



## Analyzing the Effective Factors on Internal Audit Quality of Health Insurance Organization of Iran

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### Abstract

The purpose of this study is to investigate the factors affecting the quality of internal audit of health insurance organization. This applied research is a descriptive-correlational study. The statistical population of the study includes all senior managers and senior health insurance experts, which is 440 people. Sampling method in the present study is the available sampling, because the statistical population is limited. Morgan table was used for sampling. The sample size was calculated for 200 people using the Morgan table. Data analysis in this research is done by descriptive statistics and inferential statistics. Descriptive statistics are used to extract information about demographic data such as age, gender, work experience etc. The research tool has been adjusted in 22-item questionnaire with 5 dimensions in Likert scale. Descriptive and inferential correlated t statistics were used to analyze the data using spss software. Findings indicated that experience related to accounting, education, training and outsourcing has a direct and significant impact on internal audit quality. Also, for the importance and priority of the importance of the impact of factors affecting the quality of internal audit, Friedman test has been used that employee training is more important than other factors.

### Key words

Experience, Education, Training, Outsourcing, Audit Quality, Health Insurance of Iran

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### 1. Introduction

The qualitative growth and increasing complexity of service, business and industrial activities, and the pressure from the lack of resources and increased competition to absorb the resources needed by the units in the modern world in recent decades have led the capital owners to be unable to direct the companies and the management of commercial units to be transferred to people other than their owners. The separation of ownership from management, in turn, has increased the need for specialized people who are able to audit financial statements of units with extensive and complex activities (Auditing instructions, No. 95, March 2014).

Executive and non-executive directors have the responsibility of pressures, threats and dangers to fulfill their duty of stewardship to the owners of the capital. In this regard, managers of large institutions, unlike the owners and managers of small institutions cannot be aware of all the details of the affairs.

The main reason that managers of large institutions cannot be aware of the details of the issue is the large number of employees, different departments, variety of operations, and the existence of different stages of production and products in such institutions. Therefore, these general policies are necessary to be

communicated in regulations, methods and instructions to the Chief Executive Officers of different departments. Hence, this delegation of responsibilities, creates a significant gap between executives and the operations led by them. In this situation, management will require the full-time service of people who constantly review and report all stages of the institution's operations as an observer and administrative analyst. These people should be aware about the details of the policy of managers, organization, methods, and regulations of the human resources and, finally, the actual facilities of the institution.

Therefore, the presence of internal controls for identifying, modifying, evaluating and controlling the steps, on the one hand, the legal requirements of the economic units on the other, which must be also properly observed, is essential. Therefore, an internal control system must be established to identify and control the extent to which such legal requirements are observed. Internal auditing is an independent assessment of the economic unit that is created by its management to examine the internal control system and reports the adequacy of the internal control system in terms of appropriateness, economics, effectiveness and the necessary effectiveness in using resources, tests, assessments, etc. Getting sure that the consumption of public funds has been spent properly and economically efficient, effective, and in the interests of society, has an essential role. In summary, internal auditing is considered as an important part of an effective management in all economic units and it is necessary according to auditing instructions and considering the widespread necessities of accountability in the use of resources, especially public resources, it is not possible to provide rational justification for the lack of internal auditing, even in small institutions. The existence of internal auditing is one of the conditions for the efficient operation of economic institutions. There are many managers who try to rely on the performance of internal auditors to improve their performance and achieve organizational goals. Commercial failures and economic scandals, in recent years, have drawn the attention of managers to issues of protecting, controlling, maintaining, and managing effective economic institutions. Since the main responsibility for protecting assets, preventing mistakes and exploits and discovering them is exclusively on management, so this responsibility requires the establishment of appropriate internal controls, including internal auditing. The quality which determines the auditing function depends on two factors associated with the auditor's performance, including the ability of the auditor (including knowledge, experience, compliance and technical performance), and professional performance (including independence, objectivity, professional careers, conflict, interests and judgments). The audit quality structure is multidimensional but intangible, therefore it is very difficult to measure (Factors affecting independent audit quality, Mojtahed *et al.*; Winter, 2004).

