A Study on Risk Analysis and Risk Management in Insurance Sector

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Abstract: This research paper elaborates the concept and proceeds to explain risk identification, distinguishes risk management in life insurance & general insurance and details the risk management process. It also explains the risk management system and individuals reasons for choosing insurance policies. Finally it concludes that how an insurance will help in managing and analyzing the risk in future.

Keywords: Risk Management; Life Insurance; General Insurance; Risk Management Process.

I. INTRODUCTION

Every risk involves the loss of one or new kind. In older time, the character by the person was made at the time of damage. Nowadays, only one commerce, which offers all phases of life, is insurance business. Every individual in this world is focus to unexpected uncertainties which may make him and his family helpless. At this place, only insurance helps him not only to persist but also recover his loss and continue his life in a standard manner. Insurance is a significant aid to commerce and industry. Every business enterprise contains large number of risks and uncertain ties. It may contain risk to places, plant and machinery, raw material and other things. Goods may be spoiled or smashed due to fire or flood. Some risk can be escaped by appropriate safeguards and some are unescapable and are beyond the control of a business. These unavoidable risks can be secured by insurance.

A. Risk Management In Insurance Industry

Having measured the risks it is natural for the company to consider techniques to reduce the risk, and thereby lower the effect of the different scenarios in the traffic light system. Risk Management Measurement Types of risk: There are two types of risk that focus on two major things of the insurance sector. They are as follows.

1) Unsystematic risk and
2) Systematic risk

B. Objectives of the Study

1) To evaluate the methods of risk evaluation by insurance companies.
2) To study the awareness of insurance policies among individuals.
3) To know the purpose of choosing insurance policies.
4) To study the impact of risk on investment decisions.
5) To know the satisfaction among the individuals during claims.

C. Research Methodology

The term research methodology means collecting the information from different types of resources which are required for the study. Generally there are two types of data through which the information is collected. They are as follows:

1) Primary Data and
2) Secondary Data

D. Sample Size

For ascertaining of insurance as risk management and risk analysis tool, 150 individuals have been selected randomly from Hyderabad city. The primary data is collected through survey which is systematically carried in Hyderabad. The responses are recorded in the questionnaire prepared for them.
II. DATA ANALYSIS

A. Objective 1
To evaluate the risk evaluation methods in insurance companies. Insurance industry is keen in identifying the risks pertaining to their business. The property, interruption and liability related risks are keenly looked at by the insurers. The risk management services like underwriting inspections or post loss inspections for settlement claims are used by them in India.

1) Risk Assessment Methods
The following are some of the risk management tools followed in insurance companies.

a) Elementary Risk Audits: For identification of good risks from bad risks– usually adopted by the insurance companies for underwriting. The risk audit procedure is done in two ways i.e.
   i) Relating to Profit and Loss Account
   ii) Relating to Balance Sheet

b) Safety related Audits: Fire Safety Audit, Electrical Safety Audit, Comprehensive Safety Audits etc. has become a tool more than a statutory compliance to the safety improvements for the organization and minimization of hazard level.

c) Risk Based Audits: like Machinery Breakdown Risk and ensuing Business interruption Audits have become very important to power plants, Wind energy mill, Cement Industry etc to improve the maintenance practices as well as for Risk financing i.e. insurance coverage, risk pooling etc.

2) General Information of the Respondents
a) Age of the Respondents.

| SL.NO | Age Group(Years) | No of Responses | Percentages |
|-------|-----------------|-----------------|-------------|
| 1     | 25 – 35         | 89              | 59%         |
| 2     | 36 – 45         | 36              | 24%         |
| 3     | 46 – 55         | 16              | 11%         |
| 4     | Above55         | 9               | 6%          |
| Total |                 | 150             | 100%        |

Graphical Representation

**Age of the individual**

![Graph showing age distribution](image)

- **Percentages**
- **Age of the respondent**

Table no – 4.1.1

i) Interpretation: From the above graph it is observed that the out of 150 respondents, maximum respondents belongs to the age group of 25-35 and minimum respondents are from the age group of above 55.
b) **Gender of the Respondents.**

| SL.NO | Gender | No of Responses | Percentages |
|-------|--------|----------------|-------------|
| 1     | Female | 59             | 39%         |
| 2     | Male   | 91             | 61%         |
| Total |        | 150            | 100%        |

