

The Effect of Internal Training and Auditing of Auditors on Supply Chain Management: An Empirical Study in Listed Companies of Iraqi Stock Exchange for the Period 2012-2015

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Abstract— This study aimed to examine the joint effect of auditor's auditing and training on reducing financial statements' manipulation Iraqi companies listed in stock exchange. Specifically, this study focuses on the impact of internal training and auditing of internal audit staff on reduction of the rate of manipulation in earnings management practices as depicted by the discretionary accruals. The financial statements for 69 listed companies in the Iraqi Stock Exchange were analyzed in this study in order to achieve these objectives for the period of 2012-2015. The earnings management which is measured by the Kothari et al. model (2005) is the dependent variable while independent variables considered in this study are auditor's training and the internal audit. The independent variables are analyzed using a set of data gathered from the selected companies. Based on the results of study recommends the need for activating the internal control bodies which shall consider the requirements necessary before publishing financial statements in the market by the listed companies in the Iraqi stock exchange. The requirements are also necessary to be connected with the audit committees of the companies and more training courses should be conducted for the auditors. This research can be used for the universities, teachers and students. In this research, the model of the The effect of internal training and auditing of auditors on Earning Management is presented in a comprehensive and complete manner.

Keywords— Internal Auditing, Training of Auditors, Supply Chain Management, Earnings Management.

1. Introduction

The growing problems of the agency are affecting many companies in the various financial markets in the world. Due to this, users of accounting information have encountered problem. Therefore, exercising supervisory authority in strengthening the mechanisms of corporate governance is necessary for the responsible authorities in order to minimize some of the challenges of the management of profits and important problems of

the agency. One of the tools of corporate governance and its tools are the internal and audit control department. Thus, this study discovered problem from the securities suffers from the lack of administrative departments in some of the listed companies in the Iraqi market for internal and auditing control. Similarly, most companies that have departments where there is detection and correction of the distortion in the auditor's ability in financial operations are connected with their technical abilities [1-5].

A set of methods and techniques of control and auditing is referred to as the technical ability of the auditor; these techniques provide him various signs of discovery and the existing fraud while correction is the function of the quality of work and its independence. Therefore, to investigate the effect of the role of the training of auditors and internal auditor in reducing the financial statements manipulation is the aim of the study by highlighting the impact of training auditors and internal audit and their relationship with earnings management. The contribution of this study is in terms of evaluating the quality of the modern auditing techniques and quality of internal auditing and their joint roles in minimizing the manipulations in earnings management practices. Other contributions are to show the role of internal audit and training of auditors in influencing earnings management and to highlight the concept of earnings management and the motives for its adoption.

2. The Theoretical Framework

2.1 Internal Audit Concept

According to Ljubisavljevic and Jovanovi, a major contribution to the achievement of a company's objectives is the internal audit; it contributes to the

achievement of these objectives through the implementation of the strategies [6, 7]. Additionally, Hutchinson and Zain mentioned that in reducing fraud in an organization and strengthening the role of the Administration and the Audit Committee, the Internal Audit function can be responsible. The integrity and reliability of the financial and operational information are determined by the internal audit that originates from different organizational units with accordance with the appropriate administrative decisions [8]. The internal audit should be independent in order for it to be successful in carrying out its functions. For the success of a company's management, internal auditing is an important tool [9-12]. Furthermore, in [13], added that the work and effectiveness of the audit committee is facilitated by the function of internal audit because there is consistency between the aims of the audit committee of overseeing financial reports and the audit function. In the same vein, a mechanism to strengthen internal governance processes are provided by the internal audit provides and the existence of an internal audit department is supported by the corporate governance [14-20]. The stakeholder confidence in financial disclosure is enhanced by the presence of an internal audit function according to the studies of [21-25]. companies with an internal audit department would benefit from disclosure of fraud arising from misappropriation of assets while Kaplan and Schultz reported that fraudulent activities are detected by the help of the internal audit function [26]. In 2010, how the value of the Audit Committee can be enhanced is examined by the Institute of Internal Auditors [9]. Due to this, in the Audit Committee, a statement entitled "Internal Audit Committee and Audit Committee: Working Together to Achieve Common Objectives" was issued by the institute. The American Institute of Certified Public Accountants (AICPA) conducted a study where it is opined that an internal audit division should be established in all listed companies as this will allow the roles in detecting and preventing fraud by the internal audit function to be performed well. The importance of the Internal Audit Department is also emphasized many standards such as Internal Audit Standards (SIAS), Institute of Internal Auditors [9] and Professional Standards Sheets (PSB) on the Professional Practice of Internal Auditing. Talab, Manaf and Malak posited that the cost of connecting managers as a sign of their commitment to good governance is the internal audit function from the cost perspective of the agency [21].

