

# The Use of the Financial Analysis in Improving the Efficiency and Effectiveness of the External Auditor in Detecting Financial Fraud – An Analytical Study

Dr. Alfateh Al-Amin ARahim El-Faki<sup>1</sup>

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## ABSTRACT

This study aims to develop a practical framework for the International Auditing Standard No.(520) and the statement of audit Standard No.(56)by illustrating how to apply financial analysis to help the auditor to discover financial fraud and also clarify how to use the process of brain storming. The researcher found that financial analysis itself does not lead to detect financial fraud, but helps to identify factors that may involve the existence of financial fraud, that relies on the financial analysis un comparing its results with any standards do not achieve the target purposes. The main recommendations: auditor should apply analytical procedures at the process, to help the auditor to understand the customer's work. Expedition of audit testing should be a reflection of responses of financial analysis.

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## Introduction

One of the most important causes of losing public confidence in the audit profession is failing in recent times in the detection of cases of fraud and the errors that occur in enterprises that are audited. It became clear that most of the enterprises that have been audited did not show any existence of cases of fraud and corruption. Consequently the third party lost confidence in the audit profession. Perhaps the primary reason for that is due to unprofessional judgment of auditing, which is reflected in the professional due diligence.

Financial Analysis is a personal assessment process to an existing analysis and a purpose of the assessment of the financial situation of the past and present to a certain company and results of operations .The Primary objective of the analysis is to reach the best estimates and forecasts for the company's performance in the future, and helps financial analysis to highlight the entity's ability to achieve revenue, also to know the entity's ability to meet its liabilities and efficiency in the use of available resources and its ability to maximize the wealth and achieve profits, so the importance of financial analysis lies in highlighting the facts through the interpretation of the numbers and explain the strengths and weaknesses of the economics of the enterprise .The process of detection of errors and financial fraud is an important factor in the formation of the audit opinion –audit report- on the financial statements, so it can be seen as subsidiaries targets and are of great importance in the composition of the audit opinion of the validity and fairness of the financial statements, the auditor cannot conviction of truthfully and fairness financial statement if not satisfied that the accounts are free from the errors and fraud. This research deals the role that can be playing by the financial analysis in detection of the factors risk that may involve of financial fraud in the financial statements, with an surely that the financial analysis in itself does not necessarily lead to discover financial fraud and manipulation in the financial statements

## The nature of the problem

The research problem is mainly in the non-use of external auditors for financial analysis as a tool which can detect risk factors - that predict the presence or occurs of fraud –.We can be expressed this problem through the following points:

- 1-What is the effect of the financial indicators when using to determine the risk of fraud by the auditors?
- 2-There are several methods of financial analysis for external auditor can relied upon when performing the audit, and multiple in itself a problem that requires auditor choose the optimal method. And this theme can

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<sup>1</sup> Assistant Professor in Accounting -Head Department of Accounting, Dawadmi Community Colleague, Shaqra University

be expressed with the following question: What is the best method that can be used by the auditor to conduct a financial analysis for audit purposes? Are these methods related to detect fraud and manipulation?

3-How can benefit from the financial analysis when external auditor doing brainstorming process between team members?

#### **The importance of research**

The importance of research dealt to one of the topics that can contribute to improving the professional judgment of external auditor regarding the development of abilities to detect financial fraud (risk factors that may involve the existence of fraud), and by addressing the role of financial analysis in the development of the efficiency and effectiveness of the external auditor in discover of financial fraud, also the importance of the research is to determine the optimal methods that seek to provide auditor by indicators that can help him to predict the possibility of fraud or manipulation.

#### **Research objectives:**

The research aims to develop a framework so as to apply the international audit standard No. (520) and statement auditing standard No. (56) to clarify how to apply financial analysis by the external auditor to detect fraud as well as its use in the process of brainstorming, we can reach that goal through the following sub-goals:

- 1- Addressing financial analysis methods that help in estimating the limits of the relative importance thus contributing to the audit planning process efficiently.
- 2- Set up a general framework for financial analysis contributes to the development of indicators may predict the occurrence of cases of fraud.

#### **Research Methodology:**

The researcher follow deductive and inductive approach, the first approach used in the formulation of the problem and the second approach relied on in the design of the proposed framework

#### **Previous studies**

Will be taken some of previous studies that have related the subject of research, it has been divided according to the following points:

First: a study on the expansion of audit testing

Second: a study that related by use the financial ratios in discovering the fraudulent financial reports.

