

The Impact of Internal Control Components on the Reliability of Financial Information

Zahra Safi¹, Abdollah Ramezani², Mohammad Nazaripour³

¹Student Master, Accounting Department, University of Kurdistan, Sanandaj, Iran. Email: Safi.nafir@gmail.com

²Doctorate of Business Administration (DBA), Tebran University, Tebran, Iran. Email: ind.auditor@gmail.com

³Assistant Professor, Accounting Department, University of Kurdistan, Sanandaj, Iran. Email: mnazaripour@yahoo.com

ABSTRACT

Internal control system is implemented by the management or those charged with governance to assure that entity's objectives regarding reporting, compliance with applicable laws and effectiveness and efficiency of operations is achieved. In the financial sector, the success of internal control depends on the reliability of financial information. The purpose of this study is to investigate the impact of internal control components on the reliability of financial information. The population of this paper is Retailers, Food, Pharmaceutical and Healthcare Industries and the period of this study is the summer 2014. The needed data was gathered through questionnaire. In order to test the hypotheses, Chi-square test was used. According to the research results, there is a meaningful relationship between the components of internal control (including the control environment, risk assessment, control activities, information & communication, and monitoring) and the reliability of financial information. Among the components of internal control issues such as: leadership style, law & regulation, audit committee, adequate internal control structure, protection of assets and documentation, using external & internal auditors, accounting information systems have more impact on increasing the reliability of financial information. Besides, the issues such as: organizational chart, industrial design, industry rules, responsibility system and position of organization have least impact on the reliability of financial information.

Keywords: Internal Control, Control Environment, Risk Assessment, Monitoring and Iran.

1. IMPORTANCE AND REASONS FOR CHOOSING THE TOPIC

Economic companies develop over the time in terms of size and complexity of the activity so that the direct and individual control of them will be impossible. Users evaluate carefully the time of using and rely on that information, frequency, type, and effectiveness of internal controls. These companies have legal

requirements that should work according to them. Mentioned cases and the task of protecting the value of shares and assets and providing the optimal solution for increasing profits, which is the responsibility of managers, caused that they use the most effective information system and internal control methods. Broadcasting companies develop because they broadcast things, which are part of people's daily necessities while there is no complete system that meets all the needs for accounting and each company cost a lot for preparing a special information system. It is clear that working with designed system and achieving goals by that system, as well as the accuracy of the information provided by them requires suitable internal control. In this research, we studied the relationship between effectiveness of the internal control components of broadcasting companies and the reliability of financial information.

2. THEORETICAL FOUNDATIONS

System: System is a series of physical or non-physical elements, which give mutual information and interact with each other to achieve one or more objectives (M.J. Alsander).

Information system: Too much information, which stored in databases of companies and organizations, is so much that are meaningless and useless for managers. The chaotic of information cause providing an information system for classification and division of information. In technical views, an information system consists of a set of related components that collect or retrieve, process, storage, and dissemination of information to support the organization's governance and decision-making. The information systems helps managers and stakeholders to analyze problems and complex issue and produce new products in addition to supporting decision-making, coordination, and control. Information systems contain information about important people, places, and things that are in the organization. The information is data, which is meaningful, useful, and available but data represents facts, which indicator unorganized events of institution that used in organizations and physical environment before the integrity and perception (Alavi, 2001).

3. ACCOUNTING AS INFORMATION SYSTEM

Accounting is process of collecting, classifying, recording, summarizing information and preparation of financial reports and accounting statements in specific forms and models. Accounting as an information system helps investors, creditors, managers, governments and other users to make better economic decisions by providing the necessary information. Accounting created in order to meet human needs. Therefore, objectives and accounting methods for fulfilling the information requirements develop during the time and beside development of economic activities and increase its complexity because individuals, companies , and governments need reliable information to make decisions about the proper distribution of the financial resources and these information provide by accountants . The investment is one of the essential ingredients in the process of economic development of the country and investors try to use finances in way with the lowest risk and highest returns. Therefore, they want to calculate investment risk. However, one of the basic principles for the calculation of market risk is using information produced by the accounting system.

Internal Control System

Internal control system is a process established in order to obtain reasonable assurance and achieve goals, which classified in five groups as follows by the board of directors, management, and other employees of an economic entity.