Finally, it can be stated that a system or set of controls, whether financial or non-financial, is intended to provide reasonable assurance of the proper functioning or fulfillment of the following.

1. The effectiveness or efficiency of the operations;
2. Reliability of the financial information and reporting;
3. Observance of laws and regulations (domestic and national).

Therefore, the administrative department or organization that controls and evaluates the function of the above definition can be defined as internal auditing.

With respect to the above items and the necessity of establishing a unit under the name of internal auditing in any administrative-commercial and industrial system in the Health Insurance Organization of Iran, since its establishment in 1995 as a single health insurance organization established by the name of the Internal Audit Office, which has the mentioned responsibilities and is considered as a supervisory and control arm for the CEO and board of directors. It seems that administrative systems, especially the public sector, especially the Iranian Health Insurance Organization, are facing administrative change and improving the quality of performance appraisal. In the meantime, if the aforementioned companies, especially their internal auditing, do not update itself, it lags behind science and technology. Therefore, in coordination with our desired organization, we would seek to assess the compliance of the audit services with the requirements and legal standards in order to determine the quality ratio of the services provided in order to determine the quality of the internal auditing services of the organization. Considering the raised issues, can we refer to effective factors on the quality of internal audit in Iran's health insurance organization, to be factors such as: 1. relevant experience 2. related education 3. personnel training 4. outsourcing a part of the internal auditing tasks to improve the quality of internal auditing reports in these surveys.

## 2. Literature review

Auditing quality, in most of the empirical research on audit quality is somewhat defined in relation to auditing risk. Auditing risk is the risk that the auditor presents an invalid view about the financial statements containing important misstatement. For example, Di Angelo 1981 defines the quality of auditing as the probability of a market assessment from (a) important misstatement distortions not disclosed by the auditor; and (b) reporting the distortions. Most of the other definitions of auditing quality, despite the differences, reflect some of the features of Di Angelo.

De Angelo's definition illustrates the critical attribute of understanding the audit's impact on financial statement information. The statement of basic audit concepts addresses the auditor's ability to control the quality of production information or to ensure compliance with accounting accepted principles. In accordance with section (a) from the definition of De Angelo, this issue is related to the competence of the auditor or the ability to detect material distortions. Part (b) of the above definition, means the probability of reporting the distortion, is subject to the auditor's independence. Because the conflict of interests between users and providers of information has led to an increase in demand for auditing, so independence should be a fundamental feature of the audit. The degree of competence (competence) and independence of the auditor are dependent on the components of audit quality. An important point in the definition of De Angelo is that this definition takes place in the context of market-oriented probabilities. Hence, this definition depends on the market understanding of whether the auditor is adequately audited by the audit engagement, as well as the level of understanding of the auditor's independence. De Angelo, with the introduction of the concept of market understanding, changes the competence and independence of the auditor to emphasize the components of audit quality.

Lobo and Zhao (2013) in a research entitled "The relationship between auditor's effort and distortion in financial statements" examined the contradiction between theoretical predictions (the existence of a negative relationship between the quality of audit and the renewal of financial statements), and experimental findings (the existence of a positive relationship between the quality of audit and the renewal of presentation of financial statements); that know this contradiction firstly attributable to the inability of empirical research in controlling the risk of adjustment by the auditor and secondly due to the lack of consideration of the experimental investigations, in isolating the renewing of audited financial reports from renewing the provision of non-audited reports. Both of these cases make the relationship between the quality of audit and its subsequent renegotiations, to a positive relationship, mistrust. After the correction of these two sources of diversion, they found a strong and negative correlation between the audit effort and the renewal of the presentation of the annual report.

Ettredge *et al.* (2012) examined the relationship between refinancing the presentation of profit in the financial statements and accounting conservatism. In this study, they sought to find a relationship between the renewal of profit presentation and accounting conservatism. This research was conducted by reviewing 2132 companies during 1999-2006. In their study, they used the benchmark presented by Basu (1997), which could illustrate the link between renewing profit presentation and conservatism. The results of their study indicated that the level of conservatism increases in the period following the period of increasing profit. In their cross-sectional analysis, they concluded that in the period of profound profitability, the conservatism of the tested companies is less than the conservatism of the controlling companies, and in the after-profit period, the conservatism of the tested companies is greater than the conservatism of the control companies.