#### **First: a study on the expansion of audit testing**

##### **Study (Pincus. 1990):**

According to this study, find that the auditor could face fraud management directly through the use of large sample size when the implementation of audit process, as well as expansion in the detailed audit testing. And the relationship between this study and my study, the subject matter is that both are trying to make an attempt to contribute to improving the efficiency of auditor to detect fraud and to increase confidence by a third party, as well as the subject of research focuses on the audit based on analytical procedures, opposite this study, which do require extensive detailed audit.

#### **Second: a study that related by use the financial ratios in discovering the fraudulent financial reports.**

##### **Study (Kathleen. Sterling: 2004):**

Is an exploratory study to determine whether the financial ratios that can detect fraudulent financial reporting in the facilities or not. And see that fraudulent financial reporting are anxious and an obsession socially and economically dangerous, where the application of (21) financial ratios on (79) enterprises, and were compared with these ratios on the basis of the size and type of industry and the time period for the selected periods. And conducted the comparison by choosing seven periods were divided on the basis that the year in which detect of financial fraud is the base year and other periods were divided as follows: three periods a year ago fraud, and three periods of one year after fraud. These ratios are also shown in Table (1-1):

Table (1-1): financial ratios used in the Kathleen& Sterling & Guan study

No	Statement	equation	Defined in terms equation
1	Debtors to total assets	AR/TA	Accounts receivable/Total assets
2	Cost of goods sold to inventory	COGS/INVTO	Cost of goods sold/Inventory
3	Cost of goods sold to sales	COGS/SAL	Cost of goods sold/sales
4	Current assets to current liabilities	CA/CL	Current assets/ Current liabilities
5	Current assets to total assets	CA/TA	Current assets/Total assets
6	Total liabilities to total equity	TL/TE	Total liabilities / Total equity
7	Fixed assets to total assets	FA/TA	Fixed assets / Total liabilities
8	Gross profit to sales	GP%	Gross profit / Sales
9	Interest expense to total liabilities	IE/TL	Interest expense / Total liabilities
10	Inventory to current assets	INC/CA	Inventory / Current assets
11	Inventory to sales	INV/SAL	Inventory / Sales
12	Inventory to total assets	INV/TA	Inventory / Total assets
13	Net income to sales	NI/SAL	Net income / Sales
14	Net income to total assets	NI/TA	Net income / Total assets
15	Operating expenses to sales	OPX/SAL	Operating expenses / Sales
16	Operating income to sales	OPI/SAL	Operating income / Sales
17	Retained earnings to total assets	RE/TA	Retained earning / Total assets
18	Sales to debtors	SAL/AR	Sales / Accounts receivable
19	Sales to total assets	SAL/TA	Sales / Total assets
20	Total liabilities to total assets	TL/TA	Total liabilities / Total assets
21	Working capital to total assets	WC/TA	Working capital / Total assets

The result of this study is that there are sixteen a significant ratios in general, where the study showed that:

- 1 - There are three ratios were important for three periods.
- 2 - There are five ratios were important during and before the year fraud.
- 3 - There are eight ratios were important for one term only.

This study is consistent with research topic in the fact that dealing with financial ratios, which represent a financial indicators on which it is based researcher to explain how that could contribute to the development of the audit process and then improve the external audit report for the benefit of a third party who can be trusted outputs of the audit process. The study reaches that the financial ratios are of limited capacity in detecting or the expectation of fraudulent financial reporting.

#### Division

Research will be addressed as follows:

First: The development of responsibility on the auditor discovered fraud

Second: The proposed approaches to improve the capabilities of auditor to detection of financial fraud.

#### First: The development of responsibility on the auditor discovered fraud:

Will be addressed through the following points:

- 1-1 concept fraud and types.
- 1-2 auditor responsibility for detection of financial fraud SAS82
- 1-3 auditor responsibility for detection of financial fraud SAS99

#### 1-1 Concept fraud and types:

The primary objective of the audit until the thirties of the last century (1930) is detection of fraud and manipulation in the accounting records, but this evolution and became a target with the audit profession aims to express an independent opinion about the truth and fairness of the financial statements. And the responsibility of auditor regarding the detect of fraud a controversial , as some finds (Chordler, Anderson, 1995) That the problems facing the auditing profession today due to the belief that they lead to the discovery of fraud, and this would led to the creation of a gap between public expectations and references. And it must be emphasis that the primary audit objective was the discovery of the fraud, and as long as this target until the thirties of the last century, and then become the primary audit objective is to verify the truth and fairness of the financial statements.

And we find that, if not to assume that the audit design to detect of financial fraud caused the auditors make care less discover of financial fraud - do not make due professional care - in the sense that they are not concerned about detect of financial fraud. And we can say that fraud is a constant threat presence necessarily affects the effective use of sources (Brink. 1982), so it should be the focus of attention and responsibility auditor.