1. Effectiveness and efficiency
2. Reliability of financial reporting
3. Compliance with laws and regulations
4. Encourage employees to observe the procedures and measure the compliance of procedures
5. Protection of assets against loss, misuse, and fraud.

The relative reliability means that any internal control structure is not ideal and cost of the internal control should not exceed its expected benefits.

Internal Control Components

Internal control systems of each company is different depending on the size and type of activity but this system in any company should design, deploy, implement, and document that includes all components of the following:

- (A) Control Environment
 - (B) Risk Assessment
 - (C) Control Activities
 - (D) Information and Communication
 - (E) Monitoring
- (A) **Control Environment:** Top managers should provide control environment in a way, which provided the perfect foundation for the other components of internal control by creating organizational discipline, regulation, and the impact on employees' work ethic and moral values. Some of the main causes of the company control environment are honesty, integrity and commitment of top managers to comply with internal control, internal audit, the Audit Committee, respect for ethical values, competence of staff, demarcation of responsibilities and powers of each organization, organization of devolution, systematic promotion of employees, and management guidelines to help improve control environment.
- (B) **Risk Assessment:** Top managers should implement the process of evaluating risks related to the company including risk identification, risk measurement, risk analysis, and designing and implementing risk management procedures. Top managers should determine goals because the necessary precondition for risk identification is determination of the main objectives of the company (including operational objectives, goals of financial reporting, and compliance objectives). They should identify and analyze the achieving risks, finally design and implement appropriate activities to control and manage them.
- (C) **Control Activities:** Policies, procedures, and practices in each company, which design, implement, and run in accordance with the operational objectives, financial reporting, and compliance to address the identified risks.
- (D) **Information and Communication:** Company must provide appropriate and bidirectional communication routes between employees and management. Managers should be able to

announce employees their responsibilities in relation to internal control by these communication routes and employees should be able to report the important information to managers by these ways.

- (E) **Monitoring:** The company internal control system must control constantly. This monitoring should carry out by continuous monitoring activities and evaluation of some cases or a combination of these two ways. Continuous monitoring activities should apply in normal operation and through regular management and supervisory activities, internal audit, and other activities which taken by employees for doing their duties. Evaluation of some cases depend on result of risk assessment and the effectiveness of ongoing monitoring activities. If it is necessary to design and implement evaluations of some case or continuous monitoring activities are not sufficiently effective, further assessments should design and implement.

Limitations of internal control system

Carelessness, negligence, misunderstanding of orders, other cases related to human behavior.

1. These controls cannot prevent fraud by managers because top managers are responsible for establishing internal control system and are at higher level in comparison with level of internal control.
2. The possibility of collusion or fraud by employees.
3. Cost of benefit principle: According to this principle (limitation), the results of the implementation of internal control system (benefits) are more than the costs of applying the system.

Individuals

Individuals are real persons or legal entity in legal views. In fact, any person who has nature and certain rights and responsibilities in society is “real person” but legal entity is hypothetical entity, which has certain and independent character according to the law and it has no relation with the personality of its constituents.

Company

There is no explicit definition of company in the Commercial Code. The company described as follow according to article 571 of civil law:

“The company is gathering the rights of multiple owners in unit entity to be spreading”

Broadcasting Companies

Producers work for making profit and consumers follow the acquisition of utility in the process of formation of the economic activities. Linking these two groups for preparation and presentation of the productions leads to formation of market. By expanding the geographical territory of residence and economic activity, a third party added to these parties named “distribution”.

Distribution of goods and services considered as a set of processes between production and consumption. There are two basic forms of distribution: wholesaler and retailer broadcasting. Wholesaler

sale goods and services to persons applying the production for resale or commercial usage. They have no relation with the final consumer. Accordingly, they have less attention to the promotional advertising, public space, and place of supply goods and cover more operational areas. Therefore, their turnover is more than retailers are. Retail is “resale without transformation of goods to final consumers by the retail distribution network, including large and small stores, consumer cooperatives, etc.” Retail gross profit is difference between the sale value of the goods and the purchase value of them by retail network.

