The Role of Operational Auditor Toward the Insurance Technical Computing (Actuarial)

Alireza Roozbahani

PhD student in Accounting, Islamic Azad University, Research Sciences Branch, Iran Audit Organization. Iran.

Actuarial Concept and the Role of Actuarial in Insurance Industry:
An actuary is a business professional who deals with the financial impact of risk and uncertainty. He should be master in the chance nature of the insurance, risks in asset, and use of statistical models. Using the actuary experience can be a key component in the activities of insurance companies and auditors.

The actuary activities conclude recognizing the possibilities of insurance risks, use of statistical models, and use of calculated cash flow. Actuaries advise senior managers as well as using the above skills. Regarding the fact that operational auditing has the goal of presenting advice in decision making process of manages and improving their performance, so both of them have the same purpose [1].

Advisory Role of Actuary:
When the actuary system is used, it is necessary to determine the activity field and the advisory field in insurance company. The actuary should advise in the field of technical comments. Some of the fields in which the actuary gives advice are: Premium levels, Adequacy of risk management, Reinsurance actions, Investment policies, Statistical conclusions, Test cases and its impact on the present and future tense Financial Insurance Company.

The conditions of giving advice to insurance companies are different in different countries. In addition, there are so many differences in the way of cooperating of actuaries with each other and accessing to related data and studies to actuary science. These conditions are determined by supervisor organizations and legal authorities.

In all countries in which life insurance is used in their actuary system, there are conditions for giving advice.

In life insurance, the conditions of giving advice are very diverse. For example, in some countries, it is expected from the actuary to determine the insurance premium, Terms and conditions of insurance contracts, the methods of evaluating risk, Adequacy of reinsurance obligations, Investment policies, determination of benefit sharing, and the amount of dividends paid to policyholders. Transferring the profit or returning the investment to shareholders can be a part of the actuary activity. In many cases, the advices are formal and written form [1].

In most countries, to provide advice on non-life insurance, it is necessary for actuary to comply with some obligations. Type of counseling is different in different countries; for example, in some countries, the actuary is hired in the field of insurance premium, the methods of evaluating risk, conditions of reinsurance insurance, and controlling the risk.

In some countries, the actuaries are testing and providing the related results to the potential effects on the current and future financial conditions. They present the information in a report to the manager, board of managers and the supervisor organization.

Corresponding Author: Alireza Roozbahani, PhD student in Accounting, Islamic Azad University, Research Sciences Branch, Iran Audit Organization
E-mail: roozbahani.1985@chmail.ir
It is necessary that in some cases, the actuaries have access to the members of management board directly. Also, the actuaries can be used in giving advice in the field of risk management and certain auditing issues [2].

The Relationship Between Operational Auditor and Actuaries:

In investigating the financial accounts of insurance companies, the operational auditors should consider the governmental and technical comments and circulars. It is necessary to have credible information as a basis in calculating the technical comments. The invited auditor's role in detecting the validity of the information is very important. Comments calculation requires expertise, methods, and particular techniques and actuaries usually benefit from them. In some cases, the auditing companies hire actuaries. Additionally, the independent auditors who didn’t pass the above special course benefit from actuaries in investigating the methods, techniques, and calculating the comments of insurance companies. This kind of independent cooperation and counselling of actuary leads to this issue that the operational auditors obtain the desired information and result on comments. Despite the difference between the legal authorities related to operational auditors and actuaries, the type of work and activity are close and related to each other.

Especially the relationship between auditors and operational and actuaries, increases due to the following:

- If we provide a certain definition of the relationship between actuaries and operational auditors.
- If we provide the field and introduction of making a formal relationship between actuaries and operational auditors.

The relationship between actuaries and independent auditors can be determined by establishing specific regulations or guidelines. For example, in Canada, there is an agreement between the profession of actuary and auditory. According to that, it is necessary to have formal letter for stating and determining their areas of activities.

It should be said that if an actuary is hired, it is necessary to determine his/her duties and responsibilities and also his/her rights and obligations. If the actuary is not hired, the auditor should have access to the adequate actuarial resources for doing investigations and tests.