And generally can highlight some of the concepts that addressed the issue of fraud is as follows:

\* Description Prosser(1971)of the elements of fraud as follows: Error representation of material fact, and that the supply is intentionally false, and that the person make decision in the act intended to mislead others, and the presence of a person affected by this act.

\* As explained by the American Institute of Certified Public Accountants in standard No. (SAS53) entitled (auditor responsibility for detecting and reporting errors and irregularities) expression to describe the violation fraud in the financial statements by Misstatement that management fraud, and theft of assets as a fraud user.

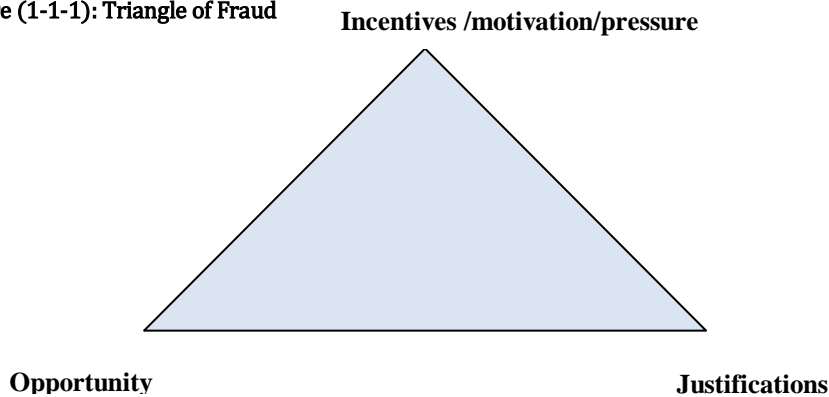
The following is a clear most important audit standards and position of responsibility auditor to detect fraud and manipulation in the financial statements:

Detect of the financial fraud was of the basic objectives of the audit process, and that in early 1930, this goal has been changed by issuing Bulletin audit procedures No.(1) " **Extensions of Auditing Procedure**" Which indicated that the audit of the financial statements did not plan to detect irregularities and corruptions , which it cannot be relied upon to achieve it , because it is non of clarity in the relationship between the audit and the detect of fraud by a third party, the auditing profession faced strongly criticized in the late fifties of the last century on auditor responsibility for detect of financial fraud, which led in 1960 to the publication of the audit procedures No.(30) "**Responsibility and Functions of the Independent auditor in the Examination of Financial Statement**". This Bulletin it showed that the auditor should be careful and aware of the possibility of the existence of fraud, but it is taken they explained that the auditor does not assume responsibility for a positive to detect the fraud, nor did expand its responsibility about it.

In 1977 Bulletin issued Statement Auditing Standards No. (16)" **The Independent auditor's Responsibility for the Detection of Errors and Irregularities**". In this bulletin to clarify that the auditor planning the audit process so being able to search for significant errors and irregularities and that responsibility is determined within the limits inherent in the audit process. Criticism of the SAS No. (30) can be faced to SAS No. (16), where they also took over the defensive side, and taken them it did not achieve the goal of issuance which cannot be for the users of financial statements rely on audit to ensure the detection of significant cases of fraud and errors and irregularities. In April 1997 Bulletin was issued Statement Auditing Standards No. (82) "**Consideration of Fraud in a Financial Statement Audit**" Where this standard applies to financial statements for the period ending on or after 15/12/1997 and Bulletin included specific guidance for estimating the risk of fraud in the audit process, and respond to the results of the risk assessment, and report on fraud detected or suspected, and finally documented estimate auditor risk and response. And although the issuance of this standard from a short period, but that the increase and the explosion of a series of accounting scandals of major U.S. companies (such as Enron Power Company, the company World com) it was led to the issuance of the Statement of Audit Standard No. (99) "**Consideration of Fraud in a Financial Statement Audit**" in 2002. Figure (1-1-1) explains factors of fraud; these factors are integrated with each other and form what is known as the Triangle of fraud.

- 1 - The existence of incentive or motivation or pressures facing the person the perpetrator of the fraud.
- 2 - There is opportunity in the internal control weaknesses or the possibility deactivated by the person the perpetrator of the fraud.
- 3- The presence of the justification for those who commit fraud.

Figure (1-1-1): Triangle of Fraud



Presentation by: Jeff. Close at A.A.A Ohio Region (May 2,2003). The New Fraud standard SAS.99 .Annual Meeting , Dublin , OH .

