



The role of COSO framework in preventing earning management practice

An analytical study of the opinions of a sample of Auditors & Accountants in banks- Erbil City

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Abstract

The main objective of this study is to determine the effectiveness of internal control according to the COSO framework for internal control contributes to reducing earning management practices in banking sectors in Erbil city from the point of view of auditors and accountants through quantitative measurement of variables.

The selection of the banking industry for this study came due to the importance of the banking sector and increased risks involved in earning management, in light of global competition and economic openness, For the purpose of this research, a quantitative methodology was applied. The data was collected through a questionnaire to test the hypotheses. 80 copies of the questionnaire were distributed to Two samples of professionals 70 valid questioners were returned. Using the analysis statistical package (SPSS) to validate and analysis of data.

Findings- the research found that there is a coefficient relationship between the dependent variable - the internal control system according to the COSO framework - and the independent variable - earnings management practices. The more efficient the internal control system, the more limited earning management practice. The study concludes with several suggestions; using this framework to guide the development of Internal Control to identify earning management practices, work to enhance employees' skills working in field of internal control system through further training programs and workshops on prevent earning management.

Keywords: COSO framework, Internal control, earnings management, Banking Industry.

1. Introduction

The need for internal control functions has increased with the increase in financial scandals that have rocked a number of the largest companies in the world such as Enron in the United States of America, which can be relied on in reducing the effects of practicing earning management.

Additionally, the collapse of major global companies is due to a number of factors, first, the laxity of supervisory operations in banks, which made it easier for bank administrations for earning management, second, reports showing inadequate internal control system knowing that accounting and financial groups were quite sure that the best way to prevent the collapse, detect Froude and ensure asset security was to implement internal control system (spira and pag,2003). The second factor is the management's resort to some measures and accounting policies in order to bring about a fictitious (not real) improvement in its profitability or its financial position, by taking advantage of the flexibility provided by accounting standards as well as using personal judgment when preparing financial reports.

The above reasons led to the increase of interest on using the COSO model, in order to raise level of disclosure and transparency, whether this is in relation to the financial events affecting the elements of the financial statements or to disclose the effectiveness of the internal control system, through a special report issued by the organization's management on the effectiveness of the internal control system as a result of using the COSO model, it is expected that this will lead the organization to maintain appropriate internal control systems



in place to help prevent fraud, and thus obtain financial statements free from fraud and manipulation by management.

This research focuses on analyzing five components of the COSO framework to enhance the internal control system, therefore, to reduce earning management practices. The five components of “COSO” are: “Risk Assessment”, “Control Environment” “Control Activities”, “Monitoring”, and “Information & Communication” (COSO, 2013).

1.1 Research problem

Due to the increasing incidence of fraudulent financial reporting, nowadays there is an increasing interest to raise the level of the effectiveness of the internal control system and the disclosure of that effectiveness through a special report issued by the bank's management within the annual report, as this is expected to reduce the practice of earning management and thus increase the confidence of users of the published financial statements of banks.

The problem of this research is to investigate whether the internal auditing according to COSO frame work decreases earning management in banking sector due to the importance of COSO framework in one hand and the danger of earning management practice in the financial statements on the other hand, which leads to emerge of misleading accounting numbers and then presenting it to users which reflects undesirably on their decision.

1.2 The importance and objectives of the research:

This research derives its importance from the importance of the internal control system in accordance with the COSO framework, which is the main line of defense for prevention of fraudulent financial reporting, and whether the effectiveness of that system has a role in limiting earning management practices, in the banking sector in Erbil city.

The aim of this research is to:

1. Identify the practices of earning management carried out by the banks.
2. Indicate whether effective internal control according to the COSO framework has a role in limiting the practices of earning management in the banking sector.
3. Provision of statement of the opinions of professionals regarding the role of the COSO framework in reducing earnings management practices.

1.3 Research question:

This research came to answer the following Two questions:

- 1- Is there any role for the COSO framework in limiting the practices of earning management in the banks in Erbil city?
- 2 - Is there fundamental agreement of professionals' opinions regarding the role of the COSO framework in reducing earnings management practices in the banking sector?

1.4 Research methodology:

This research depends on an inductive approach which depends on the collection of information related to the main elements of the research by analyzing and interpreting provided data in order to build a theoretical framework by relying on the accounting and auditing literature that dealt with the subject inter-control system and the problem of profit management also this research relies on the deductive approach that depends on the design of a questionnaire. SPSS program used to analyze provided answers from the research samples represented by auditors and accountants who work in the banking sector in the city of Erbil.

1.5 Research hypothesis

In light of the study problem and achieving the aims, a hypothetical model structured which includes the study independent variables (control elements for internal control according to the COSO framework) control environment, risk assessment, control activity, information and communication, and monitoring, influencing the independent variable of (earning management). The model reflects the relationships and the effect between the independent



variables and the dependent variable. According to the above-mentioned study model the following hypotheses were built:

H1: there is no statically substantial impact of the application elements of internal control according to the COSO framework (Control environment, Risk assessment, Control activities, Information and communication, and Monitoring) on earning management in banking sector in Erbil city.

H0: there is a statically substantial impact of the application elements of internal control according to the COSO framework (Control environment, Risk assessment, Control activities, Information and communication, and Monitoring) on earning management in the banking sector in Erbil city.

From these main hypotheses the following Five sub-hypotheses are derived:

H1a: there is no significant statical effect of the application of control environment component on the earning management in banking sector in Erbil city.

H0a: There is a significant statical effect of the application of the control environment component on the earning management in the banking sector in Erbil city.

H1b: there is no significant statical effect of the application of risk assessment component on the earning management in banking sector in Erbil city.

H0b: There is a significant statical effect of the application of the risk assessment component on the earning management in the banking sector in Erbil city.

H1c: There is no significant statical effect of the application of control activities component on the earning management in banking sector in Erbil city.

H0c: there is a significant statical effect of the application of control activities component on the earning management in the banking sector in Erbil city.

H1d: There is no significant statical effect of the application of information and communication components on the earning management in banking sector in Erbil city.