When the actuarial system is used, the auditors should investigate the accuracy of information and reports of actuaries and they shouldn’t solely rely on actuaries’ information.

Significance of Research:

In addition to present the role and duties of actuaries, it is necessary to investigate the role of operational auditors in supervising models. Providing the financial accounts of insurance companies including the determined accounts on behalf of the independent auditors is the responsibility of managers. The main role of the operational auditors can be the comparison and providing counseling in presented financial accounts in certain financial frameworks and standards including auditing standard entitled “Retirement Benefit Plans”. This comparison and counseling may be led to accreditation to the financial statements of company. It is not only accepted by supervising organization, but also it is accepted by shareholders, policyholders, rating agencies, and tax authorities. Even, the presence of actuaries in setting the financial accounts will not prevent the presence of operational auditors for this issue.

Research Questions:

This research points to two questions:

1. Is it necessary to do operational audit investigation to the reports of the actuaries’ calculations?
2. Is operational audit investigation effective in assurance and accuracy of the actuarial calculation documents?
3. Is operational audit investigation effective I assurance to the actuarial calculation?
4. Is operational audit investigation is effective to actuarial calculation in decision-making of the manager?

Method, Statistical Population, Sample Group, Collecting Instruments:

Here, an experimental plan has been used which considers 3 modes. In this section, the details of participants, data, variables, and the research methods are studied.

This population consists of 54 auditors who are selected randomly. 49 usable answers are received. All of them participate in this study equally and due to some reasons, 7 auditors were removed from this research.

The participants include the senior and experienced managers of auditing organizations. Additionally, 95% of them were graduated from auditing and at least they have B.A. degree.

In this study, univariate analysis of variance (ANOVA) was used for comparison of concepts of each group for our various researches.

Discussion and Conclusion:

It should be noted that the measurement of auditor is a kind of confirmation for the reports of actuary and the function of confirmation originally is for assurance and making conclusion about the accuracy of documents and calculations of the actuary. It can be said that the obtained results can be seen in Table 1. Large difference
between sig=0.309 and f=1.240 and also the greater amount of f here shows that there is a huge amount of effect in this report (auditor) on assurance and making confidence and also a confirmation seal on the effect of accuracy of actuarial calculations.

**Table 1: Analysis of variance (ANOVA) of research questions.**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>q2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>3.476</td>
<td>3</td>
<td>1.159</td>
<td>1.240</td>
<td>.309</td>
</tr>
<tr>
<td>Within Groups</td>
<td>35.500</td>
<td>38</td>
<td>.934</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>38.976</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1.241</td>
<td>3</td>
<td>.414</td>
<td>.235</td>
<td>.871</td>
</tr>
<tr>
<td>Within Groups</td>
<td>66.878</td>
<td>38</td>
<td>1.760</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>68.119</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>7.682</td>
<td>3</td>
<td>2.561</td>
<td>2.356</td>
<td>.087</td>
</tr>
<tr>
<td>Within Groups</td>
<td>41.294</td>
<td>38</td>
<td>1.087</td>
<td></td>
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<tr>
<td>Total</td>
<td>48.976</td>
<td>41</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

In addition to the fact that making assurance in actuarial calculations has this function that retirement funds should provide a clear picture of income and expenses at the time of Deficit and integration with other pension funds to pay debts; therefore, the role of operational auditing in confirming the accuracy of presented information and calculations for the transferred funds. Moreover, if the logical and reliable documents, evidence, and calculation is provided, Transferor and transferee funds and the agreements between them will be done more carefully and with more accurate and complete information and they can perform more confidently. The obtained results in above tables in q2 and q4 represented this issue.

**REFERENCES**

[2] Regulation Number 78- the regulation of actuary of formal insurance. Insurance Council article 17, the law of the establishment of the Central Insurance of Iran and the insurer and According to Article 114, Fifth Five Year Development Plan of the Islamic Republic of Iran.