### 1-2 Auditor responsibility for the detection of fraud,

Will be addressed this through the following points:

- 1.2.1 Estimate the risk of misstatement due to fraud.
- 1.2.2 Auditor response to the results of a risk assessment misstatement.
- 1.2.3 Documentation the risk assessment and response to it.
- 1.2.4 Materiality in the auditing.

#### 1.2.1 Estimate the risk of misstatement due to fraud:

The auditor should be estimated risk of misstatement in the financial statements due to fraud , and it put him in mind when designing audit procedures to be performed . And auditor when doing so appreciation to study the risk factors associated with each of fraud fraudulent financial reporting and misappropriation of assets. The following is a clarified of these factors :

**First:** the risk factors related with fraudulent financial reporting; include:

- a - The characteristics of management and its impact on the control environment , where there is a close link management capacity and pressure , style and direction relating to internal control and financial reporting process , for example, the presence of a strained relationship between management and the current or previous auditor .
- b - Industry conditions, including regulatory and economic environment in which the entity operates.
- c - Operating characteristics and financial stability, which is related to the nature, complexity of the entity, transactions, financial situation and profitability.

**Second:** the risk factors related to misappropriation of assets, are:

- a- Portability for misappropriation of assets, which is related to the nature of the assets of the entity and the degree of exposure to theft for example assets could be easily converted into cash.
- b- Controls, including the lack of controls designed to prevent or detect the misappropriation of assets.

#### 1-2-2 auditor response to the results of a risk assessment misstatement:

The auditor should examine the cumulative results of the audit procedures and other observations affect the assessment of the risk of misstatement due to fraud during the audit planning, and issued provisions regarding the risk of misstatement. These provisions may affect the audit process in following ways (AICPA, SAS82):

- a - suspicion professional: requires careful professional auditors to exercise professional skepticism and is the direction that includes the question, doubt and conduct a critical assessment of audit evidence.
- b - assigning work to individuals : The knowledge , skill and ability of individuals assigned to them important work responsibilities should be proportionate with the level of risk assessment assignment the task, as well as the extent of supervision should be aware of the risk of misstatement due to fraud and the qualifications of persons who perform the work.
- c - accounting principles and policies: the auditor may conclude that there are fraudulent financial reports require it to examine the selection and application management of significant accounting policies, especially those related to the recognition of revenue, assets and estimate the value or capitalization against spending -depletion- in the year they occur.

d - controls: When the risk of a misstatement related by the financial fraud risk factors may have regulatory effects.

That a critical assessment of audit evidence can be made through analytical procedures (financial analysis) which can be put many of the questions, which in turn lead to confirmation or the removal of uncertainty with professional auditor. For example, sometimes we find analytical relations unusual or unexpected by the auditor, and in this case it causes further study examination. We can say that the financial analysis can contribute to improve the capacity of the auditor on the professional judgment with respect to identifying the relative importance of risk factors and then determine the relative importance of the elements of the financial statements. It should be noted that the financial analysis by multiple styles and approach does not necessarily lead to the detect of errors and fraud , but rather provides auditor warning signals to the possibility of fraud and errors , for example, an analysis of net income and cash flows from operating activities the existence of a relationship is a logical between the parties to this relationship (income and cash flow from operating activities ) may be due to the presence of revenue is real, and in any case the response of the auditor be through the expansion of audit testing of cases that are reached through indicators of financial analysis and that led necessarily to confirm the uncertainty professional has the existence of cases of fraud.

**according to the SAS82:**

**1-2-3 Documentation the risk assessment and response:**

When audit planning the auditor should be documented the evidence of its estimate of the risk of misstatement by the fraud explaining how risk factors were addressed in worksheets , for example, in the above analysis and is illogical relationship between net income and operating cash flows from the factor risk of misstatement in this case related to fraudulent financial reporting and particular regard to the operational characteristics and financial stability. Overall, the documentation must include:

- a - risk factors that have been identified.
- b - auditors response to these factors , individually or collectively , through the expansion of audit procedures , so that should be reflected on the audit work plan .
- c - If during the audit that came to the attention of the auditor additional risk factors or other circumstances for believing that the additional response of audit is required , the risk factors and other circumstances this should be documented

**1.2.4 Materiality in Auditing:**

Materiality has been defined by the Financial Accounting Standards Board in statement No.(2)( FASB.2008: p 3) as following:

Materiality is a pervasive concept that relates to the qualitative characteristics, especially relevance and reliability. Materiality and relevance are both defined in terms of what influences or makes a difference to a decision maker, but the two terms can be distinguished. A decision not to disclose certain information maybe made, say, because investors have no need for that kind of information (it is not relevant) or because the amounts involved are too small to make a difference (they are not material). Magnitude by itself, without regard to the nature of the item and the circumstances in which the judgment has to be made, will not generally be a sufficient basis for a materiality judgment. The Board's present position is that no general standards of materiality can be formulated to take into account all the considerations that enter into an experienced human judgment. Quantitative materiality criteria may be given by the Board in specific standards in the future, as in the past, as appropriate.