**Graphical Representation**

**Gender**

| Percentages | Female | Male |
|-------------|--------|------|
| 39%         | 61%    |      |

**Gender of the respondent**

Table no – 4.1.2

i) **Interpretation:** From the above graph it is observed that the out of 150 respondents, maximum respondents belongs to male i.e., 60.70% and minimum respondents are from female i.e. 39.30%.

c) **Occupation of the Respondents.**

| SL.NO | Occupation | No of Responses | Percentages |
|-------|------------|----------------|-------------|
| 1     | Business   | 40             | 26.7%       |
| 2     | Employee   | 68             | 45.3%       |
| 3     | Retired    | 6              | 4%          |
| 4     | Others     | 36             | 24%         |
| Total |            | 150            | 100%        |

**Graphical Representation**

**Occupation**

| Percentages | Business | Employee | Retired | Others |
|-------------|----------|----------|---------|--------|
| 27%         | 45%      | 4%       | 24%     |

**Occupation of the respondent**

Table no – 4.1.3

i) **Interpretation:** From the above graph it is observed that the out of 150 respondents, maximum respondents belongs to the employees i.e., 45.3% followed by business i.e., 26.70%, then others i.e., 24% and minimum respondents are from retired people i.e., 4%.
**d) Income Level of the Respondents.**

| Sl.no | Income Level   | No of Responses | Percentages |
|-------|----------------|-----------------|-------------|
| 1     | 25000 – 50000  | 58              | 38.7%       |
| 2     | 50000 –100000  | 44              | 29.3%       |
| 3     | 100000-500000  | 37              | 24.7%       |
| 4     | Above 500000   | 11              | 7.3%        |
| **Total** |              | **150**         | **100%**    |

**Graphical Representation**

![Income Level Graph](Image)

**Table no – 4.1.4**

i) **Interpretation:** From the above graph it is observed that the out of 150 respondents, maximum respondents belongs to the income level of Rs25000 - Rs.50000 i.e., 38.70% and the minimum respondents belongs to the income level of Rs. Above 5lakhs i.e., 7.3%.

**e) Family Members Dependency of Respondents.**

| Sl.no | Number of Dependents | No of Responses | Percentages |
|-------|----------------------|-----------------|-------------|
| 1     | 2                    | 62              | 41.3%       |
| 2     | 4                    | 57              | 38%         |
| 3     | 5                    | 21              | 14%         |
| 4     | 6 and more           | 10              | 6.7%        |
| **Total** |              | **150**         | **100%**    |

**Graphical Representation**

![Number of Dependents Graph](Image)

**Table no – 4.1.5**

i) **Interpretation:** From the above graph it is observed that the out of 150 respondents, maximum respondents having family dependents of 2 members i.e., 41.3% and minimum respondents having family dependents of 6 members i.e., 6.7%.
B. Objective 2
To study the awareness of insurance policies among the individuals.

1) Individuals are Having Insurance Policies or Not.

| Sl.no | Options | No of Responses | Percentages |
|-------|---------|----------------|-------------|
| 1     | Yes     | 103            | 68.7%       |
| 2     | No      | 47             | 31.3%       |
| Total |         | 150            | 100%        |

**Graphical Representation**

![Graph showing individuals having insurance policies or not](image)

**Interpretation:** From the above graph it is observed that the out of 150 respondents, majority of the respondents are having insurance policies i.e. 68.70% and the remaining 31.30% are not having Insurance policies.

2) Type of Policy Individual is Aware Of

| Sl.no | Options     | No of Responses | Percentages |
|-------|-------------|----------------|-------------|
| 1     | Health      | 60             | 40%         |
| 2     | Life        | 50             | 33.33%      |
| 3     | Fire        | 15             | 10%         |
| 4     | Child education | 15         | 10%         |
| 5     | others      | 10             | 6.66%       |
| Total |             | 150            | 100%        |

**Graphical Representation**

![Graph showing type of policy individual is aware of](image)

**Interpretation:** From the above graph it is observed that the out of 150 respondents, most of the respondents are aware of health insurance i.e.,40% , followed by life insurance i.e., 33.33%, then fire insurance i.e., 10% , child education i.e., 10%. But 6.66% of respondents are aware of other insurance policies.
C. Objective 3
To study the reason for choosing insurance policy.

