Fraud Risk Factors Affecting Audit Program Plan: The Case of Kurdistan Region/Iraq

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Abstract

This paper aims to identify the most frequently fraud risk factors used that affect audit program plan in Kurdistan Region/Iraq. The perceptions of both international and local external auditors have been investigated. In general, it was found that the respondents are more interested in assessing fraud risk factors related to misappropriation of assets compared to ones related to fraudulent financial reporting. The results indicate a positive and significant effect of each of fraud risk factors related to fraudulent financial reporting that resulted from incentives/pressures and attitudes/rationalization and fraud risk factors related to misappropriation of assets that resulted from attitudes/rationalization on nature, extent and timing of planned audit procedures. Nevertheless, the other fraud risk factors, in study model, do not show any significant effect on audit program plan. The findings of this paper make a contribution to existing literature in the area of fraud risk assessment and its effect on planning audit programs in the eastern developing countries such as Kurdistan Region/Iraq.

Keywords: Fraud Risk Factors, Audit Program Plan, Kurdistan Region/Iraq.

1. Introduction

International Standard on Auditing No. 240 (ISA 240), issued by International Federation of Accountants (IFAC), defines fraud as "an intentional act by one or more individuals among management, those charged with governance, employees, or third parties, involving the use of deception to obtain an unjust or illegal advantage" (IFAC, 2016, ISA240: Par.11). The auditor, according to ISAs, is responsible for getting rational assurance that the financial statements, as a whole, are free from material misstatements, whether due to fraud or error. Accordingly, he/she is should design audit program plan and perform audit procedures whose nature, timing and extent are based on and are responsive to the assessed material misstatement risk (IFAC, 2016, ISA330).

One of the useful methods of assessing material misstatement due to fraud is using "fraud risk factors" that have been defined by ISA 240 as "events or conditions that indicate an incentive or pressure to commit fraud or provide an opportunity to commit fraud" (IFAC, 2016, ISA240: Par.11). However, unsuitable fraud risk assessment can lead to misdirect audit resource allocation and, ultimately, in an ineffective and/or inefficient audit (Low, 2004; Hajiha, 2012). It also could have negative effects on audit planning process (Bedard & Graham, 2002). Hence, examine whether auditors' reliance on fraud risk factors leads to modify/reconsider their audit program plans is important because auditors should plan the audit work to enhance the audit quality and further reduce the litigations risk (Arens et al., 2014; Bell et al., 2005). Moreover, risk assessment results -in the planning stage- will influence designing and performing audit procedures in the field work stage.

The objective of this paper is to identify the most frequently fraud risk factors used by auditors in Kurdistan Region/Iraq as well as to measure the effect of the assessed fraud risk factors on audit program plan. Consequently, this paper raises two questions as follows:

- **What are the most frequently fraud risk factors used by auditors in Kurdistan Region/Iraq?**
- **Do the assessed fraud risk factors affect audit program plan?**

The reminder of this paper is organized as follows. Section 2 reviews the prior literature. In Section 3, I present the study design, methodology and hypotheses developed. Section 4 reports the results. In section 5, I present concluding comments.

2. Literature Review

Planning an audit program requires the practice of professional judgement when deciding about types of procedures to be performed during the field work (Mentz et al., 2018). Such planning involves determining the nature, timing and extent of planned audit procedures at the assertion level (IFAC, 2016, ISA300). More specifically, the list of planned audit procedures, usually called an audit program, should include the following four components (Arens et al., 2014):

- **Which audit procedures to use (nature).**
- **What sample size to select for a given procedure (extent).**
- **Which items to select from the population (extent).**
- **When to perform the procedures (timing).**

Furthermore, all the components of planned audit procedures should be modified/reconsidered as a subsequent response to fraud risk assessment (Mock & Turner, 2005). In other words, planning nature, timing and extent of specific further audit procedures should depend on the outcome of auditors' fraud risk assessment (IFAC, 2016, ISA330).

Regarding fraud risk, it consists of two major types; fraudulent financial reporting and misappropriation of assets. Fraudulent financial reporting involves intentional misstatement including omission of amounts or disclosures in order to trick financial statements users. Also, it often involves management override of controls that otherwise may appear to be operating effectively. Misappropriation of assets, on the other hand, involves the steal of an entity's assets and is often committed by employees in relatively small and immaterial amounts (IFAC, 2016, ISA240).