2.2 Training of Internal Auditors

Ensuring the effective operation of internal controls and procedures and creation of effective internal control over the financial reporting procedures are the responsibilities of corporate governance. Lenz therefore posited that an independent evaluation of the internal control mechanisms of the institution is provided by the establishment of the internal audit division. From the previous studies, correction of the weaknesses in the internal control system can improve the quality of reports for the internal audit function through effectiveness of internal control over financial reporting [12].

The internal audit function should be independent in order for the function to perform effectively. According to Salehi the scope of audit function, the extent to which the issues raised by the internal audit department are corrected and the internal audit management's competence affects the efficient and effective internal control. The necessary resources such as the training of internal audit staff are therefore important to be provided [18].

Also, according to Pickett, in order to meet the challenges and support of the management, the internal auditors regularly need to acquire and develop new skills in terms of keeping abreast the new developments of regular training updates [17]. Usang and Salim opined that employee performance at their jobs is better recognized by focusing on the importance of the researchers and staff training. The study found that the greater the professional experience and ability to detect errors and distortions, the higher the level of training for the auditor; thus, there is positive relationship between training and quality of auditing. This reflects the answer to the quality of audit [22, 29].

2.3 The Concept of Earnings Management

One of the serious problems encountered by the real performance of companies is the earnings management as the users of the financial statements of the company are misled by these practices. The credibility of these financial statements is decreased which affects the confidence of stakeholders. The separation of ownership from the administration and the large size of companies have led to the emergence of the agency theory. The agency theory is developed as an attempt to find a solution to the conflict of interest between the relevant parties in the economic unit of an organization. This theory comprises and associates with the concept of earnings management to reduce the opportunistic practices of corporate management and achieve many objectives which are affected by manipulation. The impact of

accounting principles and standards and methods can equally be traced to the theory. The management of the companies is working in favor of the economic unity rather than the exploitation of accounting standards and principles. The study concludes that by changing the real performance of the company, they can be exploited to achieve their own motives.

When determining accounting policies and procedures, the problem with accounting is that it cannot place strict limits on management options. While these simple options for those actions and policies are very beneficial to investors, these options will be more complex with strategies set in place to meet the expected profits [16, 21, 26]. In other word, earnings management is an intentional management intervention in financial operations and reporting for modifying and influencing the stakeholders' decision about the company's economic performance and contracting parties with the company. The decisions are based on the data contained in the reports and accounting information. Earnings management is believed by the researchers to involve many aspects which could be positive. On this basis, it can be divided into black, gray and earnings management but regardless of the positivity or negativity of these types, they are not good as they are in contrary to all the practices and that make them negative practices [1, 6, 13, 19, 20, 23]

3. Research Methodology

This study employed inductive method; that is the companies listed in the Iraqi Stock Exchange were studied in order to examine the effect of internal audit and training auditors on manipulation reduction on earnings management. There are eight economic sectors from the period of 2012 to 2015 for the selected community that represents the companies listed in the Iraqi market for securities. The data of the study were collected from services, insurance, banks, agriculture, investment, hotels

and tourism, industry and telecommunications. During the research period, the companies that have a complete set of data were selected from the research sample. After removing the companies with incomplete set of information from the analysis, the final sample comprises 276 observations for the fiscal year over the period of the study which is 2012, 2013, 2014 and 2015.

introducing independent variables with the use of multiple-linear regression model can be used to measure earnings management while the impact of both internal audit and training auditors can be measured using STATA package in reducing manipulation on earnings management. Additionally, a secondary data extracted from the financial statements of companies listed in the Iraqi Stock Exchange is used for the program. The following is the hypothesis of the study:

"There is a significant correlation statistically between internal auditing and training of auditors and manipulation reduction in earnings management practices".