H0d: there is a significant statical effect of the application of information and communication component on the earning management in the banking sector in Erbil city.

H1e: There is no significant statical effect of the application of monitoring component on the earning management in banking sector in Erbil city.

H0e: there is a significant statical effect of the application of the monitoring component on the earning management in the banking sector in Erbil city.

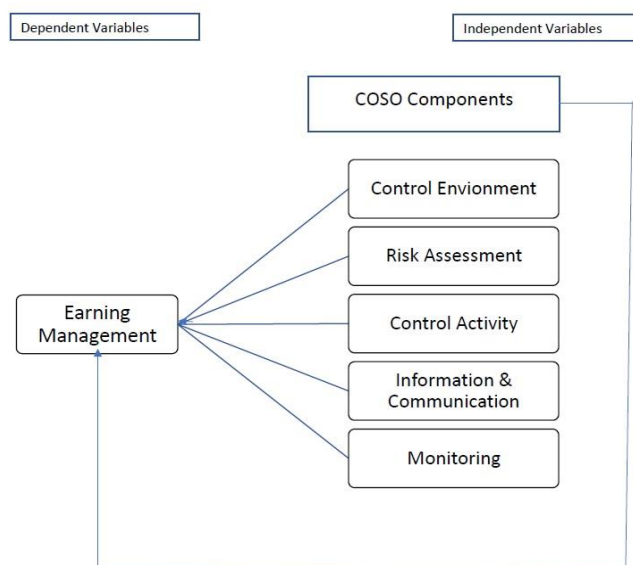


Fig. No (1) Study Model



2 Literature Review

In Past most of the studies and researches were focused on earning management practice and knowledge of the role of each of the audit committees, and internal auditing. While this research focuses on knowing whether there is a relationship between the effectiveness of internal control by applying COSO framework and limiting earning management practice in the banking sector in Erbil additionally this research focuses on auditors' opinions regarding this role. It is worth to mention that according to the researcher's knowledge this study is a first studies in the KRG that attempt to measure the impact of applying (COSO) framework in the field of banking and reducing earning management in banking sector.

1- Research by S.Wali and S. Masmoudi (2020) intitled internal control and real earning management in the French context targets to investigate the internal auditing system quality in the French context enhanced the information quality and has been reflected by the level of earning management. This research used multiple regression analysis to examine the collaboration between internal control and earning management. The results show a high level of internal control system has a negative effect on earning management while effective internal control system makes financial statements more valuable to the users.

2- Research by (Bertin, and Iturriaga,2005) intitled Earnings Management and Internal Control Mechanisms examined several mechanisms that could impact on internal control - capital structure, ownership structure, and growth opportunities- on earnings management in Chilean firms from 1991-2001. The result was focused on the corporate system, the study discovered several weaknesses in the way Chilean firms run investor protection, however, the banks play a prominent role. While ownership concentration has a non-linear relation with earnings management, this is consistent with both the control of directors by main shareholders and the idea of expropriation of minority shareholders by large controlling shareholders. They also discovered that the Bank debt is considered important to activate corporate governance as a control mechanism. Finally, the results showed that profits are not managed as an indication of growth opportunities.

3- Research by (Chen, Li, and Wang, 2018) The China, this research found that the possibility of restricting earning management within companies is one of the important questions raised in the study of Internal Control. Whereas the study focused on the use of a sample from 425 companies listed on the Shenzhen Stock Exchange 2013-2015, using the modified Jones model, The research attempted to determine the impact of internal control on earnings management in listed companies in China. The results of this research showed that there is a significant negative relationship between the levels of internal control and the levels of earning management, however, if there is high quality in the application of internal control, it is possible to reduce the earning management during the accounting options and real activities because the relationship between them is opposite. The study concluded that most of the companies listed here are manipulating, especially through financial indicators, to work on the growth of operating income, as well as the percentage of assets commitment, and in the end, financial fraud will occur within companies if there is the disclosure of inaccurate and wrong financial data and information as part of from internal control.

This study aimed to analyze the relationship between the existence of the quality of the internal control system in the French context and improving the quality of information and its reflection on the level of real profit management, which is measured by increasing inventory production, reducing discretionary expenses and manipulating sales. It hurts the movement of real earnings management, and therefore good internal control makes the financial reports to be a source of credibility for investors. Therefore, the results of this study emphasizes that the main components that significantly and fundamentally affect the movement of real earnings management are the risk assessment, control environment, monitoring activities, and control.

4- Researcher by Yousif, J. and Suman, N., (2015) investigated the relationship between earnings management and internal control weaknesses as well as the relationship between



earnings management and company size. In this research, the researcher used two samples: one of the large accelerator files, which matches the same number of companies with strong internal control, and the other accelerated files with weaknesses in internal control, and the same number of companies with strong internal control. Using the modified Jones model, and during the research, the results showed that companies with weak internal control manage their profits more than those that have strong internal control. At the same time, the results proved that the test result was strong for accelerated files, however, it shows modest for large files accelerated, and therefore we conclude that large companies manage their profits less than other companies. The results have led to the fact that there is a size factor for the company that determines the profits, and we conclude from this study the following significant points; 1) Regulators should take into consideration other disclosure factors in accelerated and non-accelerated files and small enterprises, 2) Increasing scrutiny for auditors in the financial statements of these mentioned companies.

5- Research by Abdul Rahman, A. and Al-Dhaimesh (2018), intitled The effect of applying the COSO-ERM on reducing fraudulent financial reporting of commercial banks in Jordan, banks and bank system's In their research, the researchers were focusing on the reduction of fraudulent financial reporting in the Jordanian commercial bank sector by testing the effect of the application of Committee Sponsoring Organizations for enterprise risk management (COSO-ERM), they also identified roles of internal positions within the bank in enhancing the effectiveness within applicable internal controls system used in the governance of the corporate such as executive management, Board of Directors role, Auditing Committee, HR Management. The result of the study shows that having internal control system in place with commercial banks sector in Jordan would greatly impact on variables affects dependent viable (fraudulent financial reporting). The result also proved that there is significant impact on prevention of fraudulent financial reporting if Committee of Sponsoring Organizations model for enterprise risk management (COSO-ERM) applied, where it reached influence around 77.8% on the dependent variable (fraudulent financial reporting).