ISA 240 indicates that the risk of the auditor not detecting a material misstatement resulting from management fraud (fraudulent financial reporting) is greater than for employee fraud (misappropriation of assets), because management is frequently in a position to directly or indirectly manipulate accounting records, present fraudulent financial information or override control procedures designed to prevent similar frauds by other employees. Notwithstanding, both kinds of fraud involve incentives or pressure to commit fraud, a perceived opportunity to do so and some rationalization of such acts (IFAC, 2016, ISA240). In other words, occurrence of fraud requires, at least, one of the following three cases: incentive/ pressure, opportunity, and attitude/rationalization, which are known together as "Fraud Triangle" (Jans et al., 2010).

The fraud triangle, as illustrated in the figure (1) below, consists of three conditions generally present when fraud occurs. Incentive/pressure is what causes a person to commit fraud. Opportunity is the ability to commit fraud. Attitude/rationalization is a crucial component in most frauds and it involves a person reconciling his/her behaviour (stealing) with the commonly accepted notions of decency and trust (Okoye et al., 2009).

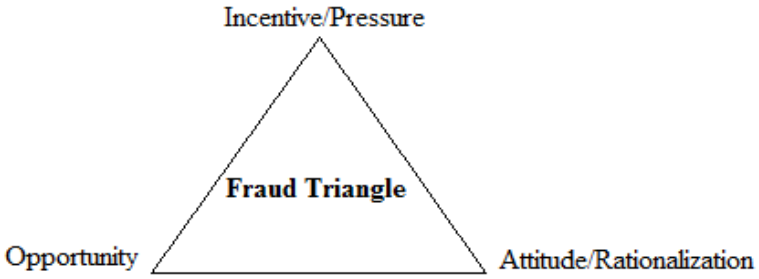

Figure 1: Fraud Triangle *(Montgomery et al., 2002)*

Hence, fraud risk factors have been classified, by both international and American standards, into three groups that fit the fraud triangle (Hammersly, 2011). From one hand, ISA 240 presents list of risk factors (in an appendix) according to the conceptual framework of fraud triangle (IFAC, 2016, ISA240). On the other hand, Statement on Auditing Standards No.99 (SAS 99), issued by American Institute of Certified Public Accountants (AICPA), organizes and present fraud risk factors (also in an appendix) along the dimension of fraud triangle (AICPA, 2002, SAS 99).

Fraud risk assessment techniques and its effect on several audit planning aspects have been a major concern for researchers in the past two decades, especially after recent audit failure cases that emphasize on the importance of adequate assessing of fraud risks and effective planning of audit programs. In this respect, Public Company Accounting Oversight Board (PCAOB) pointed out, in its report issued in 2013 after reviewing 455 audit case in the USA, that the most design flaws of audit procedures are due to fraud risk and auditors' lack of experience in assessing fraud risk factors (McKee, 2014). Furthermore, several studies suggest that the determination of critical risk factors could help auditors in an audit case and fraud risk assessments affect the nature, timing, extent of audit procedures and evidence collected (Blay et al. 2008; De Martinis et al., 2007; Colbert, 1996; Helliar et al.,1996; Chang et al. 2008; Bedard et al., 1999; Blay et al. 2007). In addition, Popova (2008) finds that integrating fraud risk into the material misstatement risks assessment process increases the effectiveness of the audit risk assessment due to include all the risk components to be considered. Likewise, Alssabagh suggests that the accurate assessment of material misstatement risks, including fraud risk, leads to achieve the balance between audit's efficiency and effectiveness by guiding the auditors to identify the appropriate extent of planned audit procedures (Alssabagh, 2016). However, other studies indicate that auditor's reliance on fraud risk factors is not always helpful for audit-planning decisions. For instance, Graham and Bedard (2003) examine the effect of specific fraud risk factors categories on audit-planning decisions in a sample of audit clients. They find that audit test planning is more strongly associated with identified fraud risk factors than with fraud risk assessment. Thus, it appears that auditors' fraud risk assessments do not always capture fraud risk factors

very well, but auditors do consider the fraud risk factors in their audit planning. Further, Asare and Wright (2004) find the auditors who use a SAS No.82-based risk checklist make lower assessment of fraud risk than the auditors who do not use a checklist. Similarly, Fukukawa et al. (2006) find, from a set of Japanese audits, that the association between client risks and audit plans again in somewhat weak and the fraud risk factors have a little effect on audit planning.