1) Reasons for Choosing Insurance Policies.

| Sl.no | Reasons for choosing insurance policies | No of Responses | Percentages |
|-------|-----------------------------------------|-----------------|-------------|
| 1     | Risk avoidance                          | 100             | 66.66%      |
| 2     | Health                                  | 15              | 10%         |
| 3     | Education                               | 5               | 3.33%       |
| 4     | Saving objective                        | 10              | 6.67%       |
| 5     | Tax benefits                            | 10              | 6.67%       |
| 6     | others                                  | 10              | 6.67%       |
| Total |                                        | 150             | 100%        |

Graphical Representation

Table no – 4.1.11

i) Interpretation: From the above graph it is observed that the out of 150 respondents, most of the respondents chosen insurance policy in order to avoid risk i.e., 66.66%, followed by health insurance i.e., 10%, education plan insurance i.e., 3.33%, saving objective i.e., 6.67%, tax benefits i.e., 6.67% and others i.e., 6.67%.

2) Individual First Priority for Choosing Insurance Policies.

| Sl.no | Individual first priority for choosing insurance policies | No of Responses | Percentages |
|-------|----------------------------------------------------------|-----------------|-------------|
| 1     | Risk avoidance                                          | 70              | 47%         |
| 2     | Returns                                                 | 10              | 7%          |
| 3     | Investment                                              | 15              | 10%         |
| 4     | Savings                                                 | 30              | 20%         |
| 5     | Tax benefits                                            | 20              | 13%         |
| 6     | others                                                  | 5               | 3%          |
| Total |                                                         | 150             | 100%        |
Graphical Representation

**Individual first priority for choosing insurance policies**

Table no – 4.1.12

i) **Interpretation:** From the above graph it is observed that the out of 150 respondents, most of the respondents chosen first priority as risk avoidance i.e., 46.66%, followed by returns i.e., 6.66%, investments i.e., 10%, saving objective i.e., 20%, tax benefits i.e., 5% and others i.e., 3.33%.

D. **Objective 4**
To study the impact of risk on investment decisions.

1) **Individual Would Make Investment Decisions**

| Sl.no | Investment Decision | No of Responses | Percentages |
|------|---------------------|-----------------|-------------|
| 1    | Yes                 | 108             | 72%         |
| 2    | No                  | 41              | 27.3%       |
| 3    | Maybe               | 1               | 0.7%        |
| Total|                     | 150             | 100%        |

Graphical Representation

**Investment Decision**

Table no – 4.1.13

i) **Interpretation:** From the above graph it is observed that the out of 150 respondents, maximum respondents will take investment decisions based up on the risk impact on it i.e., 72% and minimum respondents will not choose investments as they do not want to take any type of risk i.e., 22.30%. But only 0.70% may or may not consider the impact of risk on their investment decisions.
2) **Individual Preferred Insurance Investment Plan**

| Sl.no | Preferred Insurance | No of Responses | Percentages |
|-------|---------------------|----------------|-------------|
| 1     | Health              | 70             | 46.6%       |
| 2     | Life                | 60             | 40%         |
| 3     | Fire                | 5              | 3.33%       |
| 4     | pension             | 10             | 6.66%       |
| 5     | others              | 5              | 3.33%       |
| Total |                     | 150            | 100%        |

**Graphical Representation**

**Preferred Insurance**

- Health: 47%
- Life: 40%
- Fire: 3%
- pension: 7%
- others: 3%

**Table no – 4.1.15**

i) **Interpretation:** From the above graph it is observed that out of 150 respondents, most of the respondents preferred health insurance i.e., 46.6%, followed by life insurance i.e., 40%, then fire insurance i.e., 2.70% and others i.e., 20%. But 0.7% of respondent has not chosen any of the insurance policies.

**E. Objective 5**

To know the satisfaction among the individuals during claims.