3.1 Measurement of the Research Variables

The following is the presentation of the research variables and their respective methods of measurement.

3.1.1 Independent Variables

Internal Audit: this is a dummy variable; if there is an internal audit department, a value of 1 is given while otherwise can attract zero.

Training auditors: if there is an internal audit department, a value of 1 is given while otherwise can attract zero.

The Table 1 below shows the companies that have both the auditor's training and internal auditing.

Table 1. the companies with internal audit and training for auditors

Sample	Companies that have internal audit department	Companies that not have internal audit department	Total
No.	54	15	69
Percentage	%79	%21	100%
Sample	Companies that companies trained auditors	Companies that companies do not train auditors	Total
No.	19	50	69
Percentage	%28	%72	%100

Table 1 above clearly shows that 28% of these companies are training auditor while 79% of companies have internal audit.

3.1.2 Dependent Variables

Return on assets (ROA): using the model of Kothari et al. (2005), a modified model, return on assets is used to estimate optional receivables. To measure the optional entitlements, this model is the most suitable model. The statistical model is illustrated in the equation below:

$$\frac{\Delta TA}{Asset_{t-1}} = \beta_1 \frac{1}{Asset_{t-1}} + \beta_2 \frac{\Delta REV - \Delta REC}{Asset_{t-1}} + \beta_3 \frac{PPE}{Asset_{t-1}} + \beta_4 ROA_{t-1} + \varepsilon_{it} \quad 1$$

Where:

TA is the change in non-cash assets in the current liabilities, de-recognition and deregulation on the total assets

ΔREV is the change in sales

ΔREC is the change in debtors

PPE is the net fixed assets divided by total assets

ROA is the return on assets

ε_{it} is the standard error

Hence, the equivalent equation by which the research variables were measured is:

$$EM_{it} = \alpha_{it} + \beta_1 IAE_{it} + \beta_2 IAT_{it} + \varepsilon_{it} \quad 2$$

The independent variables comprise the internal auditing and training of auditors in this study while the earnings management is the dependent variable

which is represented by the symbol Y. The impact of internal auditing and training auditors on earnings management is measured considering the financial statements of the listed companies in the Iraqi Stock Exchange. The variables of the study are measured by the multiple-regression model from the available data provided as shown in Table 5. The Table 5 clearly shows the results of multiple regression of the tested hypothesis. The results of the statistical analysis found are illustrated in the Table below.

Table 5: the results from measuring the impact of internal audit and training of auditors on earnings management

4. Results

Table 2 shows the results of applying the model on the earnings management of the listed companies during the period of the research study in 2012. It is revealed that the highest percentage of companies that practiced earnings management is achieved in 2012 with the average of 75% of the total companies studied. Previously, the total percentages of the companies that are studied are 47%; then the number of companies reached 45% of the total companies that were studied in 2013. Finally, in 2015, from the total companies studied, the number of companies reached was 42%.

Table 2. the ratio of the practice of the company to the earnings management

Year	Sample	Ratio of corporate practices to earnings management
2012	276	2012
2013	276	2013
2014	276	2014
2015	276	2015

Table (3) shows the variables of the measurement of the statistical model of the study, which

measures the impact of both audit quality and training of auditors in the management of earnings.

Table 3. Measurement variables of the research model

Variables		Symbol	
Dependent variable	Earnings management	Y	$\frac{\Delta TA}{Asset_{t-1}} = \beta_1 \frac{1}{Asset_{t-1}} + \beta_2 \frac{\Delta REV - \Delta REC}{Asset_{t-1}} + \beta_3 \frac{PPE}{Asset_{t-1}} + \beta_4 ROA_{t-1} + \varepsilon_{it}$
Independent variable	Internal audit existence	X1	Dummy variable, given 1 for the companies that have internal audit department, zero for otherwise.
	Internal audit training	X2	Dummy variable, given 1 for the companies that have internal audit training, zero for otherwise.