6- Research by (Kehinde Adekunle Adetiloye et al., 2016) in Nigerian intitled Fraud Prevention and Internal Control in the Nigerian Banking System investigated the factors affecting the Froude and earning management in Nigerian banks. The study found the effective internal control plays the main role against Froud.

7- Research by Joseph Oguda Ndege et al. (2015) in Kenya intitled Effect of Internal Control on Fraud Detection and Prevention in District Treasuries of Kakamega County found an optimistic relationship between the effectiveness of internal control systems and reducing of fraud and earning management at a substantial level in the treasury accounts section of the Kenyan banks.

2.1 The Concept of Earning Management

Earning Management is the managers' effort to influence or manipulate the reported earnings (Akers et al., 2007), earning is one of the objectives that the financial and banking establishments are aiming for, in addition, they seek to maximize their earnings by using all available and different approaches and means, in order to continue & expand the banking business. This phenomenon may result in less confidence and transparency in financial market. earning management may include destructions of the General Accounting Principles (GAAP) or the rule (Baralexix, 2004) and the earning management by adaptable practice activities of GAAP (Degeorge et al., 1999).

Accordingly, the process of earnings management is considered the most important effort undertaken by banks and financial institutions in particular in order to improve their banking reputation and increase their customer base, by soothing income and accounting get rid of all losses in corrupt year or approaching a certain practices of manipulating expenses in order to overstate them to show unreal value, in addition to ensuring the continuity of banking



business, therefore they are regarded as the most difficult and important operations, especially in the banking environment (DeGeorge et al., 1999).

The conclusion from the above that the earnings management can be defined as disclosing profits by bank managers; Based on their personal evaluations that mislead the shareholders and the public who are dealing with the bank in general, the earning Management also means the process of positive manipulation of accounting outcomes; to show different perception.

2.2 The concept of the COSO framework

The term COSO is an acronym for Committee of Sponsoring Organizations, which refers to the Committee to Support or Sponsor Organizations of the Treadway Commission (COS,1994). COSO is an integrated framework enables organization efficiently develop internal control system that adopts swapping business and operating environments, mitigates risk to an acceptable level, and supports sound decision-making and governance of the organization (COSO,2013), COSO was formed and designed to provide leadership by developing comprehensive frameworks and guidance in internal control fraud prevention interface risk management (Akyel, 2010: 87).

The COSO framework suggests five components that are inserted and constitute the internal control system (COSO, 2013). The columns represent the Three objective groups; the rows consist of the Five components which can be extended flexibly through the organizational levels. The following is a short summary of the elements of the COSO framework: (Manale et al,2021)

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| c) 483 | |

1-Control Environment:

Control environment means the general position of managers and management, their awareness and actions related to internal control and its Importance in the organization and the control environment has an effect on the efficiency of control processes (Akyel,R, 2010).

The control environment include (COSO,2013):

- Exercise integrity and ethical values.
- Make a commitment to competence.
- Use the board of directors and audit committee.
- Facilitate management's philosophy and operating style.
- Create organizational structure.
- Issue assignment of authority and responsibility.
- Utilize human resources policies and procedures.

2- Risk Assessment:

This component requires a pre-assessment to the set of objectives associated with all levels of the entity. Management defines objectives, within categories related to operations, reporting, and compliance, with sufficient clarity to be able to identify and analyze risks for these objectives, and assessment of risk is required by management to consider the impact of potential changes in the external environment. The risk assessment includes (coso,2013):

- Create companywide objectives.
- Incorporate process-level objectives.
- Perform risk identification and analysis.
- Manage change.

3-Control Activities:

Control activities are carried out at all levels in the entity and at various stages within the



operations and environment such as delegation of authority and approval procedures, and separation of duties principle (Akyel, 2010: 87). control activity includes (COSO,2013):

- Follow policies and procedures.
- Improve security (application and network).
- Conduct application change management.
- Plan business continuity/backups.
- Perform outsourcing.

4- Information and Communication:

Communications instructions are put in place to make sure that both internal and external communications adhere to legal requirements, ethical values and standard industry practices. Aimed at instance, private sector institutes common accept privacy policies creating how customer data can be used information and communication, for this, it is important to ensure the uninterrupted flow of information between the internal and external information network that supports the internal control system (AICPA, 2017: 127) Information and Communication include (COSO,2013).

- Measure quality of information.
- Measure effectiveness of communication.

5- Monitoring:

Managers use this element to monitor activities and processes or internal controls within the organization, monitoring include (COSO,2013):

- Perform ongoing monitoring.
- Conduct separate evaluations.
- Report deficiencies.

3-Research Methodology

To achieve the objectives of this study a quantitative methodology will be adopted, the data was collected by distributing a questionnaire to test the hypotheses made.

3.1 Research Approach

The questionnaire is divided into Three sections, the first part is designed to identify the demographic characteristics of the employee of the study, the Second part deals with the variables related to the elements of internal control according to the (COSO) framework and the Third section is related to earning management variables.

3.2 Sample and Procedure:

This chapter covers the statistical analysis of the questionnaire forms that were distributed to the professional Accountants and Auditors working in banks sector, to show their opinion and determine the extent of the impact of the COSO framework on reducing earning management, in the banking sector in the city of Erbil. 80 questionnaires were distributed, however only 70 forms were valid for analysis in this research, based on the SPSS statistical program outcomes.

3.3 Findings and discussion of the results:

The personal characteristics of the sample dealt with by the questionnaire were described by determining the number, and percentages of some personal information of the respondents, which included Gender, Occupation, and total years of experience, as summarized in Table (1):

Table (1): Statistical description of the personal characteristics of the respondents Source:

Occupation					
Auditors			Accountants		
Number	Ratio		Number	Ratio	
40	57.1		30	42.9	
Years of experience					
More than 15 years		5-15	Less than 5 years		
Number	Ratio	Number	Ratio	Number	Ratio
33	47.1	24	34.3	13	18.6



Prepared by the researcher based on the SPSS statistical program

Table number (1) illustrates 42.9% of respondents were accountants, compared to 57.1% of respondents were Auditors category. Meanwhile, the experience by years distributed to 18.6% for a category (Less than 5 years), 34.3% for a category (5-15) years, and finally 47.1% for a category of (More than 15 years).