In assessing fraud risk factors, the importance, diagnostic ability, and weighting of risk factors are investigated by a number of studies. Wilks and Zimbelman (2004a) suggest that decomposition of fraud-risk-assessment task may requires less cognitive effort in assessing fraud risk and may allow auditors to better process fraud risk factors. Wilks and Zimbelman (2004b), in another study that examines assessment of fraud risk when difficult-to-assess "attitude" risk factors indicate low fraud risk, suggest that auditors may be differentially sensitive to "incentive" and "opportunity" risk factors depending on the method of assessment that they use (decomposed assessment of fraud risk using the elements of the fraud triangle versus global assessment of overall fraud risk). Alssabagh and Dahdoh find, from a study based in Syria, that the auditors have moderate commitment in assessing fraud risk factors due to fraudulent financial reporting, while they have strong commitment in assessing fraud risks factors due to misappropriation of assets (Alssabagh and Dahdoh, 2016). Brazel et al. (2013) suggest that it is important to assess non-financial fraud risk factors, as they are important indicators for the auditor and help to assess the risks of fraud effectively. Furthermore, Carpenter (2007) examines the brainstorming process in an experimental setting and finds that brainstorming sessions result in higher assessment of fraud risk. Likewise, Brazel et al. (2010) find that assessment of fraud risk factors requires the auditors to use the highest degree of brainstorming, whereby High-quality brainstorming improves the relationship between fraud risk factors and the auditor's assessment of fraud risks. Finally, Allen et al., after insight reviewing of academic literature on fraud risk assessment, indicate that auditors often respond to fraud risks by doing more audit procedures which is not directly related to the risk area. In other words, a typical audit response is to perform "more of the same" checking, rather than performing different kinds of procedures specifically targeted to the identified fraud risk (Allen et al., 2006).

3. Study Design and Methodology

The nature of this study is empirical as it employs a questionnaire to survey fraud risk factors that affecting audit program plan. The questionnaire, as a primary study instrument, consists of two parts. The first part includes six general questions related to some demographic information about the respondents, while the second part includes thirty-three questions that divided into two sections fit the study variables. Section I is about fraud risk factors that has been prepared based on (ISA 240 & SAS 99), while section II is about the audit program components that has been identified by (ISA 300 & ISA 330) and related literature.

3.1 Data Collection and Statistical Techniques

The study population consists of all local and international auditors who practice the audit profession in Kurdistan Region/Iraq. The questionnaire was distributed over a random

sample of (80) auditors. However, what was subjected to statistical analysis only (54) because of lack of returned or completion of the respondents. Hence, the response rate reached (67.50%).

Data collection process was done through several successive stages. Firstly, Five-Likert scale has been used in preparing the questionnaire, for being one of the most metrics used to measure the opinions and responses, to indicate the extent of the respondents' agreement for each parameter in the questionnaire. Then, collected data was transformed into quantified numbers and percentages to assist in data analysis process. Finally, statistical procedures were done using Statistical Package for Social Sciences (SPSS-Ver.24).

The study implements a set of statistical techniques and procedures that help to analyze the collected data and verify the designed hypotheses. Frequencies, percentages, means and standard deviations were conducted for descriptive statistics purposes, while linear regression analysis was employed to test the proposed model and verify the study hypotheses. Furthermore, Cronbach's Alpha test has been used to check the reliability and validity of the study instrument whereby the result of this test was as follows:

Table (1) Reliability Statistics

Cronbach's Alpha	N of Items
.856	33

Table 1 shows that the value of alpha was (85.6%), which indicates homogeneity and high credibility for the parameters used in study questionnaire.

