

Post-Epidemic Era in Guangxi People's Recognition of the Insurance Industry in the Survey—— Taking Nanning, Guilin and Yulin Cities for Example

Deyuan Zeng, Hong Liang, Chen Xia, Sifan Zhou, Xiping Wang
Guangxi Normal University, Guilin 541004, China.

Abstract: The arrival of unknown risks such as the epidemic has brought great trouble to regional economic development. In the post-pandemic context, many risks remain inaccurately predictable. People pay more attention to the protection of existing wealth and health status, choose recognized insurance companies and types of insurance, and improve risk prevention capabilities. Based on the survey data and interview results, this paper analyzes the recognition of the insurance industry by some people in Guangxi after the outbreak of the epidemic, and summarizes the shortcomings of the insurance industry, to provide ideas for reform, promote the reform and development of the insurance industry, so as to protect people's lives.

Keywords: Insurance Industry; Logistic Return to Recognition

Foreword

In recent years, people have carried out a number of surveys on the development status and trend of the insurance industry. Allianz predicts that global premiums are expected to fall by 3.8%, which means that tens of billions of dollars in premiums will disappear compared to pre-pandemic levels. Today, the state has attached great importance to the development of the insurance industry, and it is necessary to explore the shortcomings of insurance and understand people's recognition to promote the reform of the insurance industry mechanism in Guangxi.

Research method and basic overview

Survey methods and data overview

This survey adopted the questionnaire survey method and the field survey method, learning about people's intention and recognition of insurance from Ping An Insurance Company of China, Chinese Life Insurance Company, Guangxi Zhuang Autonomous Region, Social Insurance Bureau and other units.

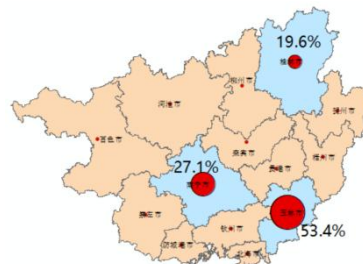


Figure 1. Main regional distribution map of the survey subjects

The questionnaire was completed anonymously with the consent of the respondents, includes income level, city, age, insurance knowledge, COVID-19 epidemic, purchasing insurance plans, and related insurance recommendations. A total of 588 questionnaires

were valid. Based on the situation in Guangxi, the team selected three representative cities: Nanning, the provincial capital, Guilin and Yulin, Lingnan. The survey lasted one year and was completed in June 2022. The main geographical distribution of respondents is shown in Figure 1.

Analysis method

Using statistical regression analysis, team members studied the important factors affecting people's perception of insurance in the post-pandemic era. When the dependent variable is categorical and the independent variable is nonlinearly associated with it, the applicable conditions for a multiple linear regression model cannot be determined, and logistic regression is applicable.

In this survey, the independent variables were the age and income of the participants, which were discrete and categorical. We could not directly judge the correlation of the independent variable with the dependent variable, so the logistic regression model was chosen. The regression model is:

$$\log it(p) = \ln\left(\frac{p}{1-p}\right) = \alpha_0 + \alpha_1 x_1 + \alpha_2 x_2 + \dots + \alpha_n x_n \quad (2-1)$$

x_1, x_2, \dots, x_n are dependent variable ¹

Data analysis

"Where do you come from", "age", "income" and "sufficient insurance knowledge". Assignments 1, 2, 3, 4 from Nanning, Guilin, Yulin, and other regions, 18 years old, 18 to 30, 30 to 60, 60 years old, 1, 2, 3, 4, student party and below, 3,000 yuan to 1,000 yuan, and more than 10,000 yuan to assign 1, 2, 3, 4 to obtain the original data.

Import data SPSS analyzes 588 samples, compares the mean, standard deviation, and knows "whether you know enough about insurance", "where you come from", "what is your current age", "what is your income", "standard deviation is less than 0.7, that is, the deviation from the average statistics is small, insurance investigators have enough understanding, the age and income of researchers tend to mean that the data is relatively concentrated, which often means that it is well distributed and has research value. Descriptive statistics are shown in Table 1.

Table 1: Descriptive statistics

model	mean	standard deviations	N
Do you have enough knowledge about the insurance	1.87	0.594	588
Where do you come from	2.73	1.066	588
Your current age stage is	2.11	0.465	588
How is your income like	1.35	0.696	588
Are you buying the insurance voluntarily	0.56	0.497	588

Table 2: Coefficient analysis

model	The 0.95 confidence interval in B	relativity			Collinearity statistics	
	superior limit	zero-order	inclined to one side	part	tolerance	VIF
(constant)	1.565					
Where do you come from	0.039	-0.062	-0.011	-0.010	0.934	1.071
Your current age stage is	0.259	0.180	0.090	0.086	0.650	1.538
How is your income like	0.188	0.192	0.100	0.096	0.619	1.616
Are you buying the insurance voluntarily	0.363	0.230	0.231	0.226	0.994	1.006

The tolerances of "where are you from", "what is your current age stage", "how is your income", and "whether you actively buy greater than 0.1. The variance inflation factor is greater insurance" are 0.94, 0.650, 0.619, 0.994, all not serious, and logistic regression analysis is (VIF) than 10, and the collinearity is performed. The coefficient analysis is shown in Table 2.

