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EFFECTIVE FACTORS ON RISK MANAGEMENT IN DETERMINING OF PROPORTION OF THIRD PARTY INSURANCE CLAIM (CASE STUDY: ASIA INSURANCE CO. IN KHORASAN RAZAVI PROVINCE)

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ABSTRACT

Risk management is a systematic approach for analysis, assessment, and how-to-react toward relevant risk of any kind of activity enabling organizations to lessen the climes while enjoying opportunities. The biggest advantage of risk management for an organization is that it makes the coincidence evitable and lessens the relevant expenses due to current wealth and then contributes in the consistency of business activities. The present study aims to investigate the influencing factors on risk management in proportion of third party insurance clime in Khorasan Razavi Asia Insurance Co. in 2014. Methodologically, the research is carried as survey and data are collected through questionnaire. The population of the study consists of all staffs and agents of Asia insurance company among whom 285 individuals are selected as case studies. Single T-test analysis and Friedman's ranking are applied in this study as statistical techniques. As indicated by the results obtained from testing main hypotheses, some factors including internal, external, human, and modifying variables are influential in risk management in third party insurance clime proportion identification. The results of Friedman's variable ranking showed that external factors take the first place followed by internal factors, modifying variables, and human factors, respectively. The results of T-test of two independent variables regarding the influence of gender on indices indicated that human factors and modifying variables are significantly influenced by gender. The results of the investigation of the influence of job on indices showed that job has no significant influence on any factor. The results of Variance analysis test regarding the influence of educational level on indices showed that internal factors, external factors, and modifying variables are significantly influenced by educational level. The results of the investigation of age group influence on indices indicate that both internal and external factors are significantly influenced by age groups.

Keywords: Risk Management, Clime Proportion, Third Party Insurance, Human Factor, Internal and External Factors

INTRODUCTION

Organizations and their systems, nowadays, are in changing and challenging environment. Being in harmony with environmental changes and reacting properly toward them is vital for those organization's maintenance and life. Reacting properly requires proper decision-making necessitating each program's managers and assistants' ambition. Obviously, in any decision-making situation, not all aspects of relevant decisions and programs are clear. Therefore, potential or specified risks influencing taken decisions, among other factors, should be inevitably considered in decision-making. This is the very discussion of risk management.

Risk management is the strategic managing center of each organization. Risk management is a process through which and through an intelligent and systematic approached organizations identify all risks relevant to their activities aiming at endowing organization with maintenance and consistency (Mirbaqeri and Payandan, 2007). An effective risk management concentrates on risk identification and how to confront it aiming at maximizing the efficiency of all organization's activities. This process increases the identification rate of positive/negative factors influencing organization's movement and activities. Risk management increases the probability of success and reduces the probability of failure and uncertainty in achieving ultimate goals (Mirbaqeri and Payandan, 2007). Organizations always seek the most output out

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of their investment. Each organization takes two factors into account before investing. Investment should result in the most output, and output is supposed to be continuous and consistent. Measuring this consistency manifests investment risks. The process of decision-making gets complex when an organization deals with different projects and the decision regarding the level of investment in each of them (Dadashpouromrani, 2011).

Risk management is a systematic logical approach for analysis, assessment, and how-to-react toward relevant risk of any kind of activity enabling organizations to lessen the climes while enjoying opportunities. The biggest advantage of risk management for an organization is that it makes the coincidence evitable and lessens the relevant expenses due to current wealth and then contributes in the consistency of business activities.

Actually, risk management leads in more logical decision-making, consistent programming, and better use of resources. Risk management enables firms in achieving strategic and financial goals confronting with risks resulted from universal continuous economy complexity. Some factors including environmental complexity, competition intensity, spread of new and developed technology, development of information communication and technology, modern approaches of supplying goods and services, environmental issues etc. are among important issues putting organizations and economy agents in front of various, even unexpected risks and dangers.