History of Research

Studies show that researches did not conduct about accounting and information systems and internal controls of distribution companies in Iran but separate research conducted on each of the mentioned items. Some of them are:

- Pakravan, L. (2012). Internal control and accountability
- Shirmohamadi, S. (2011). Internal control of accounting information systems. Islamic Azad University, Ghasr Shirin.
- Alavi, B. (2001). Human Resource Management Information System. Journal of Tadbir, No. 105.
- Omidvar, M. Typology of Information Systems
- Taheri, Z. (2011). systems of the databases and future of accounting
- Safaee, E. (2011). Information Systems of Management. Tehran: Jaber Ibn Hayan pharmaceutical company

Time of Research

The research stages involves the primary study and selection of topic, search and study the theoretical foundations of the research, selection the statistical population, complete questionnaire, and eventually study conducted in the first half of 2012.

Major and Minor Purposes

Major goals is reviewing the effectiveness of the internal control components of broadcasting companies to increase reliability of financial information and minor goals are as following:

1. Does the control environment affect the reliability of financial information?
2. Does risk assessment affect the reliability of financial information?
3. Do control activities affect the reliability of financial information?
4. Do information and communication affect the reliability of financial information?
5. Does control affect the reliability of financial information?

Hypothesis of Research

Five hypothesis considered according to components of internal control activities as follows:

1. Control environment affect's the reliability of financial information.
2. Risk assessment affect's the reliability of financial information.
3. Control activities affect the reliability of financial information.
4. Information and communication affect the reliability of financial information.
5. Control affect's the reliability of financial information.

Method of Research and Tools of Collecting Data

Inferential statistical methodology used depending on the type and nature of the subject. In this study, a questionnaire selected to gather information as the most appropriate method. We used *t*-student statistic, Chi-square and SPSS software. In this regard, questionnaire gave to statistical population after examining the validity and reliability.

Statistical Sample and Population

Statistical population limited to companies, which distribute food, pharmaceutical and health things according to their widespread activities. 71 companies selected. We checked an appropriate sample to achieve an accurate, precise, and more reliable as well as due to budget of time and money for research. Then the results of the samples extended to the whole population. Therefore, broadcasting companies in Tehran selected.

Seventy-one questionnaires gave respondents by visiting the companies. We received seventy questionnaires for final checking. We did not receive one questionnaire because time limitation of receiving the questionnaire.

Test Method of Hypothesis

Statistical data analyzed using SPSS. We used Cronbach's alpha to prove the reliability of the tests and equality test with an assumed value for testing hypothesis. Data analyzed using inferential statistics. In inferential statistics, H_1 consider as positive and H_0 as negative hypothesis. If more than 50% of respondents had positive answer with the hypothesis, the hypothesis will accept (i.e H_1). Otherwise, if more than 50 % of respondents had negative view with the hypothesis, the hypothesis will reject (H_0). In addition, we used *t*-student, Chi-square test due to significant differences between the average of population and an assumed value and with the assumption that the population variance is unknown

$$\begin{cases} H_0 : \mu < \%50 \\ H_1 : \mu > \%50 \end{cases} \rightarrow \begin{cases} H_0 : \mu \leq \mu_0 \\ H_1 : \mu \geq \mu_0 \end{cases}$$

$$t = \frac{\bar{x} - \mu_0}{\frac{S}{\sqrt{n}}}$$

S: The estimation error of the sampling distribution

\bar{x} : The sample estimated average

μ : Average of population

n : Number of samples

Tools of Measuring

The five-item Likert scale used to measure the variables in this study. Likert scales provide usually five to seven possible with a neutral position such as strongly agree, agree, neutral, disagree or strongly disagree. We can use these scales for comparison. This study is qualitative; therefore, we assigned one to five coefficients for each answer to convert those into quantitative answers.