3.4: Description of the terms and characterization of research:

The questionnaire included Two variables with total of 40 questions. This analysis used the arithmetic mean, the degree of agreement, and the standard deviation for each of these questions was calculated as follows:

The independent variable: The independent variable included five components, of the COSO framework and each components had (6) questions summarized in the following table:

Table (2): Statistical Description of the Expressions of the Independent Variable

#	Statements	Average	% of agreement	standard deviation
First Dimension				
Q2	The internal auditor is independent.	6.1000	87.14	.98024
Q3	The independency of Internal auditor Enhancing professionalism and a code of conduct in every job reduces manipulation	6.0143	85.92	1.08338
Q4	assigning authority and responsibility for internal control and risk management to an executive	5.8571	83.67	1.09393
Q6	Enhancing professionalism and a code of conduct in every job reduces manipulation	5.7143	81.63	1.40540
Q1	identifying objectives in line with Risk apatite	5.6857	81.22	1.19834
Q5	having different response by authority for each risk (e.g. avoiding, accepting, reducing, or sharing) reduces manipulating financial information's	5.5143	78.78	1.31593
Average		5.8143	83.06	1.17950
Second Dimension Risk Assessment				
Q9	Assessing the cost impact of every risk independently reduces earning management	6.1286	87.55	1.33971
Q7	Having professional risk assessment technique reduces Earning management	6.0429	86.33	.99907
Q11	setting actions to align the risk response with the entity's risk appetite.	5.8857	84.08	1.38880
Q10	taking steps to consider the effect of risk response on other risks reduces interventions	5.7857	82.65	1.38201
Q12	We always assess the "probability" of every risk independently	5.7429	82.04	1.58513
Q8	analyzing every risk could impact earning management	5.6286	80.41	1.29851
	Average	5.8691	83.84	1.33220
Third Dimension Control Activities				
Q17	Physical oversight over entity's resources and assets reduced fraud and manipulations	5.9429	84.90	1.64964
Q18	Use IT for control	5.7857	82.65	1.60518



Q15	run functions to review performance reports	5.5429	79.18	1.62129
Q16	implementation of variety of controls activities to check the accuracy, completeness, and authorization of transactions	5.5143	78.78	1.55799
Q14	implementing procedures to ensure that the risk responses are effectively carried out	5.4000	77.14	1.60975
Q13	having processes in all levels to set objectives reduces Earning management	5.2143	74.49	1.87966
	Average	5.5667	79.52	1.65390
Fourth Dimension Information and Communication				
Q22	Information system has effective communication and in a broad sense (e.g. inside and outside the entity)	6.2286	88.98	.98056
Q21	information system effectively provides information to appropriate personnel so that they can carry out their responsibilities.	5.7714	82.45	1.52440
Q19	We ensure that the identified information can be captured, processed, and reported	5.7143	81.63	1.25274
Q23	Our entity's objectives and information system support its mission.	5.7000	81.43	1.41780
Q20	Information system effectively communicates the information and in timely manner.	5.5571	79.39	1.38977
Q24	Identifying the risks may influence on Earning Management	4.8143	68.78	1.67931
	Average	5.6309	80.44	1.37410
Fifth Dimension				
Q30	Management ensures that its internal control system continues to operate effectively	5.8714	83.88	1.10232
Q28	Ensures that monitoring is accomplished through ongoing activities or separate evaluation may reduce earning management	5.8000	82.86	1.29212
Q25	Modifying the process of internal control system, when necessary, could impact on earning management	5.5429	79.18	1.57596
Q29	considering all expected internal factors (events) that may influence positively or negatively its objectives	5.5000	78.57	1.32698
Q26	The internal control system is thoroughly monitored to avoid manipulations	5.2857	75.51	1.26426
Q27	Identifying the risks may influence on Earning Management	4.9714	71.02	1.41392
	Average	5.4952	78.50	1.32930
	Total Average	5.6752	81.07	1.3738

Source: Prepared by the researcher based on the SPSS statistical program

Table (2) shows that the total average of the independent variable reached (5.6752), which is higher than the hypothetical average (4) by (1.6752), which indicates the agreement of the



researched sample with the selection of (Agree) with a percentage of agreement of % 81.07 and a limited standard deviation of (1.3738). It indicates the convergence of the opinions of the researched sample and none-Scattered around the paragraphs of measuring the independent variable. Above results illustrate that the COSO framework affect reducing earning management according to auditors and accountant who work in banking sector in the city of Erbil.

The average of the first-dimension control Environment was (5.8143), which is higher than the hypothetical average (4) by (1.8143), which indicates the agreement of the surveyed sample with the selection (Agree) with an agreement rate of % 83.06 and a limited standard deviation of (1.1795), which indicates the convergence of the opinions of the surveyed sample and none-scattered on the paragraphs of the measurement of the first dimension which is Control Environment. this is indicating that there is a strong relation between Control Environment and earning management practice. while the second question about the auditor's independence received a higher average of (6.1), which is higher than the hypothetical average of (4) by (2.1) with an agreed percentage of % 87.14 and a standard deviation of (0.98024), while the fifth question about having different response by authority for each risk (e.g. avoiding, accepting, reducing, or sharing) reduces manipulating financial information " ranked last with an average of (5.5143) which is higher than the hypothetical average (4) by (1.5143) with an agreed percentage of %78.78 and a standard deviation of (1.31593), while the rest of the paragraphs were average and varying percentages of agreement ranging between them.