Certainly, each organization experiences different risks based on their activity nature. In changing situation of nowadays, the success of each organization depends on the level of their control over and their management in different risks. Given the specific nature of insurance organizations, risk management takes much more importance in them. It is due to the fact that insurance organizations are basically founded on the acceptance of customers' risks. It means that insurance taker transfers his/her risk to insurance company through acknowledging insurance contract. Therefore, it is natural that insurance firms have more control over accepted risk management (Atayi, 2010). Accordingly, given the importance and role of risk in insurance, the present study aims at investigating the influencing factors on risk management in proportion of third party insuranceclime identification in Asia Insurance Co. inKhorasan Razavi Province.

Literature Review

Models presented up to the present time are almost similar to each other in terms of content, though containing terms and phases with different orders. Arjmandnezhad (2004) investigated the influencing factors on management and supervision of operational risks in banking discussions. The vast functionality of this risk branch has made researchers introduce excluding definitions- what is not included in this category- rather than including ones. For this, banks refer to it as every kind of risks except for market and credit risks. Abzari *et al.*, (2000) investigated the influencing factors on risk and investment output in financial products. The results of their study indicate that macro economy, micro economy, and non-economy factors influence investment systematic risk of financial products, investment unsystematic risk of financial products, and investment general risk of financial products, respectively. On the other hand, other non-economy variables demonstrated different correlation including risk comprehension a negative correlation with willingness to investment risk, background output rate a positive correlation with the willingness to risk, risk comprehension a negative correlation with expected output rate, and previous function information a positive correlation with expected output rate. The obtained results are applicable for economical and financial policy makers of investment market, accredited firms in bourse, financial and investing institutes, and individual investors. Kharrazi (2011) carried a research on identification of components of risk management process in BOT railing project. Today, this approach is known and acknowledged as one of the modern effective models in national infrastructure project investment especially in railing transportation. Various risks including time, expenses, and the quality may influence BOT contract administration.

Sehhat and Alavi (2006) investigated the necessity of risk management knowledge application in third party insurance branch and the influence of new law of third party insurance on relevant risks of third party insurance. The results of their study indicated that third party insurance is the Achill heel of

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insurance company having the highest rate of claims (except for 2009) among insurance items. Given the process of privatization and acting the 44 principle of the main law and the probability of joining Iran to World Business Organization, it is assumable that companies with lack of required efficiency will fail in competition with others.

Mirbaqeri and Payandan (2007) carried a research on risk management on insurance and financial issues. Although all points of view referred to risk management as the process of finding and administrating the preventive approaches against risks, no consensus made on the type of risks that managers are required to control. Understanding different categorization of risks and ultimately selecting one as the reference on which risk management activities concentrate requires exact and scientific definition of risk.

Sadi *et al.*, (2012) investigated the role and structure of insurance on risk management of petrochemical, gas, and oil industry. Risk management in industry aims at reducing risks that challenge the consistency of production. In other words, consistency of production in petrochemical, gas, and oil industry is much dependent on risk management. Different strategies have been proposed the most important of which include risk prevention, risk reduction, risk distribution, insurance and risk maintenance. In this approach, insurance taker paying insurance fee transfers the risk to other side, risk giver, who accept potential claims caused by risks taking insurance compensating fee. Nowadays, in addition the reason of risk transfer, insurance has become important due to financial supply of petrochemical, gas, and oil industry. Insurance is important in this approach because the proportion of debt to investment of investors was high.

Various studies have been carried about risk management strategies. However, there is a lack of study about the role of insurance on risk management. In their study, they tried to identify applicable insurances and specify their terms and features to use them effectively. Atayi (2009) carried a research about risk management development as an inevitable requirement of insurance industry. Risk management is a systematic logical approach for analysis, assessment, and how-to-react toward relevant risk of any kind of activity enabling organizations to lessen the claims while enjoying opportunities. The biggest advantage of risk management for an organization is that it makes the coincidence evitable and lessens the relevant expenses due to current wealth and then contributes in the consistency of business activities. Actually, risk management leads in more logical decision-making, consistent programming, and better use of resources. Risk management enables firms in achieving strategic and financial goals confronting with risks resulted from universal continuous economy complexity.