And the equivalent equation by which the search variables were measured.

$$EM_{it} = \alpha_{it} + \beta_1 IAE_{it} + \beta_2 IAT_{it} + \varepsilon_{it} \quad 3$$

Where :

EM = Earnings management

a= constant value

β = Beta coefficient of independent variable (i) per year (t)

IAE = Internal audit existence

IAT= Internal audit training

Table (4) below shows the results of multiple regression tests to test hypotheses. The tables listed

below illustrate the results of the statistical analysis reached.

Table 4. Results of measuring the impact of internal audit existence and training of auditors in earnings management

Dependent variable Independent variable		Earnings management			
		β	F	R ²	p-value
1	Internal audit existence	-0.13	21.40	0.13	0
2	Internal audit training	-0.29			

According to the statistical tables, the effect was significant at the level of 0.05 and 95% and the value of F at table at a significant level of 0.05 is 4.19.

At a significant level of 5%, the value of the calculated F (21.4) is greater than the value of the Table F (4.19) which was determined through the equation of regression. While the values of β for both the internal audit and the auditors' training respectively were negative for both variables with -0.13 and -0.29. In the management of profits, it implies that there is an inverse relationship to the variables; therefore, when the result of the internal audit and training of auditors is 0.13, it shows that both the internal audit and the training of the auditors have passed 13% of the earnings management variables. The other contributions that are not addressed in this model account for the remaining 87%. The main hypothesis of this study was accepted on this basis: "There is a statistically significant relationship between the internal auditing and the training of auditors in manipulation reduction of the earnings management".

5. Conclusion

In accordance with the outcomes of this study, it can be concluded that a majority of the companies listed on the Iraq Stock Exchange had internal control departments. Nevertheless, only a few numbers of the companies listed in the Iraqi market for securities have an internal audit department which are working for the internal audit staff development in order to develop their competence professionally. Similarly, this study outlined the rates of practice of this phenomenon between the selected companies from year to year and the existence of earnings management practices in companies listed in the Iraqi market for securities. Quality of internal audit is achieved by conducting training for the auditors; therefore, it will subsequently reflect on the practices of the earnings management positively.

Considering several conclusions reached in this study, a set of recommendations are recommended

by the researcher: first, there is need to promote the active role of internal auditing in companies listed in the Iraqi market for securities. Also, audit internal audit committees and conducting more training courses for the auditors should be a criterion for publication of financial statements in the market. Finally, role of internal auditing should be resuscitated in order to reduce manipulations in the practices of earnings management in the companies listed in the Iraqi market for securities.

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References

- [1] Ajallooeian, E., Gorji, Y., & Niknejadi, F. (2015). Evaluate the Effectiveness of Social Skills Training through Group Therapy Play on Reducing Rational Aggression Boy Elementary School Student in Esfahan City. *UCT Journal of Social Sciences and Humanities Research*, 3(1), 1-4.
- [2] Araújo, C., Henriques, P. R., & Martini, R. G. (2018). Virtual Learning Spaces Creation Based on the Systematic Population of an Ontology. *Journal of Information Systems Engineering & Management*, 3(1), 07.
- [3] Archambeault, D. S., DeZoort, F. T., & Holt, T. P. (2008). The need for an internal auditor report to external stakeholders to improve governance transparency. *Accounting Horizons*, 22(4), 375-388.
- [4] Collier, P., & Gregory, A. (1996). Audit committee effectiveness and the audit fee. *European Accounting Review*, 5(2), 177-198.
- [5] Goodwin, C. (2003). Pointing as situated practice. In *Pointing* (pp. 225-250). Psychology Press.
- [6] Khuzairi, M., Rahim, H. A., Abdulmalek, M., & Warip, M. N. M. (2019). Radio frequency radiation measurement for base tower station safety compliances: a case study in Pulau Pinang