The average of the second component risk Assessment reached (5.8691), which is higher than the hypothetical average (4) by (1.8691), which indicates the agreement of the sample surveyed with the selection of (Agree) with an agreement rate of % 83.84 and a limited standard deviation of (1.3322) indicating the convergence of the opinions of the surveyed sample and none- scattered about the paragraphs of the measurement of the second dimension. Risk assessment counts as the most important components in the COSO framework according to the auditors and accountants' opinion in reducing profit management. While the Ninth question " Assessing the cost impact of every risk independently reduces earning management received the highest average of (6.1286), which is higher than the hypothetical average (4) by (2.1286) with an agreed percentage of % 87.55 and a standard deviation of (1.33971), while the Eighth question " Analyzing every risk could impact earning management " ranked last with an average of (5.6286), which is higher than the hypothetical average (4) by (1.6286), with an agreement rate of % 80.41 and a standard deviation of (1.29851), while the rest of the paragraphs were average and varying percentages of agreement ranged between them.

The average of the Third component Control Activities reached (5.5667), which is higher than the hypothetical average (4) by (1.5667), which indicates the agreement of the surveyed sample with the selection of (Agree) with an agreement rate of %79.52 and a limited standard deviation of (1.6539), which indicates the convergence of the opinions of the surveyed sample and none-Scattered around the Third-dimension measurement paragraphs. While Question Seventeen " Physical oversight over entity's resources and assets reduced fraud and manipulations " received the highest average of (5.9429), which is higher than the hypothetical average (4) by (1.9429), with an agreement rate of %84.9 and a standard deviation of (1.64964), while Question Thirteen "Management ensures that its internal control system continues to operate effectively " ranked last with an average of (5.2143), which is higher than the hypothetical average (4) by (1.2143) with an agreement rate of %74.49 and a standard deviation of (1.87966), while the rest of the paragraphs were average and varying percentages of agreement ranged between them.

The average of the Fourth component Information and Communication was (5.6309), which is higher than the hypothetical average (4) by (1.6309), which indicates the agreement of the surveyed sample with the selection of (Agree) with an agreement rate of %80.44 and a limited standard deviation of (1.3741) indicating the convergence of the opinions of the surveyed



sample and the none-Scattered around the Fourth-dimension measurement paragraphs. while question Twenty-One " information system effectively provides information to appropriate personnel so that they can carry out their responsibilities " had the highest average of (6.2286), which is higher than the hypothetical average (4) by (2.2286) with a degree of agreement of % 88.98 and a standard deviation of (0.98056), the accountants and auditor who respond to the questionnaire strongly agree on the relation between effective information system and earning management reduction, while question Twenty-Four " Information system effectively communicates the information and in a timely manner " ranked last with an average of (4.8143) which is higher than the hypothetical mean (4) by (0.8143) with an agreement rate of %68.78 and a standard deviation of (1.67931), while the rest of the paragraphs were with varying averages and degrees of agreement ranging between them.

The average of the Fifth component monitoring reached (5.6752), which is higher than the hypothetical average (4) by (1.6752), which indicates the agreement of the surveyed sample with the selection of (Agree) with an agreement rate of % 81.0 and a limited standard deviation of (1.3738) indicating the convergence of the opinions of the surveyed sample and none-scattered around the Fifth-dimension measurement paragraphs. While question Thirty " Management ensures that its internal control system continues to operate effectively " Received the highest average of (5.8714), which is higher than the hypothetical average (4) by (1.8714), with an agreement rate of % 83.88 and a standard deviation of (1.10232), while question Twenty-Seven was ranked last with an average reached (4.9714), which is higher than the hypothetical average (4) by (0.9714), with an agreement rate of % 71.02 and a standard deviation of (1.41392), while the rest of the paragraphs were at varying rates and degrees of agreement ranging between them.

Dependent variable: This variable included (10) questions summarized in the following table:

Table (3): Statistical Description of the Expressions of the Earning management Dependent Variable

#	Statements	Paragraphs	Average	% of agreement	standard deviation
Q7	The independence of the members of the board directors the majority of the members are not executive limits the banks earning management practice.		6.1143	87.35	1.17391
Q10	Some members of the board of directors have the financial and accounting knowledge and skills necessary to understand the bank's financial reports which limits the bank's practice of earning management		6.1000	87.14	1.11836
Q6	The board of directors setting and reviewing the bank's financial plans and objectives annually and monitoring performance limit's the bank's practice of earning management		6.1000	87.14	1.18138
Q8	The audit committee's confirmation of compliance with accounting standards and legal requirements when preparing financial statement limits the bank's practice of earning management.		5.9857	85.51	1.33507
Q9	The board of director's supervision of the establishment		5.9286	84.69	1.36543



	and evaluation of internal control structure related to the preparation of the financial statement limits the company's practice of earning management.				
Q1	The board of director's review of the company's internal policies periodically limits the bank's practice of earning management.		5.8571	83.67	1.52549
Q5	The board of director's supervision of the establishment and evaluation of the internal control structure related to the preparation of financial statements limits the bank's practice of earning management.	Average	5.6286	80.41	1.77887
Q4	The audit committee's examination of the accounting policies adopted by the bank and investigating the changes that occurred limits the bank's practice of earning management		5.5571	79.39	1.66495
Q3	The audit committees verify the adequacy and appropriateness of accounting discloser in the financial statements limits the bank's practice of earning management.		5.5571	79.39	1.70792
Q2	The board of directors are in corporation with the audit committee, supervise the internal audit function, limits the banks practice of earning management		5.4857	78.37	1.63071
		Average	5.8314	83.31	1.44820

Source: Prepared by the researcher based on the SPSS statistical program

The average of the earning management dependent variable was (5.8314), which is higher than the hypothetical average (4) by (1.8314), which indicates the agreement of the researched sample with a selection of (Agree) with the degree of agreement amounted to 83.31% and a limited standard deviation amounted to (1.4482) indicating the convergence of the opinions of the researched sample and the none-scattered about the paragraphs of measuring the dependent variable. While the Seventh question " the independence of the members of the board directors the majority of the members are not executive limits the banks earning management practice " received the highest average of (6.1143) which is higher than the hypothetical average (4) by (2.1143) with an agreement rate of % 87.35 and a standard deviation of (1.17391), while the second question" the board of directors is in corporation with the audit committee, supervise the internal audit function, limits the bank's practice of earning management " ranked last with an average of (5.4857) which is higher than the hypothetical mean (4) by (1.4857) with an agreement rate of % 78.37 and a standard deviation of (1.63071), while the rest of the paragraphs were with varying averages and degrees of agreement ranging between them.



