical interdependencies, based on the Pearson's correlation coefficient, allows to emphasize the fundamental theory of personal finance, which states that the financial decisions are closely related to the household's life cycle and its financial situation (Garman and Forgue, 2006; Keown, 2010). The obtained results confirm the following facts:
- Non-life insurance products are in the area of interest of these households, which members have already accumulated some assets (e.g. CASCO insurance are usually purchased by middle-aged drivers, not by young drivers often using low-value vehicles).
- The households with a relatively low level of income confine to buying mandatory MTPL insurance, considering the purchase of additional, voluntary policies as an unnecessary expenditure (in the conducted analysis the households with an income

amounting to less than 1800 PLN *per capita* did not purchase voluntary motor insurance products).

On the basis of the conducted survey, another result, especially important for the insurance companies, can be noticed. The inhabitants of large cities are more satisfied with the quality of provided insurance services than people living in smaller towns or in the country. Despite the analysed sample is not representative of the whole population, the obtained results can be useful in practice, for both the insurance companies, interested in improving their motor insurance offer, especially in time of crisis, and the insurance intermediaries serving the individual customers.

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