3.2 Study Model

After reviewing the literature that covers both fraud risk assessment and planning the audit program, the following model is proposed for this study:

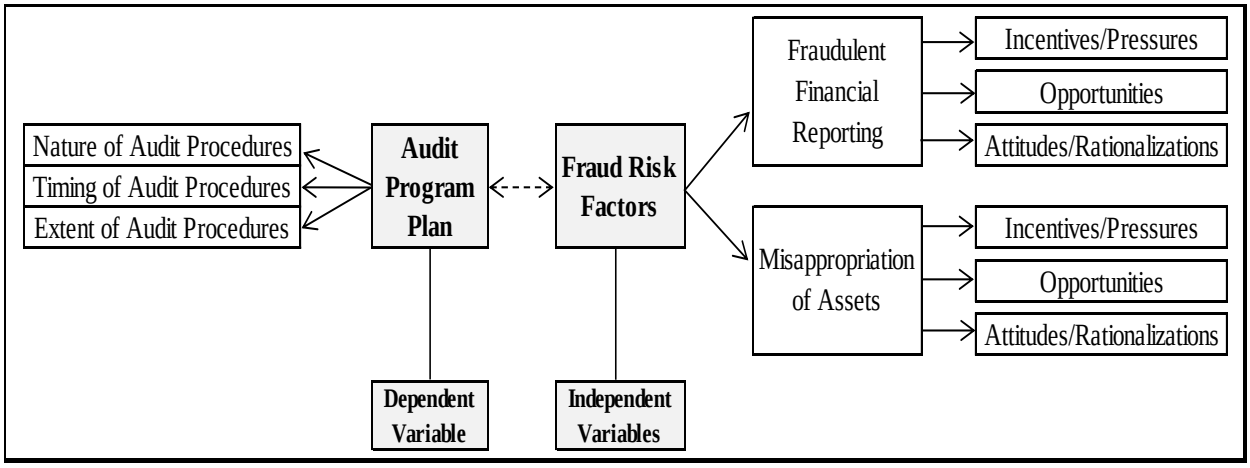

Figure 2: Study Model

Moreover, to examine the effect of independents variables on the dependent variable, in accordance with the above proposed study model, the following model is used:

$$AuditPP = \alpha + \beta_1 FIP + \beta_2 FOP + \beta_3 FAR + \beta_4 MIP + \beta_5 MOP + \beta_6 MAR + \varepsilon$$

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Where:

AuditPP *denotes audit program plan,* ***FIP*** *are factors related to fraudulent financial reporting and resulted from incentives/pressures,* ***FOP*** *are factors related to fraudulent financial reporting and resulted from opportunities,* ***FAR*** *are factors related to fraudulent financial reporting and resulted from attitudes/rationalizations,* ***MIP*** *are factors related to misappropriation of assets and resulted from incentives/pressures,* ***MOP*** *are factors related to misappropriation of assets and resulted from opportunities,* ***MAR*** *are factors related to misappropriation of assets and resulted from attitudes/rationalizations, and* ***ε*** *denotes the random error.*

3.3 Study Hypotheses

Based on the proposed study model, the following hypotheses were set out to address the study objective:

- **H_1:** ***Fraud risk factors related to fraudulent financial reporting and resulted from incentives/pressures affect audit program plan.***
- **H_2:** ***Fraud risk factors related to fraudulent financial reporting and resulted from opportunities affect audit program plan.***
- **H_3:** ***Fraud risk factors related to fraudulent financial reporting and resulted from attitudes/rationalizations affect audit program plan.***
- **H_4:** ***Fraud risk factors related to misappropriation of assets and resulted from incentives/pressures affect audit program plan.***
- **H_5:** ***Fraud risk factors related to misappropriation of assets and resulted from opportunities affect audit program plan.***
- **H_6:** ***Fraud risk factors related to misappropriation of assets and resulted from attitudes/rationalizations affect audit program plan.***

4. Data Analysis and Hypotheses Verification

4.1 Descriptive Statistics

Table 2 provides the response frequencies and percentages of the sample across the demographic variables of the study. Table 2 shows that approximately 48% of the respondents have high university degrees. It also illustrates that around three quarters of the respondents are specialized in accounting and about half of them are at junior/assistant levels (with 5 years' experience or less). However, only 38.9% of the respondents have international professional certificates (CPA, CIA or CMA). Moreover, Table 2 remarkably shows that 68.5% of the respondents work either in the Big4 or in international audit firms, which indicates that the foreign audit firms control the majority of the audit market share in Kurdistan Region/Iraq.