The vast range of risks in insurance companies is those that insurance companies take them from their insurance takers. For this, risk management application is manifested more clearly. The risks related to insurance takers' third party insurance are included in these risks. Third party insurance is one of the most important products of insurance industry. Because third party insurance is like a shop-window, through whose window insurance givers show their products. The performance of insurance firms in this field influences other fields. In other words, this field of insurance is the key of insurance giver entrance into insurance market.

Third party insurance has taken 45.3% of insurance fee portfolio of national insurance industry and absorbed 60.52 of claim portfolio of this industry (Zarae, 2009).

According to the high share of this field in casualties' payment, private and governmental insurance companies are under much loss in third party insurance field. Therefore, risk management knowledge application in this insurance field, given its high risk, is very important.

MATERIALS AND METHODS

Methodology

The present study is application and descriptive correlation, as far as its objective and data collection are respectively concerned. Therefore, this is a descriptive survey carried as a case study in Khorasan Razavi Province Asia Insurance Co. In order to analyze the data, we made use of descriptive analytic statistics. The organization of data was carried through SPSS software. We made use of T-test to identify factors and Friedman's ranking to prioritize.

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Research Population

The present study is application and descriptive correlation, as far as its objective and data collection are concerned. Therefore, this is a descriptive survey carried as a case study on agents, managers, and staff of KhorasanRazavi Asia Insurance Co.

This study was carried on 285 individuals of on agents, managers, and staff of Asia Insurance Company in 2014. Most of the participants were male with a bachelor degree aging between 30-40 who were the agents of Asia Insurance Co.

Research Hypotheses

Hypothesis 1: Internal factors of risk management are influential in clime identification of third party field.

Hypothesis 2: External factors of risk management are influential in clime identification of third party field.

Hypothesis 3: Human factors of risk management are influential in clime identification of third party field.

Hypothesis 4: Moderating variables of human, external, and internal factors are influential in clime identification of third party field.

RESULTS AND DISCUSSION

Results

Descriptive Statistic Results

Before determining the suitable statistic approach for analysis, the hypothesis of observation normalization was investigated analytically through Kalmogorov- Smirov test. In this section, meanwhile, the results of statistical analysis were investigated. In descriptive analysis of data, descriptive statistics and their appropriate tables were presented, and in analytical section, suitable tests were investigated confirming or rejecting research hypotheses.

According to the following table, sample group consists of diplomas or lower degrees (8.8%), junior college students (11.9%), bachelors (65.3%), and master students (14%).

Table 1: Frequency of research sample group

		Frequency	Percent
Gender	Female	97	34.0
	Male	188	66.0
Job background	Less than 30 years	36	12.6
	30-40 years	204	71.6
	40-50 years	37	13.0
	More than 50 years	8	2.8
Education	Diploma and lower	25	8.8
	Junior	34	11.9
	Bachelor	186	65.3
	Master	40	14.0
Job type	Branch staff	40	14.0
	agent	245	86.0

According to the above-mentioned table, bachelor group with 65/3%, is the highest case of sample group, and branch staff are 14% and agents 86% of sample group.

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Table 2: Descriptive statistics

	Number	Percent	Medium	Standard deviation	Minimum	Maximum
Internal Factors	285	4.32	4.33	0.481	2.50	5.00
External Factors	285	4.42	4.40	0.375	3.20	5.00
Human factors	285	3.91	3.80	0.441	2.60	5.00
Modifying variables	285	3.89	3.83	0.456	3.00	5.00

The Results of Analytical Statistics

Hypothesis 1: internal factors influence risk management and third party time coefficient.

This test was designed for comparing the mean of one variable with fixed number. Research hypotheses are as follows

$$\left\{ \begin{array}{l} H_0: \\ H_1: \end{array} \right.$$

Table 3: Test of comparing the mean of internal factors with fixed number

Variable name	Mean	Standard deviation	T-test statistic	Significance level	Certainty distance 95% Upper group	Lower group	Variable status
Internal factors	4.31	0.482	46.19	0.001	1.26	1.37	Being effective

Since this test indicates a significance level of 0.001 lower than 0.05, the zero hypothesis in the error level of 0.05 is rejected. This means that the mean of this variable in population was not 3, instead it was significantly different. On the other side, since sample mean is 4.31, between upper and lower groups with certainty distance of 95% for the mean variance of 3 is positive for both. Therefore, it is concluded that the mean of this variable in population was not 3; instead, it is significantly more than 3. Given the definition and the existence of this variable, we conclude that internal factors have a positive significant influence on risk management. According to the first hypothesis, internal factors influence risk management and third party time coefficient.