Analyzing the Results of Hypothesis Test

The questions divided into two categories: questions related to personal characteristics of responders and questions related to the hypothesis. 61.43 % of persons had work experience more than 5 years among 71 responders. It should mention that classifying groups are less than year, 1-5, 5-10, 10-15, 15-20, and more than 20 years. Fifty- one percent of responders were chief of accounting department of broadcast companies active in food, pharmaceutical and health. Professional responsibility of persons divided to five groups as managing director, financial manager, accountant chief, and managing director of distribution and member of the board. In terms of education, persons divided to five groups, including diploma, associate, bachelor, master, and PhD degrees. 88.75 % of persons had bachelor and postgraduate degrees. They divided to four groups in terms of field of study including accounting, business management, industrial Management, and other. Ninety percent of responders had degree in accounting. The main questions of this study consisted of 20 questions, based on researching and solving the problem of hypotheses. So that questions 1 to 4 related to the first hypothesis and questions 5 through 8 on the second hypothesis and questions 9 to 12 of the third hypothesis and Questions 13 to 16 related to the fourth hypothesis and finally Questions 17 to 20 of the fifth hypothesis. We use options including very high, high, medium, low, and very low adopted 1,2,3,4, and 5 score to study the view of responders.

In this study, the first hypothesis accepted with confidence level of 95%, which mentioned that control environment affect the reliability of financial information. Questions 1 to 4 used for testing this hypothesis. It divided to four statistical hypothesis, which organizational structure, rules and regulations in force and the Audit Committee had been more effective (the first, second, and fourth statistical hypothesis) but industrial design was less effective (third statistical hypothesis).

Questions 5 to 8 used for testing second hypothesis, which mentioned that risk assessment affect the reliability of financial information and it accepted with confidence level of 95%. It divided to four statistical hypothesis, which independent auditors and preparation of financial statements of the budget had been more effective (second and fourth statistical hypothesis) but rules of industry and position of organization in industry were less effective (first and third statistical hypothesis).

Questions 9 to 12 used for testing third hypothesis, which mentioned that control activities affect the reliability of financial information and it accepted with confidence level of 95%. It divided to four statistical hypothesis, which four cases involving the use of qualified internal auditors, the appropriate internal control structure, type, and level of education of staffs, and superior methods of human resources management had been effective.

Questions 13 to 16 used for testing fourth hypothesis, which mentioned that information and communication affect the reliability of financial information and it accepted with confidence level of 95%. It divided to four statistical hypothesis, which using appropriate accounting information systems, the duties of staff and appropriate budget forecasting system of each part had been more effective (the first, third, and fourth statistical hypothesis) but organizational charts were less effective (the second statistical hypothesis).

Questions 17 to 20 used for testing fifth hypothesis, which mentioned that control affect the reliability of financial information and it accepted with confidence level of 95%. It divided to four statistical hypothesis. Supervision and protection of assets and documentation, control and protection of recorded assets and information, and idea of management and its implementation had been more effective (the second, third, and fourth statistical hypothesis) but testing system of responsibility of employees was less effective (The first statistical hypothesis).

Table 1
Results of testing the hypotheses

<i>Hypothesis</i>	<i>Mean</i>	<i>Std. deviation</i>	<i>Error of standard deviation</i>	<i>Amount of Statistics</i>	<i>Degree the freedom</i>	<i>Level of Significant</i>	<i>Difference of means</i>	<i>Difference in level 95%</i>	
								<i>min</i>	<i>max</i>
1	3.9821	1.06913	0.06389	15.372	279	0.000	0.98214	0.8564	1.1079
2	3.9250	1.04285	0.06232	14.842	279	0.000	0.92500	0.8023	10.477
3	4.0821	0.97479	0.05825	18.576	279	0.000	1.08214	0.9675	1.1968
4	3.9429	0.95618	0.05714	16.500	279	0.000	0.94286	0.8304	1.0553
5	4.1505	0.92852	0.05559	20.697	278	0.000	1.15054	1.0411	1.2600

4. CONCLUSION

The results showed that the internal control components related to increasing reliability of financial information. Also according to the tests, the internal control components had most to least impact on the reliability of financial information as following: control with amount of statistic equal to 20.697, control activities with 18.76, information and relations with 16.50, control environment with 15.372, and risk assessment with 14.842. As well as, reasons such as appropriate organizational charts (44.29%), organizations industrial design (51.43%), the status of the industry (54.29%), the industry rules (61.43%), responsibility sensing system (61.43%) had no great importance. Some recommendation are in next section as well as the items in question 12, 16, 15, 8, 11, 1, 18, was charged but not enough. Factors set in questions 2, 19, 4, 10, 6, 9, 20, 13 considered but we should always pay attention to them more than the past. Recommendations for increasing the effectiveness of the internal control components on the reliability of financial information expressed as follows:

1. Draw organizational charts and expose it help expedite service and better performances of employees. Low recognition of organizational charts, benefits, how to draw etc. are reasons of low importance of this issue in broadcasting industry. Therefore, we recommended managers to use experts to draw organizational charts and outlines for employees.
2. Managers use resources and facilities of organization to achieve purposes including innovation in services or production of goods with higher quality. Given that all managers are aware of

their industrial designation, non-drafting or editing are reasons of lack of attention to this issue. Therefore, managers must provide industrial plan of organization, emphasize on study, and use it.