Table (2) Demographic Variables Description

Parameter		**Frequency**	**Percentage**
Academic Qualification	BSc/BA	28	51.9
	Higher Diploma	6	11.1
	MSc/MBA	16	29.6

	PhD	4	7.4
Specialization	Accounting	39	72.2
	Business & Management	6	11.1
	Banking & Finance	9	16.7
Job Title	Junior Auditor	9	16.7
	Senior Auditor	22	40.7
	Assistant Audit Manager	8	14.8
	Audit Manager	7	13.0
	Senior Audit Manager	6	11.1
	Partner	2	3.7
Years of Experience	Less than 2 years	9	16.7
	2-5 Years	25	46.3
	6-10 Years	12	22.2
	More than 10 Years	8	14.8
Professional Certificates	CPA	8	14.8
	CIA	4	7.4
	CMA	9	16.7
	Local CPA	33	61.1
Type of Audit Firm	Big 4 Audit Firms	24	44.4
	International Audit Firm	13	24.1
	Regional Audit Firm	5	9.3
	Local Audit Firm/Individual Office	12	22.2
Total		**54**	**100**

Table 3 provides basically averages and standard deviations of the sample across the study variables. Table 3 shows that the number of observations for each variable was 54, which reflects that respondents have answered all questions concerning study variables. It also illustrates that the average value of *AuditPP* was 75.62%, indicating that the auditors believe that they have relatively high response to reconsider/modify their audit plans based on assessed fraud risk.

In addition, table 3 illustrates that the average values of fraud risk factors related to misappropriate of assets and fraudulent financial reporting were 84.61% and 75.43%

respectively, which indicates the auditors in Kurdistan Region/Iraq are more interested in assessing fraud risk factors related to misappropriation of assets compared to ones related to fraudulent financial reporting. However, table 3 shows that the average value of *MIP* was 87.78%, which indicates that fraud risk factors related to misappropriation of assets and resulted from incentives/pressures are the most used fraud factors among the other factors, while the fraud risk factors related to fraudulent financial reporting and resulted from attitudes/rationalizations are the least used ones whereby the average value of *FAR* was only 68.24%. Finally, standard deviations for all variables was relatively low, which indicate that respondents' answers are consistent and close to each other.

Table (3) Descriptive Statistics for Study Variables

	N	Minimum	Maximum	Mean	Std. Deviation
AuditPP	54	.63	.96	.7562	.08005
FIP	54	.70	.96	.8083	.06919
FOP	54	.60	.90	.7722	.05109
FAR	54	.60	.82	.6824	.07700
Fraudulent Financial Reporting	54	.68	.86	.7543	.04805
MIP	54	.70	1.00	.8778	.06344
MOP	54	.70	1.00	.8667	.06443
MAR	54	.72	.96	.7940	.08455
Misappropriation of Assets	54	.74	.92	.8461	.03721

4.2 Regression Analysis

Tables 4, 5 and 6 present the results of regression analysis for study model.

Table (4) Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.827[a]	.684	.644	.0477663	1.671

a. Predictors: (Constant), MAR, FAR, FOP, MIP, FIP, MOP
b. Dependent Variable: AuditPP

Table (5) ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.232	6	.039	16.977	.000[b]
	Residual	.107	47	.002		
	Total	.340	53			

a. Dependent Variable: AuditPP
b. Predictors: (Constant), MAR, FAR, FOP, MIP, FIP, MOP

Table (6) Coefficients[a]

Model		Unstandardized Coefficients		Unstandardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.200	.232		-.861	.393	-.667	.267
	FIP	.327	.151	.283	2.165	.035	.023	.631
	FOP	.068	.148	.043	.459	.649	-.230	.366
	FAR	.336	.132	.323	2.552	.014	.071	.600
	MIP	.017	.143	.014	.121	.904	-.270	.305
	MOP	-.006	.164	-.005	-.039	.969	-.336	.323
	MAR	.505	.148	.533	3.409	.001	.207	.802

a. Dependent Variable: AuditPP

Based on the tables above, the following can be inferred:

- **R^2 and adjusted R^2 were 68.4% and 64.4% respectively, which reflects the explanatory power for independents variables (fraud risk factors) to explain about 64% of the change in the dependent variable (audit program plan).**
- **Durbin-Watson statistic was 1.67, which reflects that there is no serial correlation (autocorrelation) in the dependent variable since it is relatively close from the optimal value 2.**
- **F-statistic and its significant denotes the goodness of fit. In other word, f-statistic indicates that the model is properly specified to reflect the effect of fraud risk factors on audit program plan.**
- **Finally, *FIP*, *FAR* and *MAR* are the only variables that have a positive and significant effect (at 5% significant level) on *AuditPP*, while the other independent variables (*FOP*, *MIP* and *MOP*) do not show any significant effect on the dependent variable.**