Table 3: Correlations and analysis of covariance

model		Are you buying the insurance voluntarily	Your current age stage is	Where do you come from	How is your income like
relativity	Are you buying the insurance voluntarily	1.000	0.004	0.074	-0.004
	Your current age stage is	0.004	1.000	-0.098	-0.590
	Where do you come from	0.074	-0.098	1.000	0.240
	How is your income like	-0.004	-0.590	0.240	1.000
covariance	Are you buying the insurance voluntarily	0.002	1.205E-005	7.938E-005	-8.330E-006
	Your current age stage is	1.205E-005	0.004	0.000	-0.002
	Where do you come from	7.938E-005	0.000	0.001	0.000
	How is your income like	-8.330E-006	-0.002	0.000	0.002

Note: the dependent variable "do you have enough understanding of insurance"

Compare the covariance to the relevant values, as shown in Table 3. "Where are you from", "What is your current age", "Do you actively buy insurance", showing a negative correlation with income level, "Where are you from", "What is your age now", "What is your income", "Do you actively buy insurance" and "whether consumers have enough understanding of insurance" are more correlated.

Table 4 Kendall test

			x_1	x_2	x_3	y
Kendall, tau_b	x_1	correlation coefficient	1.000	0.634**	-.229**	0.159**
		Significance (double-tailed)	.	0.000	0.000	0.000
		The number of cases	588	588	588	588
	x_2	correlation coefficient	0.634**	1.000	-0.063	0.157**
		Significance (double-tailed)	0.000	.	0.090	0.000
		The number of cases	588	588	588	588
	x_3	correlation coefficient	-.229**	-0.063	1.000	-0.035
		Significance (double-tailed)	0.000	0.090	.	0.339
		The number of cases	588	588	588	588
	y	correlation coefficient	0.159**	0.157**	-0.035	1.000
		Significance (double-tailed)	0.000	0.000	0.339	.
		The number of cases	588	588	588	588
Speelman Rho	x_1	correlation coefficient	1.000	0.666**	-.255**	0.168**
		Significance (double-tailed)	.	0.000	0.000	0.000
		The number of cases	588	588	588	588
	x_2	correlation coefficient	0.666**	1.000	-0.068	0.164**
		Significance (double-tailed)	0.000	.	0.100	0.000
		The number of cases	588	588	588	588
	x_3	correlation coefficient	-.255**	-0.068	1.000	-0.040
		Significance (double-tailed)	0.000	0.100	.	0.335
		The number of cases	588	588	588	588
	y	correlation coefficient	0.168**	0.164**	-0.040	1.000
		Significance (double-tailed)	0.000	0.000	0.335	.
		The number of cases	588	588	588	588

tagging: ①**. Is presented at 0.01 level (double tail) with significant correlation.

② "Where do you come from", "your current age is", "how is your income" and "Do you have enough understanding of insurance" x_1, x_2, x_3, y .

Because the data are not continuous and hierarchical, the correlation analysis between the two rank variables of the original data using SPSS is presented in Table 4. According to the results of Kendall rank correlation analysis in this table, the correlation coefficients of "coming from where" and "age", "income" and "having enough knowledge of insurance" are 0.634, -0.229 and 0.159, and the probability of significance Sig. All were 0.00, less than 5%. The correlation coefficients of "age stage" with "income" and "sufficient knowledge of insurance" were -0.063 and 0.157, and the probability of significance Sig. At 0.09 and 0.00 respectively, it can be said that "age" is hardly related with "income". The correlation coefficient of "income" and "sufficient knowledge of insurance" is -0.035, and the probability of significance Sig. At 0.339, greater than 5%, it can be said that "income" is almost unrelated to

"sufficient knowledge of insurance". This conclusion, can be considered that "from where", "age stage" and "with enough knowledge of insurance", while "income" is almost not associated with "with enough knowledge of insurance"

Disadvantages

The sudden COVID-19 pandemic has stimulated consumer interest in insurance products. Internet insurance is not universal. On the one hand, consumers do not have a clear understanding of the concept of Internet insurance. On the one hand, consumers are mainly worried about fraud, on the other hand, the quality level of some shopping guides is not high, they even maliciously mix insurance and scam customers, which affects people's choice.

In addition, some insurance companies always shirk responsibility for claims settlement issues, which is inefficient, and consumers face problems such as difficulty and slowness in claim settlement.

The inability to understand some professional terms when buying insurance will also affect their desire to buy.

Conclusions and suggestions

After the outbreak of the epidemic, the people in Guangxi have paid more attention to critical illness insurance services, and consumers are more likely to return to the insurance industry when buying insurance.

If you need to increase the proportion of online channel purchases, you need to increase people's awareness of online channels. On the one hand, insurance companies can increase publicity, optimize business structure, broaden customer channels, on the other hand, they can contact cooperative insurance experts to provide consumers with a professional consultation platform. On the other hand, insurance companies can strengthen training and dynamically update the quantitative evaluation model, which will help improve the overall quality of insurance sales personnel.

When operating online business, insurance companies should combine the needs of consumers, intelligently push high-quality information, and avoid information bombardment as much as possible.

In the future development, insurance companies can launch simplified channels on their official websites and software, simplifying and summarizing content regulations under the premise of ensuring the accuracy of information, so that customers can spend more time thinking about choices instead of understanding insurance regulations and coverage.

At the same time, the government needs to vigorously rectify. The CBRC said at a working conference held in 2021 that the trend of strict supervision will not change, and for the rectification of the insurance industry, the evaluation should be high standards and the supervision should be high. Vigorously crack down on malicious interference with undesirable phenomena such as arrears and black intermediaries.

In addition, reducing the scope of manual intervention, accelerating the realization of "usable non-visibility" of data such as health management information and sensitive personal information, and making the channels for calling customers' personal information public, these are the directions that can be considered.

References

[1] Yuan X. Report on consumer awareness and recognition of Medicare [D]. Beijing: Capital University of Economics and Business, 2019.

[2] Finance. Preventing and resolving financial risks requires strict supervision and good supervision[EB/OL]. Available from: <http://bank.jrj.com.cn/2021/08/02092033186737.shtml>, 2021-08-02.

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Author brief: Deyuan Zeng; Hong Liang; Chen Xia; Sifan Zhou; Xinping Wang

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