Albring *et al.* (2012) investigated the changes in the growth of companies after the renewal of accounting presentation in their research entitled "The effect of renewing the provision of accounting on the growth of the company". The results of the study indicate that after the renewal of accounting, companies' growth decreases and especially the growth rate of investments that are financed from outside the company. In addition, their research suggests that this reduction is greater for firms the renewal reason of which is cheating, rather than for companies that are renewing the presentation due to the correction of mistakes. Chang *et al.* (2011) examined whether companies were adopting more conservative profit-sharing strategies after announcing a renegotiation. Their research results indicated that renewing firms rarely, in the year following the renegotiation, have a similar conservative level with controlling companies.

Indeed, according to their results, companies that refinance due to an over-representation of assets or earnings or a diminution of debt or expenses, make more conservative accounting practices than controlling companies a year after they are renegotiated. The research also indicates that firms adopt a cautious (non-conservative) accounting strategy in the pre-renegotiation period, which gradually decreases in earnings management gradually in the near future when the renegotiation notice is issued. From the combination of the two above-mentioned issues, they claim that refiners, in the period before and after the renegotiation, are reversed by the behavior of discretionary accruals, which is more reversed in firms that have renewed presence. By more rigorous renegotiation we mean renegotiations with high price or those which overshadow more accounts.

### 3. Methodology of research

#### 3.1. Questions and hypotheses

According to theoretical foundations, the following questions arise from this research:

- Does the audit-related experience affect the quality of internal auditing?
- Does auditory-related education have an impact on the quality of internal audit?
- Is personnel training effective in internal audit quality?
- Is outsourcing a part of the auditing responsibilities is transitional in affecting the quality of internal auditing?

To answer the research questions, the following hypotheses have been raised:

*H1: The audit-related experience has an impact on the quality of internal auditing.*

*H2: Audit-related education has an impact on the quality of internal auditing.*

*H3: Personnel training is effective in the quality of internal auditing.*

*H4: Outsourcing a part of audit functions is effective in the effectiveness of internal audit quality.*

#### 3.2. Statistical population

Some of the desired elements that have at least one specified attribute are called as the statistical population. Characteristic attribute is an attribute that is common among all the elements of a statistical society and distinguishes the statistical society from other societies (Momeni Azar, 2004). The statistical population of the study includes all senior managers and senior health insurance experts, which is 400 people.

#### 3.3. Sample and sampling

Considering that the exact number of managers and senior financial experts in Iran's health insurance organization is clear, the sampling method is available sampling in the current study, due to the fact that the upper statistical population is limited, we will use the Morgan table for sampling. The sample size was calculated to be 128 using Morgan table.

#### 3.4. Conceptual model of the research

In this study, factors affecting the audit quality of the dependent variables and related experience variables, related education, personnel training and outsourcing the independent variables of the research.

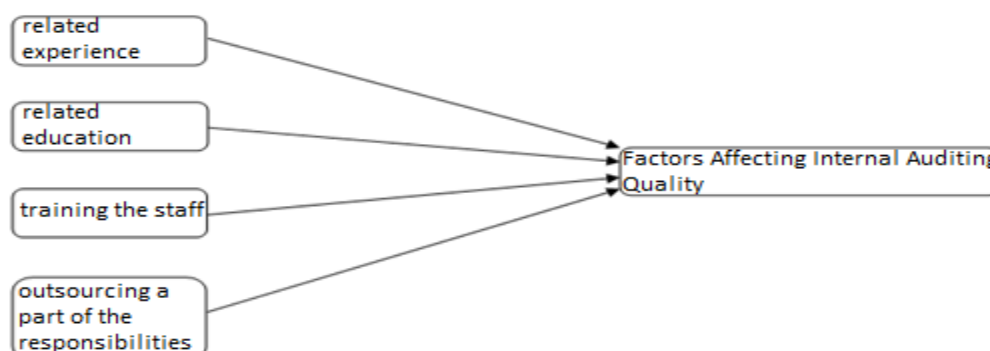


Figure 1. Conceptual model of the research

#### 4. Data analysis

The assumptions for testing the normality of the data are as follows, where being greater than and equal to 0.05 indicates normality and less than 0.05 indicates the abnormality of the variable.