Hypothesis 2: the external factors of risk management are influential in third party time coefficient.

This test was designed for comparing the mean of one variable with fixed number. Research hypotheses are as follows

$$\left\{ \begin{array}{l} H_0: \\ H_1: \end{array} \right.$$

Table 4: Test of comparing the mean of external factors with fixed number

Variable name	Mean	Standard deviation	T-test statistic	Significance level	Certainty distance 95% Upper group	Lower group	Variable status
External factors	4.42	0.375	63.82	0.001	1.37	1.46	Being effective

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Since this test indicates a significance level of 0.001 lower than 0.05, the zero hypothesis in the error level of 0.05 is rejected. This means that the mean of this variable in population was not 3, instead it was significantly different. On the other side, since sample mean is 4.42, between upper and lower groups with certainty distance of 95% for the mean variance of 3 is positive for both. Therefore, it is concluded that the mean of this variable in population was not 3; instead, it is significantly more than 3. Given the definition and the existence of this variable, we conclude that external factors have a positive significant influence on risk management. According to the second hypothesis, external factors influence risk management and third party climate coefficient.

Hypothesis 3: human factors influence risk management and third party climate coefficient.

This test was designed for comparing the mean of one variable with fixed number. Research hypotheses are as follows

$$\left\{ \begin{array}{l} H_0: \\ H_1: \end{array} \right.$$

Table 5: Test of comparing the mean of internal factors with fixed number

Variable Name	Mean	Standard deviation	T-test statistic	Significance level	Certainty distance 95%		Variable status
					Upper group	Lower group	
Human factors	3.91	0.441	34.67	0.001	0.852	0.955	Being effective

Since this test indicates a significance level of 0.001 lower than 0.05, the zero hypothesis in the error level of 0.05 is rejected. This means that the mean of this variable in population was not 3, instead it was significantly different. On the other side, since sample mean is 3.91, between upper and lower groups with certainty distance of 95% for the mean variance of 3 is positive for both. Therefore, it is concluded that the mean of this variable in population was not 3; instead, it is significantly more than 3. Given the definition and the existence of this variable, we conclude that human factors have a positive significant influence on risk management. According to the third hypothesis, human factors influence risk management and third party climate coefficient.

Hypothesis 5: modifying variables of human, external, and internal factors in risk management are influential in third party climate coefficient.

This test was designed for comparing the mean of one variable with fixed number. Research hypotheses are as follows

$$\left\{ \begin{array}{l} H_0: \\ H_1: \end{array} \right.$$

Table 6: Test of comparing the mean of internal factors with fixed number

Variable name	Mean	Standard deviation	T-test statistic	Significance level	Certainty distance 95%		Variable status
					Upper group	Lower group	
Modifying Variables	3.89	0.458	33.23	0.001	0.846	0.952	Being effective

Since this test indicates a significance level of 0.001 lower than 0.05, the zero hypothesis in the error level of 0.05 is rejected. This means that the mean of this variable in population was not 3, instead it was significantly different. On the other side, since sample mean is 3.89, between upper and lower groups with certainty distance of 95% for the mean variance of 3 is positive for both. Therefore, it is concluded that the mean of this variable in population was not 3; instead, it is significantly more than 3. Given the

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definition and the existence of this variable, we conclude that modifying variables have a positive significant influence on risk management. According to the fourth hypothesis, modifying variables influence risk management and third party clime coefficient.

Friedman’s Ranking of Variables

Given the significance level of less than 0.05, it seems that variables do not have equal priority. Therefore, they are able to be ranked as follows:

Table 7: Results of Friedman’s ranking test

Numbers	Statistics	Free degree	Significance level
285	317.08	3	0.001

According to the average ranking of table 8, external factors, internal factors, modifying variables, and human factors are in priority.