**1-3 Auditor responsibility for the detecting of fraud, according to the statement of audit standard SAS No.(99)**

We will address this point by reportedly standard SAS99 about brainstorming where requires this standard to the audit team need to discuss the possibility of a misstatement as a result of committing fraud before or during the process of gathering information , this discussion has created a new concept in the audit, known as ( brainstorming) , where the auditor must decide early in the process of adopting this concept of how this can be implemented practically demand the best possible way, as the brainstorming became procedures required and must be applied with the same degree of care applied by any other conduct an audit.

**Brainstorming rules (AICPA,2002)**

We can put some basic rules to help achieve the goals set by the auditor and the following are examples for this:

- 1- There are no stupid questions or ideas, pre-governance questions as stupid ideas lead to non-contributing ideas.
- 2 -No one owns ideas.
- 3- There is no hierarchy where the world of ideas does not recognize by experience level or the level of efficiency.
- 4- Not allowed recording observations by excessive way.
- 5- Get Information to identify the risk of fraud. Where he expands SAS99 with a large number of sources of information to identify fraud risk, offering guidelines to get information from:  
a - management and others Inside the enterprise. b- analytical procedures  
c - a study of fraud risk factors. d - other sources.

**Second: The proposed approaches to improve the capabilities of auditor to detection of financial fraud.**

Will be addressed this through the following points:

- 2.1 The use of indicators of financial analysis in the auditing.
- 2-2 proposal for the practical application of financial analysis when implementation of the audit process.

**2.1 The use of indicators of financial analysis in the auditing:**

We can address that as following:

- 2.2.1 Analytical procedures according to the statement of audit standard No.(56).
- 2.2.2 Analytical procedures in accordance with the International Auditing Standard No.(520)

**2.2.1 Analytical procedures according to the statement of audit standard No.(56):**

According to this standard, analytical procedures consist of assessment work for financial information performed by auditor and focus on relations expected and reasonable ostensibly between the financial statements and non-financial((Reckers and Wing,1991)) , which vary from simple comparisons ( ratios with current ratios earlier ) and the use of complex models include relationships and elements many data ( regression analysis ) . explained this standard analytical procedures goals through two stages as follows:

**First stage:** When planning the audit, we found that the analytical procedures aimed at increasing understandable of the auditor to the work of the client, and identify the risks specific audit by examining the balances or relationships unusual or unexpected in the aggregate data , which recognize the presence of transactions and unusual events and amounts , percentages and trends may reveal things have an impact on the planning and implementation of the audit process.

**Second stage:** When the overall audit , where analytical procedures aim to help the auditor to assess the safety of the conclusions that have been reached during the audit, including an opinion on the financial statements. We found that the analytical procedures will help the auditor in identification of audit risk .Therefore SAS (56)made it clear some important warning signs when auditor using the analytical procedures, which are:

1 - The analytical procedures are based on expectations , which is a prediction auditor of what should be the account balance or proportion, and when this expectation is configured for the auditor to decide whether the relationship reasonable superficially or not (Gibbins,1983).Relations apparently accepted are expected to exist based on the understanding of auditor to the work of the customers as well as the industry in which it operates .When auditor understand that he can analyze the forces that are outside industry or the position of the client within the industry , as well as existing processes at the client to achieve its objectives , and the auditor also can analysis through the business strategy, may also wish to auditor in the study of the results of the audit of previous years , and the amounts of the client included in the budget or in the lists of actual , as well as in the discussions held with members of the working group - which result from brainstorming - and also with individuals working with the client for the preparation of account balances or ratios recorded and financial results and non-financial similar entities operating in the industry . Generally a typical expectation is configured using one or more of the following elements:

- a - previous year's data modified in accordance with the expected change. b - the current period data. c - budgets or forecasts. d - the non-financial data.

**Analytical procedures in accordance with the International Auditing Standard No.(520):**

The purpose of this standard is to set guidance on the application of analytical procedures. It is intended analytical procedures in accordance with this standard as ratio analysis and important indicators, including the results of fluctuations or relationships that are inconsistent with other relevant information, or those that deviate from the amounts predicted. And explains this standard that the analytical procedures include a comparative study of property info with comparative information for prior periods, and the expected results, such as planning budgets or forecasts auditor, as well as information similar to the sector, which belong to established as compared to sales ratio established to accounts receivable with the rates prevailing

in the sector or in combination with other indicators in the same sector sizes converged it also the relationship between:

- a - elements of financial information, which is expected to be identical with the models predicted and prepared on the basis of the experience of the enterprise, for example the percentage of the gross profit margin.
- b - financial information and relevant non-financial, such as cost of salaries with the number of employees.