3. Each managers try to promote their organization position in the industry, which graded based on the quality of services and customer satisfaction. Clearly, the best ways examined by consultants to achieve this important goal in addition to all parties.
4. Every industry has its own laws according to their customer and service. Lack of law enforcement is reason of low usage. Therefore, the laws must use that have the ability to run in most sub companies.
5. Responsibility sensing system reveals number of centers across the organization, determine plans and projects of each centers by assigning the costs, and specifies revenues. This system determine duties of each employee and calculate efficiency of each individual according to duties. Lack of information about this system may be the only reason of less using. Therefore, managers should aware of testing methods of responsibility, announce them to employees, and use them in their working plan

Practical Recommendations for Distribution Companies

1. Separation of protection duties and bookkeeping
2. Performance in accordance with the financial rules adopted for the purpose
3. Using the services and experience of professionals to strengthen internal control structure
4. Encourage employees to adhere to established controls and their participation in the establishment and improvement of these controls
5. Knowledge of managers about various levels of internal control frameworks
6. Managers need to review and formulate appropriate internal control structures in order to achieve organizational goals. Also increasing the sensitivity of managers to keep track of corrective actions to overcome weaknesses of internal control is effective.
7. Managers should also employ according to work of each department and position while trying to employ staff with the highest level of education, use training during working.
8. It should note that only high-ranking employees is not the way of preparation of reliable financial information. It is necessary to control employees. In other words, performance of them must check by internal and independent audit.
9. Design, development and implementation of accounting and financial reporting systems and procedures, the appropriate control environment, and control for financial and operational accountability.
10. Managers should update their views and systematic thinking in addition to using the best and updated tools of internal control, budgeting, human resources etc.

Recommendations for Future Research

The following topics suggested:

1. Each of the components of internal control strategies and the impact on the reliability of financial statements study separately.
2. Review the factors that create restrictions on the use of components of internal control in the distribution industry.
3. Check the duties of accountants and auditors against knowing the advantages of the implementation of internal controls by managers.

Limitations of Research

1. Lack of information on distribution companies, types and their accounting methods.
2. Limitations of questionnaire including lack of real responders and the difficulties in assessing the actual respondents to questions.
3. There was problem for easy access to questionnaires due to administrative offices and busy responders.
4. Insufficient accuracy of some of the responders for completing the questionnaire
5. Researchers notice that collecting this information in this way is very time consuming because researchers needed to gather information through questionnaires. Therefore, researchers must consider this issue

References

- Dastgir, M., Saeedi, A. (2011). *Accounting information systems*. Tehran: Terme Press.
- Industrial information center, <http://www.myindustry.ir/index.php>
- Jaberi, A. (1994). *Review and evaluate local controls of addressed companies reviewed by independent auditors*. Master thesis.
- Pooryanasab, A., Keyhan, M. (2014). Local controls -Integrated framework. *Journal of audit office*, No. 118.
- Ratlif, R. (2011). *Local auditing (A. Arbabsoleimani, A. Kamali Zare, Trans.)*. Tehran: Accounting and auditing research center press.
- Walterbi, M., Ere, V., Kurt, P., Rabert F, M. (2012). *Auditing methods (A. Arbabsoleimani, Nafari, M., Trans., Vol. 1, No. 87)*. Tehran: Auditing office press.
- Walterbi, M., Ere, V., Kurt, P., Rabert F, M. (2012). *Auditing methods (A. Arbabsoleimani, Nafari, M., Trans., Vol. 2, No. 105)*. Tehran: Auditing office press.
- Web site of the broadcast industry companies, <http://apir.ir/>
- Web site of education Management of Tehran Stock Exchange, www.irbourse.com