- Malaysia. *Bulletin of Electrical Engineering and Informatics*, 8(1), 150-157.
- [7] Holt, T. P., & DeZoort, T. (2009). The effects of internal audit report disclosure on investor confidence and investment decisions. *International Journal of Auditing*, 13(1), 61-77.
- [8] Hutchinson, M. R., & Zain, M. M. (2009). Internal audit quality, audit committee independence, growth opportunities and firm performance. *Corporate Ownership and Control*, 7(2), 50-63.
- [9] IIA, Institute of Internal Auditors Australia (2010), *Internal Auditing and the Audit Committee: Working Together toward Common Goals*, viewed 19Nov2010, .
- [10] Issaliyeva, A., Ospanova, A. N., & Alibekul, A. (2018). Kazakhstan and GCC: Islamic component in joint collaboration. *Opción*, 34(85-2), 205-220.
- [11] Kaplan, S. E., & Schultz, J. J. (2007). Intentions to report questionable acts: An examination of the influence of anonymous reporting channel, internal audit quality, and setting. *Journal of Business Ethics*, 71(2), 109-124.
- [12] Lenz, R. (2013). Insights into the effectiveness of internal audit: a multi-method and multi-perspective study.
- [13] Pardimin, & Widodo, S. A. (2017). Development Comic Based Problem Solving in Geometry. *International Electronic Journal of Mathematics Education*, 12(3), 233-241.
- [14] Ljubisavljevic, S., & Jovanovic, D. (2011). Empirical research on the internal audit position of companies in Serbia. *Economic annals*, 56(191), 123-141.
- [15] Mercer, M. (2004). How do investors assess the credibility of management disclosures? *Accounting Horizons*, 18(3), 185-196.
- [16] Nisawa, Y. (2018). Applying van Hiele's Levels to Basic Research on the Difficulty Factors behind Understanding Functions. *International Electronic Journal of Mathematics Education*, 13(2), 61-65.
- [17] Pickett, S. (2000). Developing internal audit competencies. *Managerial Auditing Journal*, 15(6), 265-278.
- [18] Salehi, T. (2016). Investigation Factors Affecting the Effectiveness of Internal Auditors in the Company: Case Study Iran. *Review of European Studies*, 8(2), 224.
- [19] Selomo, M. R., & Govender, K. K. (2016). Procurement and Supply Chain Management in Government Institutions: A Case Study of Select Departments in the Limpopo Province, South Africa.
- [20] Shirvani, M., Mohammadi, A., & Shirvani, F. (2015). Comparative study of cultural and social factors affecting urban and rural women's Burnout in Shahrekord Township. *UCT Journal of Management and Accounting Studies*, 3(1), 1-4.
- [21] Talab, H. R., Flayyih, H. H., & Ali, S. I. (2018). Role of Beneish M-score model in Detecting of Earnings Management Practices: Empirical Study in listed banks of Iraqi Stock Exchange. *international journal of Applied Business and Economic Research*. 16.
- [22] Usang, O. U. E., & Salim, B. (2015). A conceptual perspective of internal audit quality and local government performance in Nigeria.
- [23] Gutiérrez-Artacho, J., & Olvera-Lobo, M. (2017). Web Localization of Spanish SMEs: The Case of Study in Chemical Sector. *Journal of Information Systems Engineering & Management*, 2(3), 15. <https://doi.org/10.20897/jisem.201715>
- [24] Rezaei, M., & Nemati, K. (2017). The Impact of Purchase Intent, Word of Mouth Advertising and Skill Domain of Seller on Quality of Customer Relationship to Sale Life and Savings Insurance Policies (Case Study: Dana Insurance Co., Bushehr Province). *Dutch Journal of Finance and Management*, 1(2), 43. <https://doi.org/10.29333/djfm/5819>
- [25] Borhanian, S., & Mirabi, V. R. (2017). Factors affecting customer satisfaction in the private sector hotels in Qom Case study: parsia Grand Hotel (4 starsT) . *UCT Journal of Management and Accounting Studies*, 5(1), 24-32.
- [26] Mousavi Kouhpar SY, Rabiee Mondajin M, Amirkabiri A. Study of Intellectual Capital on Employees Capabilities in Judicial Organization. *Journal of Humanities Insights*. 2019;03(02):65-9.