## **2-2 proposal to the practical application of financial analysis when implementation of the audit process:**

Will be addressed that through the following points:

- 2.2.1 Steps of financial analysis application.
- 2.2.2 Application methods of financial analysis.
- 2.2.3 testing indicators of financial analysis.

### **2.2.1 Steps of financial analysis application:**

These steps represent in :

- 1- To find expectations for any balance or determine the predicted of the important relations between the terms of the financial statements, that can be referred to predict values and indicators, carried out by the auditor, this prediction may be in the form of values or ratios for previous periods or.
- 2- Determine the amount of the variation between values and indicators predicted by auditor and among those actually extracted and which can be accepted without studying because they intervention within the allowable range, meaning they not raise the attention of the auditor to be tested, and at the same time determine the amount of the variation or variances abnormal, which of course need to examine or study.
- 3- Compared to the actual ratios or indicators with the predicted ratios and indicators in order to determine the amount of deviation.
- 4- study significant deviations and find out the causes. This can be done through:
  - a - clarification and possible explanations for the change in the indicators a result of changing the business environment conditions Such as general economic conditions and the market changes and government policies.
  - b- clarification and possible explanations for the change in the indicators a result of changing the customer environment conditions(such as a change in activity level scheme, or the techniques used, or in employment, ...).
  - c - If you do not provide the business environment and the client environment convincing explanations for auditor, it may contain a mistake or fraud, therefore, the auditor examined the internal control environment. Notes of these steps that the financial analysis indicators if what has been relied upon only, without comparing it with previous forecasts, standards or with the previous years they do not serve the purposes for which it seeks to achieve, therefore, the auditor beginning determine or predict the foundation will support it when making the comparison with the actual indicators.

### **2.2.2 Application methods of financial analysis:**

It can be said that the methods of applying analytical procedures varied and that to configure the expectation or prediction, which can be auditor adoption, and it is appropriate based on all of the methods without neglecting the other, because these methods are integrated with each other-that means, they are not an alternative to each other-to form an opinion with auditor concerning the planning or implementation of audit process, as well as the financial statements are free of any material misrepresentation. And all that necessarily depends on the availability of information and the need for advanced analysis or simple. And on the whole the analytical procedures include(Janet,1994):

- a - analysis of financial ratios.
- b - comparisons
- c - trend analysis
- d - Financial Statements of normal size (vertical analysis).

### **2.2.3 Testing the financial analysis indicators:**

auditor can be rely on indicators that can be inferred from the financial analysis, with the need to notice the auditor to the necessity of obtaining clarifications and explanations when he finds that there are changes and unexpected fluctuations or illogical when making comparisons. Since these useful auditor in the notes explain the reasons for the changes in the indicators. auditor to pay attention to the fact that the change in the indicators may take a number of different forms such as (Janet,1994,):

- a - variation on the same indicator for the previous year.
- b - difference between the actual figures and budget figures and projected figures.
- c - variation on the same indicator compared to similar enterprises.



Also when the checking or interpreting indicators need to consider whether there are factors that could lead him to expect change in the indicator, and examples of these factors (Janet, 1994):

- a - knowledge of customer's enterprise operations and the environment in which it operates.
- b - relations between each other indicators
- c - any administrative decisions (such as the change in accounting policy)
- d - any significant events or transactions that knows auditor.
- e - any other test results for auditing.

The following are some examples of indicators of analytical tests, where they were divided in two groups as follows:

The first group indicators: income statement items:

- 1 sales - 2- production costs 3 - Gross Profit 4- Operating Expenses

The second group indicators: financial position:

- 1 - fixed assets 2- long-term investments 3 - inventory 4- accounts receivable 5 - Creditors 6 - capital structure 7- liquidity

The following tables show the proposed models for some financial indicators, that has been extracted from the financial statements; so as to helping the auditor in planning and audit process to identify risk factors that might involve fraud. And these tables can be considered as a focus for the brainstorming between the audit team, and thus represent support for professional estimate of auditor on improving the appreciation of the materiality of the subject of audit items which contribute to him necessarily in the performance audit process.