4. Results & Discussion

4.1: The internal stability test of the resolution (Consistency):

In this part, Cronbach's Alpha coefficient was found, which is a measure or indicator of the consistency of the test (Resolution). The following table shows the values of Cronbach's alpha coefficients for each dimension individually and for the scale as a whole.

Table (4): Cronbach's alpha test to measure resolution consistency.

Section of the form	Cronbach's alpha coefficient	Number of parts
Independent variable	0.612	30
Dependent variable	0.714	10
All parts of the form	0.786	40

Source: Prepared by the researcher based on the SPSS statistical program

The reliability coefficient of Cronbach's alpha for all parts of the questionnaire for measuring tool has a high degree of stability because due to the higher than % 60, and therefore it means that there is internal consistency for questions of the questionnaire variables and relevant parts of the questionnaire in general.

4.2: Data Distribution Test:

To ensure that the data have a normal distribution by using the Kolmogorov-Smirnov test, i.e. testing the following hypothesis:

: H_{N1} : The averages of the answers to the questions are of a normal distribution.

: H_{A1} : The averages of the answers to the questions are not normally distributed.

The compatibility of the estimated mean of the study axes with the normal distribution was tested to determine the parametric test, (if the distribution of the means is normal) or the nonparametric (if the averages are not distributed normally) according to the results of this test, and the results are summarized in the following table:

Table (5): Normal distribution test

The average axes of the study	Value -k.s	Tabular value	p - value
Independent variable	0.1346	0.1598	0.1441
Dependent variable	0.1177	0.1598	0.2654

Source: Prepared by the researcher based on the SPSS statistical program

By analyzing the above table, it is noted that the averages of the axis of the independent and dependent variable are distributed normally because the k.s-value equals to (0.1346) and (0.1177), respectively, which are less than its tabular value (0.1598), and this is confirmed by the p-value equal to (0.1441) and (0.2654) respectively, they both greater than the level of significance (0.05).

4.3 Testing the hypotheses of the Study:

The main Hypothesis.

Hypothesis 1: There is no effect (relationship) for the independent variable **X** on the dependent variable **y**.

Hypothesis 0: There is an effect (relationship) of the independent variable **X** on the dependent variable **Y**.

The simple linear regression model was estimated to show the effect of the independent variable on the dependent variable, the coefficient of determination was calculated with the correlation coefficient, and the hypothesis was tested under the level of significance (0.05), and the following results were obtained:



Table (6): Effect sample (and relationship) for the independent variable in the dependent variable

Regression Coefficients		t-Value	p-value	F-Value	p-Value	Correlation coefficient	The coefficient of determination
Fixed	-3.862	-5.097	0.000	164.45	0.000	0.841	0.707
Decline	1.708	12.824	0.000				

Source: Prepared by the researcher based on the SPSS statistical program

Note that the in table (6), the independent variable explains %70.7 of the changes that occurred in the dependent variable, additionally the calculated F-value equals to (164.45) which is greater than its tabular value under the level of significance of % 5 and degrees of independent (1 and 68) which amounted to (3.99). This means that the estimated model is suitable for the data (and this is confirmed by the p-value of Zero which is less than the level of significance of % 5), thus the null hypothesis there is no statically substantial impact of the application elements of internal control according to the COSO framework on earning management in the banking sector in Erbil city will be rejected and the alternative hypothesis there is a statically substantial impact of the application elements of internal control according to the COSO framework on earning management in thebanking sector in Erbil city will be accepted, which states that there is an effect of the independent variable on the dependent variable. With a significant direct correlation of 84.1%.

H1: There is no effect of the components of COSO framework the independent variable on the dependent variable Earning management.

H0: There is an effect of the components of the COSO framework on the independent variable on the dependent variable Earning management

The simple linear regression model was estimated to show the effect of the dimensions of the independent variable on the dependent variable, the coefficient of determination was calculated with the correlation coefficient, and the hypothesis was tested under the level of significance (0.05), and the following results were obtained:

Table (7): Effect model (and relationship) for the dimensions of the independent variable in the dependent variable.

Dimensions of the independent variable	regression coefficients	F	p-Value	R	R ²	
First	Fixed	4.632	1.234	0.271	0.134	0.018
	decline	0.206				
Second	Fixed	1.759	60.87	0.000	0.687	0.472
	decline	0.694				
Third	Fixed	2.986	139.9	0.000	0.820	0.673
	decline	0.511				
Fourth	Fixed	4.310	1.729	0.193	0.157	0.025
	decline	0.270				
Fifth	Fixed	6.586	0.989	0.323	0.120	0.014
	decline	-0.137				

Source: Prepared by the researcher based on the SPSS statistical program

Analyzing Table (7), note that the first-dimension control environment explains only % 1.8 of the changes that occurred in the dependent variable. further note that the calculated F-value is equal to (1.234), which is less than its tabular value under the significance level of % 5 and degrees of independence (1 and 68), which amounted to (3.99) This means that the estimated model is not suitable for the data (this is confirmed by the p-value of 0.271 which is greater than the %5 significance level), so the main hypothesis will be accepted, which states that there is no effect of the first dimension in the dependent variable. With a weak correlation of 13.4%.



The second-dimension risk assessment explains only %47.2 of the changes in the dependent variable. Furthermore, the calculated F-value is equal to (60.87), which is greater than its tabular value under the level of significance of % 5 and degrees of independence (1 and 68), which amounted to (3.99). This means that the estimated model fits the data (this is confirmed by the p-value of 0.000 which is less than the % 5 significance level), so the main hypothesis will be rejected and the alternative hypothesis which states that there is an effect of the second dimension on the dependent variable is accepted. With a significant direct correlation of % 68.7.