Table 8: Results of ranking of factors

	Average of ranking	Priority
External factors	3.22	First priority
Internal factors	3.10	Second priority
Modifying variables	1.87	Third priority
Human factors	1.81	Fourth priority

Analysis of Variables

According to the results of table 9, the explanation of each internal, external, human, an modifying factors is as follows

Since the significance level of test of internal factors is 0.455 that is more than 0.05; the zero hypothesis at the error level of 0.05 is not rejected meaning that the mean of this variable is not significantly different between male and female groups. On the other side, as the sample mean variation is 0.042, upper and lower groups with certainty distance of 95% for the mean variance are one positive and the other negative. Therefore, mean variation of this variable in the population was zero, and given the definition and the existence of the variable, it is concluded that internal factors variables have no significant level between male and female group.

Since the significance level of external factors is 0.125 that is more than 0.05, the zero hypothesis at the error level of 0.05 is not rejected meaning that the mean of this variable is not significantly different between male and female groups. On the other side, as the sample mean variation is – 0.063, upper and lower groups with certainty distance of 95% for the mean variance are one positive and the other negative. Therefore, mean variation of this variable in the population was zero, and given the definition and the existence of the variable, it is concluded that external factors variables have no significant level between male and female group.

Since the significance level of test of human factors is 0.032 that is less than 0.05, the zero hypothesis at the error level of 0.05 is rejected meaning that the mean of this variable is significantly different between male and female groups. On the other side, as the sample mean variation is 0.107, upper and lower groups with certainty distance of 95% for the mean variance are positive. Therefore, mean variation of this variable in the population was positive, and given the definition and the existence of the variable, it is concluded that variable mean of human factors is higher among males than females.

Conclusion

Single sample T-test results indicate that the first hypothesis referring to the influence of internal factors on risk management in third party clime coefficient is verified. As indicated by the results of the study, internal factors influences risk management significantly positively. Single sample T-test indicates that the second hypothesis referring to the influence of external factors on risk management in third party clime coefficient is verified. As indicated by the results of the study, external factors influences risk

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management significantly positively. Single sample T-test indicates that the third hypothesis referring to the influence of human factors on risk management in third party clime coefficient is verified. As indicated by the results of the study, human factors influence risk management significantly positively. Single sample T-test indicates that the fourth hypothesis referring to the influence of modifying variables on risk management in third party clime coefficient is verified.

As indicated by the results of the study, modifying variables influence risk management significantly positively. The results of Friedman's ranking indicate that variables' priority in the level of influence on risk management in third party clime is not equal. Among others, external factors take the first priority followed by internal factors, modifying variables, and human factors. According to the result of hypothesis testing, and as indicated by single sample T-test results, internal, external, human factors and modifying variables have a significant influence on risk management of third party clime. The results show that these factors have a positive and direct influence on risk management. These results are in harmony with the results of Sehhat and Alavi (2006), Sadi *et al.*, (2012), and Mibaqeri and Payandan (2000).

Recommendations

As mentioned in the previous sections, all hypotheses were verified and accepted by the results of the study. These results can be applied in effective factors identification in risk management of third party insurance clime.

As demonstrated by the results of the present study, external factors having the most influence on risk management of third party insurance clime should be more considered. As far as the priority of factors is concerned, internal factors take the second place followed by modifying variables and human factors. The priority order of variables is recommended to be taken into account by managers in risk management of third party insurance clime.

- 1- A comprehensive research regarding the level of customers' satisfaction with insurance companies' functionality in acknowledging and paying climes is recommended.
- 2- The proposition of measurements that police and the ministry of city and road development can take to reduce accident or lessen their climes is suggested.
- 3- A research on clime-raising spots and their reconstruction, and the level of its influence on accident reduction is proposed
- 4- It is recommended to carry a research regarding the level of accident occurrence, the rate of their climes, and the comparison of occurred coincidence in standard and non-standard country-wide roads.

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