**Table (1-2-3): Analytical Procedures for the sales cycle and cash receipts**

analytical procedure	The possible misrepresentations
1-Compared to gross profit ratio with the same ratios for the previous year	1-Increase or decrease in sales and accounts receivable
2-Comparison of monthly sales values during different time periods	2-Increase or decrease in sales and accounts receivable
3-compared with returns of sales as a percentage of sales for the previous year	3-Increase or Decrease in accounts receivable , sales returns
4-Individual customer balances compared with the corresponding in previous years	4-Distortion of the accounts receivable and accounts related income .
5-Compared to bad debt as a percentage of sales with the corresponding in previous years	5-Get accounts receivable is uncollectible and bad debt expenses .
6-Compared to the number of days in which it requested the accounts of debtors without collection with the corresponding in previous years	6-Increase or decrease in the provision for accounts uncollectible and bad debt expenses
7-Compared allocation accounts for uncollectible accounts as a percentage of debtors with the corresponding in previous years.	7-Increase or Decrease in accounts allowances for uncollectible bad debt expense
8-Compared to debtors turnover counterpart in previous years or industry data .	8-Increase or Decrease in accounts allowances for uncollectible and bad debt expense .
9-Compared to discounts as a percentage of sales revenue with its counterpart in the previous year	9 - The increase or decrease in sales discounts .
10-Determination of the sales commission expense by multiplying the net revenue in the commission rate and compare it with the Registrar books .	10- Increase or Decrease of sales commission expense and benefits associated with them.

**Table (2-2-3): Analytical Procedures for wages accounts**

analytical procedure	The possible misrepresentations
1-Compared to the current year balances for wage expense balances with previous years.	1- Increase or Decrease in wages expense.
2-Comparison of wage costs as a percentage of sales with previous years.	2 -Increase or Decrease in wages expense.
3-Comparedtoratesaslabor exploitation and statistics were made by the industry and previous years.	3 -Increase or Decrease in wages expense.
4-Comparison of wage rates estimated in the budget with the actual expenses of wages.	4 -Increase or Decrease in wages expense.
5-Determinationofthe sales commission by the use of commission rates with sales totals recorded.	5 -Increase or Decrease in sales commission.

**Table (3.2.3): Analytical Procedures for the purchases cycle, payments and creditors**

analytical procedure	The possible misrepresentations
1 - Comparison of account balances purchases expenses related with the corresponding previous years.	1-Possible misrepresentation in accounts payable and expenses.
2-Examinedthelistofcreditorsaccounts to determine the accounts of ordinary creditors who do not represent suppliers who are dealing benefit	2- Possible misrepresentation in classification liabilities that are not related to the main activity
3-Comparison of individual balances of the accounts of creditors with the corresponding previous years.	3-does not record or no of accounts or the thereof misstatements.
4-Percentage of purchases to accounts payable and accounts payable ratio to current liabilities .	4-does not record or no of accounts or the thereof misstatements.
5-Compared to turnover of accounts payable and accrued days to settle accounts with the corresponding creditors in previous years.	5 -excessive or decline in the presentation of liabilities and expenses accounts.
6-Compared to purchases returns and allowances as a percentage of revenue or cost of sales with the corresponding in previous years.	6 -excessive or decline in purchases returns.

**Table (4-2-3): Analytical procedures for inventory and related accounts**

analytical procedure	The possible misrepresentations
1-Compared the gross profit ratio with the corresponding in previous years.	1 - Increase or Decrease in inventory and cost of goods sold.
2-Inventory turnover rate compared with previous years..	2-Inventory becomes obsolete which affects the inventory and cost of goods sold.
3-Compared the unit costs with the stocks in previous years.	3 -Increase or decrease in unit costs that affect inventory and cost of goods sold.
4-Doing calculations to evaluate the inventory and compare it with previous years.	4-Misrepresentationin the process of collection and unit costs that affect inventory and cost of goods sold
5-Compared Industrial costs for the current year with previous years .	5-Misrepresentationofthestockunitcosts, which affect both the inventory and the cost per unit sold.
6-Compared the stocks of raw materials and finished goods and the total inventory turnover rate in the previous year with it counterpart and industry averages .	6-Inventory sluggish or slow-moving or superfluous.
7-Compared to the actual cost of goods at the estimated budget .	7 -Increase or decrease in inventories.
8-Compared to the actual additional costs of industrial estimated cost	8 -include or exclude additional costs.

In addition to these examples, auditor can also use analytical procedures are more intensive to test the revenue and expense accounts, which appear in the income statement, in the same way like above analysis. On this basis the auditor can design procedures specially to detection of material misrepresentations.

These tables are examples or guide on how to take advantage of the analytical procedures, and on the basis and take advantage of the inter-relationships between accounts at the level of the income statement and the statement of financial position.