1) **Individual Opinions Towards Insurance Claims At The Time Of Damages Caused**

| Sl.no | Opinions on insurance claims | No of Responses | Percentages |
|-------|------------------------------|----------------|-------------|
| 1     | Satisfied                    | 98             | 65.3%       |
| 2     | Very Satisfied               | 34             | 22.7%       |
| 3     | Neutral                      | 12             | 8%          |
| 4     | Dissatisfied                 | 6              | 4%          |
| Total |                              | 150            | 100%        |

**Graphical Representation**

**Opinions on insurance claims**

- 1: 65%
- 2: 23%
- 3: 8%
- 4: 4%

**Individual opinions towards insurance claims**

Table no – 4.1.18

i) **Interpretation:** From the above graph it is observed that out of 150 respondents, majority of the individuals are satisfied with the policy they have chosen i.e. 65.3%, very satisfied i.e. 22.7%, Neutral i.e. 8%, dissatisfied i.e. 4%
III. FINDINGS, SUGGESTIONS AND CONCLUSIONS

A. Findings
1) Most of the respondents belong to the age between 25-35 i.e. 59.3% compared to the age group 36-55 i.e. 24% and 10.7% and above 55 are 6%.
2) Majority of the respondents are having insurance policies i.e. 68.70% and the remaining 31.30% are not having insurance policies.
3) Most of the individuals are aware of health insurance i.e. 40%, life insurance i.e. 33.33%, Fire insurance i.e. 10% and 6.6% of individuals are aware of other policies.
4) It is also observed that most of the individuals are having health and life insurance i.e. 26.6% and 16.66% and 35.48% have not chosen any policy.
5) This study states that the reason for choosing insurance policy is to avoid risk i.e. 64.5%.
6) It also indicated that the priority of individuals for choosing an insurance policy is to avoid risk in future i.e. 47% when compared to investments, tax savings, returns and others.
7) It is also observed that 72% of individuals make investment decisions based upon impact of risk and 27% will not go for any investment decisions, 0.7% may choose for investment decisions.

B. Suggestions
1) As risk is uncertain and unpredictable all individuals should predict risk in future by analyzing and managing.
2) It is suggested from the above study that insurance companies need to encourage female individuals to take more policies as the percentage is less when compared to male individuals i.e. 39.3%.
3) It is also observed that the age group between 36-55 and above 55 are not taking policies more i.e. 24%, 10.7% and 6%. The insurance companies need to bring more awareness to these age groups individuals in order to take policies to avoid risk in future.
4) It is also observed that 27.3% people are not predicting risk in future. So it is suggested that individuals should predict risk in order to reduce their risk in future to avoid large amount of loss.

C. Conclusion
This study had made an attempt to understand risk analysis and risk management in investing in insurance sector. It is also observed that most of the people are buying more health and life insurance policies because to avoid risk in future as future is uncertain. The government of India has taken certain measures in insurance sector which will provide protection to the people in rural areas.

BIBLIOGRAPHY
[1] https://www.myinsuranceclub.com/articles/insurance-industry-in-india-e28093-an-overview
[2] https://quizlet.com/75154611/fin-ch-1-flash-cards/
[3] https://www.academia.edu/2454569/a_study_on_the_growth_of_indian_insurance_sector
[4] https://www.mbaknol.com/investment-management/evolution-and-development-of-life-insurance-in-india/
| Question | Options |
|----------|---------|
| 1) **Age** | a) 25 – 35  
   b) 36 – 45  
   c) 46 – 55  
   d) Above 55 |
| 2) **Gender** | a) Female  
   b) Male |
| 3) **Occupation** | a) Business  
   b) Employee  
   c) Retired  
   d) Others |
| 4) **Income level** | a) 25000 – 50000  
   b) 50000 – 100000  
   c) 100000 – 500000  
   d) Above 500000 |
| 5) **Family member dependency** | a) 2  
   b) 4  
   c) 5  
   d) 6 |
| 6) **Do you have insurance policies** | a) Yes  
   b) No |
| 7) **Are you aware of insurance policies in the market** | a) Health  
   b) Fire  
   c) Life  
   d) Others |
| 8) **What is the reason for choosing insurance policy** | a) Risk avoidance  
   b) Education  
   c) Tax Benefits  
   d) Health  
   e) Saving Objective  
   f) others |
| 9) **What is your first priority for choosing insurance policies** | a) Risk avoidance  
   b) Investments  
   c) Tax Benefits  
   d) Returns  
   e) Saving Objective  
   f) others |
| 10) **Would you make investment decisions based upon impact of risk** | a) Yes  
   b) No  
   c) Maybe |
| 11) **What is your preferred insurance investment plan** | a) Health  
   b) Life  
   c) Pension Plan  
   d) Others  
   e) Fire |
| 12) **What is your opinion towards insurance claim at the time of damages caused** | a) Satisfied  
   b) Very satisfied  
   c) Neutral  
   d) Dissatisfied |