The third-dimension control activity explains only % 67.3 of the changes in the dependent variable. also note that the calculated F-value is equal to (139.9) which is greater than its tabular value under the level of significance of % 5 and degrees of independence (1 and 68), which amounted to (3.99). This means that the estimated model fits the data (this is confirmed by the p-value of 0.000 which is less than the % 5 significance level), therefore the main hypothesis will be rejected and the alternative hypothesis which states that there is an effect of the third dimension in the dependent variable is accepted. With a significant direct correlation of % 82.

Analyzing date shows that the fourth dimension Information and communications explain only % 2.5 of the changes in the dependent variable. also note that the calculated F-value is equal to (1.729), which is less than its tabular value under the level of significance of % 5 and degrees of freedom (1 and 68), which amounted to (3.99). This means that the estimated model is not suitable for the data (this is confirmed by the p-value of 0.193 which is greater than the % 5 levels of significance), thus the main hypothesis will be accepted, which states that there is no effect of the fourth dimension in the dependent variable. With a weak correlation of 15.7%.

It is noted that the fifth-dimension monitoring explains only % 1.4 of the changes in the dependent variable. the calculated F-value is equal to (0.989), which is less than its tabular value under the level of significance of % 5 and degrees of independence (1 and 68), which amounted to (3.99). This means that the estimated model is not suitable for the data (this is confirmed by the p-value of 0.323 which is greater than the %5 levels of significance), so the main hypothesis will be accepted, which states that there is no effect of the fifth dimension in the dependent variable. With a weak correlation of %12.

5. Conclusion & Recommendation

5.1 Conclusion

The study reached a set of conclusions which are:

1. The study results presented that there is an application of the internal control elements according to the COSO framework at an average level. Meanwhile an effective internal control system, contributes to reducing earning management at bank sectors in City of Erbil.
2. Internal control is one of the most significant fights against the failure of economic units and it is a major driver of business performance and an integral part of the governance system.
3. The study reached that there is an average level to the adopted element of internal control by COSO framework, the order of the levels of this application is as follows (Risk assessment, Control environment, Information and communication, Control activity and Monitoring).
4. The study confirmed the existence of a statically significant effect of the application elements of internal control by COSO framework on earning management.
5. The study results according to correlation coefficient showed that earning management is significantly affected by Risk assessment and Control activity components of COSO framework and the study accept the alternative hypothesis, while for Control environment, information and communication, and monitoring the research accepted Null hypotheses.



5.2 Recommendations:

The recommendations can be summarized as follow:

1. The important of applying COSO components to assess the internal control of the banking sector in Erbil city to recognize the weaknesses points presented when evaluating the activities or control procedures due to the positive impact of the internal control system on earning management.
2. Work to develop the efficiency of employees in the field related to internal control system through holding more training programs and related workshops to inform them to evade earning management.

6. References

- Abdul Rahman, A., and Al-Dhaimesh (2018), The effect of applying the COSO-ERM model on reducing fraudulent financial reporting of commercial banks in Jordan, banks and bank system's 13(2), p.107-115. available at: [://www.researchgate.net](http://www.researchgate.net).
- Akers, M., Giacomino, D. E., & Bellovary, J. L. (2007). Earnings management and Its Implications. The CPA Journal, 77, 64–69.
- AICPA. (2017). Accounting Guide: Brokers and Dealers in Securities, New York: American Institute of Certified Public Accountants.
- Akyel, R. (2010). "Türkiye'de İç Kontrol Kavramı, Unsurları ve Etkinliğinin Değerlendirilmesi", Yönetim ve Ekonomi, 17 (1)
- Baralexis, S. (2004). Creative Accounting in Small Advancing Countries: The Greek Case. Managerial Auditing Journal, 19(3), 440–461
- Bertin, M. and a Iturriaga, F. (2005), Earnings Management and Internal Control Mechanisms: Evidence from Chilean Firms, researchgate.
- Chen, Y., Li, J., and Wang, Y. (2018), An Empirical Study on Internal Control and Earnings Management of China's Listed Companies Based on the Modified Jones Model, International Conference on Management, Economics, Education and Social Sciences, available at: [://www.researchgate.net](http://www.researchgate.net).
- COSO (1994), Internal Control-Integrated Framework, Committee of Sponsoring Organizations of the Treadway Commission, Coopers, and Lybrand, New York, NY.
- COSO (2013), Internal Control-Integrated Framework 2013, Committee of Sponsoring Organizations of the Treadway Commission, Coopers and Lybrand, New York, NY.
- COSO (2013). COSO Internal Control- Integrated Framework: <https://www.coso.org/Doc/unmints/COSO-CROWE-COSO-Internal-Control-Integrated-Framework.pdf> (Erişim: 05.02.2020).
- COSO (2013) Internal Control-integrated Framework, Committee of Sponsoring Eatmon, N. & Baroque, O. A. Exploring the impact of internal corporate governance on the relation between disclosure quality and earnings management in the UK listed companies. Journal of Business Ethics, Vol. 18 (2015) No. 13, p.1-23.
- DeGeorge, F., Patel, J., & Zeckhauser, R. (1999). Earnings management to exceed thresholds. Journal of Business, 72(1), 1–33. <https://doi.org/10.1086/209601>
- Kehinde Adekunle Adetiloye, Felicia Omowunmi Olokoy, & Joseph Niyan Taiw (2016). Fraud Prevention and Internal Control in the Nigerian Banking System. International Journal of Economics and Financial Issues, 6(3), 1172- 1179. Retrieved from <https://www.econjournals.com/index.php/ijefi/article/viewFile/2035/pdf>
- Oguda N. J., Odhiambo, A., & Byaruhanga, J. (2015). Effect of Internal Control on Fraud Detection and Prevention in District Treasuries of Kakamega County. International Journal of Business and Management Invention, 4(1), 47-57. Retrieved from [http://www.ijbmi.org/papers/Vol\(4\)1/F041047057.pdf](http://www.ijbmi.org/papers/Vol(4)1/F041047057.pdf)
- Manale A., Khalil F. and Mona Z. (2021) "The role of emotional intelligence and personality on the overall internal control effectiveness: applied on internal audit team member's behavior in Lebanese companies" Asian Journal of Accounting Research, Issue: 1, Volume: 6, p1-13.
- Spira, L.F. and Page, M. (2003), "Risk management: the reinvention of internal control and the changing role of internal audit", Accounting, Auditing and Accountability Journal, Vol. 16 No. 4, pp. 640-661, doi: 10.1108/09513570310492335.
- Sonda Wali, Sana Mardessi Masmoudi, (2020), Internal control and real earnings management in the French context, Journal of Financial Reporting and Accounting, Volume 18 Issue 2.
- Wali, S. and Masmoudi, S.M. (2020), "Internal control and real earnings management in the French context", Journal of Financial Reporting and Accounting, Vol. 18 No. 2, pp. 363-387. <https://doi.org/10.1108/JFRA-09-2019-0117>.