## **Results and recommendations**

### **First: Results**

- 1- Financial analysis indicators some how contribute in improving the external audit report; through the role played in the estimation of the materiality, and being detecting for unexpected relationships between items under audit. It helps the auditor to develop a plan for the audit process to investigate and search for these unexpected relationships, in addition to these indicators work to achieve the guidance provided by the Statement Audit Standard No.(99). That related with auditor responsibility for fraud detection; can the financial analysis procedures activate the brainstorming as one of the procedures covered by the standard mentioned in improving the capacity of auditor to detect fraud.
- 2- Financial analysis indicators contribute in improving the professional judgment of the auditor, through their contribution in determining the materiality and this in turn contributes to identify items that require more detailed audit procedures which are observed by the auditor when planning the audit.
- 3- If financial analysis procedures are used properly, it can help improve the auditor's report; and giving more credibility to the audit report, and that being provide a good base of information that can benefit the auditors in the audit planning. Financial analysis by different types helps to identify the risk factors that may include fraud, especially when they appear abnormally relations or unexpected. And describes the procedures for financial analysis documented that the auditor interested Since the beginning of the audit process that doing a high- quality level through financial analysis provided a good understanding of the client's activity , which contributes to the process of planning a high level of efficiency audit .
- 4- Financial Analysis - different approach - in itself does not help auditor to detect financial fraud, but it contributes to the identification of opportunities for balances that may be exposed to fraud, it also contributes to determine the factors that may lead to the occurrence of fraud, these factors have been identified in what is known fraud triangle, which consists of motive, opportunity and justification. The process of assessing the risk of material misstatement depended on it audit planning process, which do not necessarily reflect the response of the auditor to assess those risks. Through the financial analysis it offers a good contribution to improving the ability of auditor to professional judgment with respect to identifying the relative importance of risk factors; and then determine the relative importance of the elements of the financial statements under auditing.
- 5- A financial analysis as a tool for auditing based on expectation by the auditor that the relationship between the information are going to the same lines or the previous trend in the event that circumstances that point to the opposite and the existence of such relationships provide evidence to refer that the completeness and accuracy of the information resulting from the accounting system, and with that, the confidence in the financial results of the analysis will depend on the auditors for the risk assessment of the ability of financial analysis to diagnose relations as is expected from it, While the truth may indicate the presence of wrong information basically.
- 6- The responsibility of the auditor for the detection of fraud is one of the components of the expectations gap in audit, as the common belief of users of financial statements that the auditor is responsible for discovered all cases of fraud and not only important cases, such as this expectation is considered unacceptable in practice because the perpetrator of fraud commits by high professionalism. And with that, the Statement of Audit Standard No.(99) have expanded responsibilities of auditor about the detection of fraud where a set of procedures provided that the auditor be followed when conducting the auditing process and the a confirmation that it has become responsible for the detect of cases of fraud.
- 7- Analytical procedures can be used in a various of times when doing the audit, they are useful in the early planning stage to help in planning the nature, timing and extent of other audit procedures and also in attracting the attention of the auditor to items that require examination and a special study, It also can be applied during the implementation of the audit process, which contribute to providing evidence of the extent of the reasonableness of a specific account balance, in addition to that it can be applied at the end of a comprehensive audit of fieldwork, this application would provide assurance that the audit or able to see the things in spite of many details.

### **Second: Recommendations**

- 1- When applying for financial analysis auditor he has to take into account the variety of factors, which include, for example, the goal of financial analysis, and the availability of information, such as budgets or non-financial information such as the number of units sold or produced, and the extent of confidence in that information, and the portability of this information to compare
- 2- The auditor should apply financial analysis procedures at the beginning of the audit process to contribute to the planning process, and also applied at the end of the audit process and to form the auditor opinion of whether matching the financial statements taken as a whole to see auditor to the nature of the customer
- 3- The auditor should not to rely on certain financial ratios to judge the efficiency the enterprise into audit also recommend that is compared to financial ratios for several financial periods at enterprise level itself, or be compared with enterprises similar taking into consideration difference in size, and in the classification of assets and liabilities.
- 4- We recommend that auditors need to implement the guidelines in SAS No. (99) and the International Standard Audit No. (520), which provides some guidelines that will improve the capacity of the auditor to detection fraud and manipulation in the financial statements.
- 5- Recommend the auditors that do not rely on analytical procedures as the only way to detection of the fraud, but rather be used as a tool to identify the risk factors that may involve the existence of fraud.
- 6- Recommend the auditors using the proposed model for the planning and auditing process as well as to identify the risk factors that may involve the presence of an additional fraud as a check and not a substitute for what is applied in practice.

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