*H0: Distribution of ranking in the sample is the same (the distribution is normal).*

*H1: Distribution of rankings in the sample is not the same (the distribution is not normal).*

Where the test values are indicated in Table 1.

Table 1. Normality test of the structures

Structure	Number	Test parameters		Sig.	Value of statistics
		Mean	SD		
Related experience	128	3.70	0.966	0.08	0.114
Education	128	3.75	0.852	0.20	0.059
Training the staff	128	3.78	0.844	0.10	0.110
Outsourcing	128	3.37	1.025	0.58	0.088

If the value of the significance level is greater than the error value of 0.05, we conclude H0, and if the value of the significant level is less than the error value of 0.05, then we conclude H1. Since the value of the significance level in all variables is larger than the error value of 0.05, then we conclude H0, that is, the variables of the research are all normal and it is necessary to use parametric tests. After normality of the data, we will examine the results of the assumptions that are mentioned in Table 2.

Table 2. Results of the research hypotheses

Hypothesis	T	Sig.	Result
The audit-related experience has an impact on the quality of internal auditing.	15.710	0.000	Approved
Audit-related education has an impact on the quality of internal auditing.	14.452	0.000	Approved
Personnel training is effective in the quality of internal auditing.	14.060	0.000	Approved
Outsourcing a part of audit functions is effective in the effectiveness of internal audit quality.	84.926	0.000	Approved

Friedman test has been used to study the importance and prioritization of the significance of the factors affecting the internal audit quality. The results are as follows:

Table 3. Results related to prioritizing the factors affecting the quality of the audit

Variable	Average ranking	Conclusion (rank)
Training staff	3.69	1
Outsourcing	3.41	3
Education	3.46	2
Related experience	3.34	4
Chi-Square	1802.303	
Df	6	
Sig.	0.000	

#### 5. Conclusions and suggestions

An important issue with regard to defining the quality of an audit is whether there is a distinction between the quality of the auditing firm and the quality of the auditing. Several studies, including Clarkson, (2000), Colbert and Murray (1998), did not distinguish such a distinction but used these concepts interchangeably. Under certain conditions, the quality of the auditing firm and auditing quality may be used interchangeably. According to the important assumptions in the definition of De Angelo (1981), when the auditor provides only one level of quality of audit services, the quality of the auditing firm and auditing

quality may be of the same type and be combined. While Lam and Chang argued that auditing quality should be defined based on the type of service, because an auditing company cannot perform the entire auditing at a similar level of quality. The quality of the auditor is defined as the overall quality of auditing services in all audits of the institution. However, the auditing quality should be defined separately for each auditing work, because the auditing firm may not conduct all its audits at the same quality level; in other words, the quality of the auditor is based on the quality assurance concept of the audit firm, while auditing quality is based on the concept of the true quality of each auditing activity; therefore, the distinction between these two concepts is essential in research on auditing quality. The actual and perceived auditing qualities are two separate concepts because the quality of the actual audit is not observable and can only be assessed after auditing. For example, Palmrose measured the actual auditing quality using the auditor's litigation activities. Deis and Giroux (1992) used quality control reports to measure the actual auditing quality in the public sector. The assessment of actual auditing quality of Krishnan and Schauer's (2000) is based on how auditing financial statements is accepted with the GAAP reporting requirements. Deis and Giroux and Krishnan and Schauer's will carry out an assessment of the actual auditing quality in the nonprofit sector. The results of the non-profit sector studies may not be generalized in the profit-making sets; therefore, the results have a generalizability problem. According to the explanations presented here, we will examine the limitations of the present research, and then we will provide suggestions and solutions:

They must criticize the results of the research and criticize for their own research and the others'. Apparently, the world which is given to us for study is not a 100% true or false world. Nothing can be proved with absolute certainty in empirical sciences, and the theoretical principles are neither confirmable, nor refutable nor unpredictable. The present research is not an exception to the above and has limitations that make the results be stated cautiously. Limitations and problems that exist in the implementation of this research and should be considered while interpreting the research findings and its generalization are as follows:

1. The statistical population of this study was the directors and senior experts of Iran health insurance company; it is suggested to future researchers, to conduct researches in other cities and compare their results with the results of this research.

2. The existence of cultural and economic-social differences in which perceptions of individuals changed the questions in the questionnaire.

3. The lack of cooperation by some people in answering the questions.

Here are some suggestions and solutions:

- Based on the findings of the first hypothesis, it is recommended to the audit firms to oversee these employees and thus increase their experience in order to increase their audit quality with an increase in the number of employees.

- According to the findings of the second hypothesis, the auditing firms are recommended to increase their senior staff in order to increase their auditing quality so that they can be better treated by increasing time and with a better division of labor.

- Based on the findings of the third hypothesis of the research regarding the effect of employee training on auditing quality, the auditing firms are recommended to increase the quality of its services to staff training and, moreover, use specialist staff that can train other staff.

- In line with the findings of the fourth hypothesis of the research, the auditing firms are recommended to expand their customer portfolios for maximum quality audits to increase their independence to the clients.

## References

1. Albring, P. M., W. Ge, C. R. Larson, and Sloan, R G. (2012). The effect of renewing the provision of accounting on the growth of the company, *Contemporary Accounting Research*, Vol. 28, pp. 17-82.
2. Auditing Instruction (2014). Internal Audit Performance Assessment, Audit Standard No. 95.
3. Basu, J. (1997). Using financial and market information to identify pre-engagement factors associated with lawsuits against auditors, *The Accounting Review* 66, pp 516-533.

4. Chang, R, N. and Maher, J.J .and Fleming, D.M. (2011). Whether companies were adopting more conservative profit-sharing strategies after announcing a renegotiation?, *The Accounting Review*, Vol. 2, pp. 389-413.
5. Clarkson, M. (2000). Client industry audit expertise: towards a better understanding, *Pacific Accounting Review*, Vol. 20, pp. 49-62.
6. Colbert, R.N. and Murray, J.J. (1998). *Journal of Accounting, Auditing & Finance*, vol. 13, Issue 2, April 1998, pp. 135-150.
7. DeAngelo, L. (1981). Auditor size and audit quality. *Journal of Accounting and Economics*, Vol. 3, pp. 183-99.
8. Deis, N. and Giroux, S. (1992). The impact of performance-based compensation on misreporting, *Journal of Financial Economics*, Vol. 79, pp. 35-67.
9. Ettredge, Y., L. Myers, A. and Omer, T.C. (2012). The relationship between refinancing the presentation of profit in the financial statements and accounting conservatism. *Contemporary Accounting Research*, Vol. 29, pp. 956-990.
10. Krishnan M.A. and Schauer's K. (2000). Auditor tenure and audit reporting failures, *Auditing: A Journal of Practice & Theory*, Vol.21, Issue 1, pp. 67-78.
11. Lam, E. M. and Chang, R. (2008). Fraud Detection: A Theoretical Foundation, *The Accounting Review*, Vol. 67, pp. 753-782.
12. Lobo, K.L., and T.L. Zhao. (2013). The relationship between auditor's effort and distortion in financial statements. Working paper. Georgetown University, Vol. 22, pp. 54-937.
13. Mojtahed Z.M. (2004). Factors Affecting Independent Audit Quality, *Official Accounting Journal*, Winter Vol. 88, pp. 35-67.
14. Momeni, I. and Azar, S.A. (2004). Investigating the Relationship between Disclosure Quality and Earnings Management, *Fassaname Accounting and Auditing Reviews*, No. 55, pp. 134-117.