- Yousef J. and suman, N., 2015, Earning management, weak internal controls, and firm size, volume 7 no 2, p1944-592, available at: www.theibfr2.com

له رڤگريکردن له کرداری بهرپوهبردی داهاات COSO رۆلی چوارچيويه توڤڤينه وهيه کي شيکاريه بۆ رای نمونه يه ک له وردبينيکار و ژميريان له بانکه کان - شاری ههولير

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پوخته

ئامانجی سه ره کي ئەم توڤڤينه وهيه ديارليکردن کارگهري کۆنترۆلی ناوڤويه به پي چوارچيويه COSO بۆ کۆنترۆلی ناوڤوي له به شداريکردن له کهمکردنه وهی کرداری بهرپوهبردی داهاات له کهرتی بانک له شاری ههولير له روانگهی وردبينيکار و ژميريان له رڤگه ی به کاره پيانی پيوانه کردنی چهنديا به تي گۆراوه کان.

هه لڤاردنی کهرتی بانکی بۆ ئەم توڤڤينه وهيه به هۆی گرنگی کهرتی بانکی و زيادبوونی مه ترسيه کانی په يوه ست به بهرپوهبردی داهاات بووه، له ژير رۆشنايی کيپرکي جيهانی و کرانه وهی ئابووري، له م توڤڤينه وهيه دا ريبازی چهنديا به تي به کاره پيتراره. داتاگان له رڤگه ی پارسي کۆراوه ته وه بۆ هه لسه نگاندي گریمانەکان. 80 کۆپی پارسي به سه ر دوو نمونه ی پسپۆران دابه شکرا، له ده رته نجامدا 70 کۆپی په سند کراو گه پندرانه وه بۆ توڤڤينه وه که. بۆ پشتراستکردنه وه و شيکردنه وهی داتاگان پاکي شيکاری ئاماری (SPSS) به کاره پيتراره.

ده رته نجامه کان - توڤڤينه وه که گه يشتۆته ئەو ده رته نجامه ی که په يوه ندييه کي رڤه ی له ئيوان گۆراوه وابه سته کراوه که دا هه يه - سيسته می کۆنترۆلی ناوڤوي به پي چوارچيويه COSO - له گه ل گۆراوه سه ره به خۆکه - کرداری بهرپوهبردی داهاات. تا سيسته می کۆنترۆلی ناوڤوي کارا تر بيت، کرداری بهرپوهبردی داهاات سنووردارتر ده بيت، توڤڤينه وه که چهنديا پيشنيارک ده خاته روو؛ به کاره پيانی چوارچيويه که بۆ رڤنمايکردن په ره پيدانی کۆنترۆلی ناوڤوي بۆ ده ست نيشان کردنی کرداری بهرپوهبردی داهاات، هه روه ها کارکردن بۆ به رزکردنه وهی توانای ئەو کارمه ندانه ی له بواری سيسته می کۆنترۆلکردنی ناوڤويدا کارده کەن له رڤگه ی به رنامه ی راهيانی زياتر و وۆر کشۆيه کان له سه ر رڤگريکردن له بهرپوهبردی داهاات.

وشه کليله کان: چوارچيويه COSO، کۆنترۆلی ناوڤوي، بهرپوهبردی داهاات، کهرتی بانکی.

ممارسة إدارة الارباح في الحد من COSO دور إطار دراسة تحليلية لآراء عينة من المدققين والمحاسبين في المصارف - مدينة اربيل

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ملخص

الهدف الرئيسي من هذه الدراسة هي تحديد فاعلية الرقابة الداخلية وفق إطار COSO للرقابة الداخلية في المساهمة في الحد من ممارسات إدارة الارباح في القطاع المصرفي في مدينة أربيل من وجهة نظر المدققين والمحاسبين من خلال القياس الكمي للمتغيرات. تم اختيار القطاع المصرفي لهذه الدراسة لأهمية القطاع المصرفي وزيادة المخاطر التي ينطوي عليها إدارة الارباح، في ظل المنافسة العالمية والانفتاح الاقتصادي، في هذا البحث، تم تطبيق منهج الكمية. فقد تم جمع البيانات من خلال استبيان لاختبار الفرضيات. فقد وزعت 80 نسخة من الاستبيان على عينتين من المهنيين، وتم إعادة 70 استبيان صالح للدراسة. وقد تم استخدام الحزمة الإحصائية التحليلية (SPSS) للتحقق من صحة البيانات وتحليلها. النتائج - وجد البحث أن هناك علاقة معامل بين المتغير التابع - نظام الرقابة الداخلية وفقاً لإطار COSO - والمتغير المستقل - ممارسات إدارة الأرباح. حيث كلما كان نظام الرقابة الداخلية أكثر كفاءة، كلما كانت ممارسة إدارة الأرباح محدودة. واختتمت الدراسة بعدد من المقترحات؛ استخدام هذا الإطار لتوجيه تطوير الرقابة الداخلية لتحديد ممارسات إدارة الارباح وكذلك العمل على تعزيز مهارات الموظفين العاملين في مجال نظام الرقابة الداخلية من خلال المزيد من البرامج التدريبية وورش العمل حول الحد من إدارة الأرباح.

كلمات الدالة: إطار عمل COSO، الرقابة الداخلية، إدارة الأرباح، القطاع المصرفي.