Moreover, to exclude insignificant variables that might affect the results negatively, stepwise regression analysis has been used. Stepwise regression is a method selection option that allows specifying how independent variables are entered into the analysis. According to this method, stepwise variable entry and removal examines the variables in the block at each step for entry or removal. At each step, the independent variable not in the equation which has the smallest probability of F is entered, if that probability is sufficiently small. Variables already in the regression equation are removed if their probability of F becomes sufficiently large. The method terminates when no more variables are eligible for inclusion or removal (Al-Khaddash et al., 2013).

Tables 7, 8, 9 and 10 present the results of stepwise regression analysis for study model.

Table (7) Model Summary[d]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.604[a]	.365	.353	.0644154	
2	.806[b]	.650	.636	.0482706	
3	.826[c]	.682	.663	.0464495	1.691

a. Predictors: (Constant), MAR
b. Predictors: (Constant), MAR, FAR
c. Predictors: (Constant), MAR, FAR, FIP
d. Dependent Variable: AuditPP

Table (8) ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.124	1	.124	29.857	.000[b]
	Residual	.216	52	.004		
	Total	.340	53			
2	Regression	.221	2	.110	47.385	.000[c]
	Residual	.119	51	.002		
	Total	.340	53			
3	Regression	.232	3	.077	35.808	.000[d]
	Residual	.108	50	.002		
	Total	.340	53			

a. Dependent Variable: AuditPP
b. Predictors: (Constant), MAR
c. Predictors: (Constant), MAR, FAR
d. Predictors: (Constant), MAR, FAR, FIP

Table (9) Coefficients[a]

Model		Unstandardized Coefficients		Unstandardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.302	.084		3.616	.001	.134	.470
	MAR	.572	.105	.604	5.464	.000	.362	.782
2	(Constant)	-.051	.083		-.612	.543	-.218	.116
	MAR	.538	.079	.568	6.845	.000	.380	.696
	FAR	.557	.086	.535	6.450	.000	.383	.730
3	(Constant)	-.155	.092		-1.676	.100	-.340	.031

MAR	.530	.076	.560	7.006	.000	.378	.682
FAR	.343	.126	.330	2.715	.009	.089	.596
FIP	.317	.141	.274	2.253	.029	.034	.599

a. Dependent Variable: AuditPP

Table (10) Excluded Variables[a]

Model		Beta In	T	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	*FIP*	.522[b]	6.156	.000	.653	.994
	FOP	.000[b]	.004	.997	.000	.868
	FAR	.535[b]	6.450	.000	.670	.996
	MIP	.059[b]	.442	.661	.062	.695
	MOP	-.118[b]	-.757	.453	-.105	.507
2	*FIP*	.274[c]	2.253	.029	.304	.430
	FOP	.010[c]	.107	.915	.015	.868
	MIP	.046[c]	.460	.648	.065	.695
	MOP	-.021[c]	-.173	.863	-.025	.499
3	*FOP*	.046[d]	.527	.601	.075	.839
	MIP	.026[d]	.271	.788	.039	.689
	MOP	.015[d]	.134	.894	.019	.489

a. Dependent Variable: AuditPP - b. Predictors in the Model: (Constant), MAR
c. Predictors in the Model: (Constant), MAR, FAR - d. Predictors in the Model: (Constant), MAR, FAR, FIP

Based on the tables above, the following can be inferred:

- The analysis produce three models as follows:

$AuditPP = \boldsymbol{\alpha} + \boldsymbol{\beta}_1 MAR$

$AuditPP = \boldsymbol{\alpha} + \boldsymbol{\beta}_1 MAR + \boldsymbol{\beta}_2 FAR$

$AuditPP = \boldsymbol{\alpha} + \boldsymbol{\beta}_1 MAR + \boldsymbol{\beta}_2 FAR + \boldsymbol{\beta}_3 FIP$

- These models include the most important fraud risk factors that affect audit program plan. Other variables were estimated because they are not significant and affect other variables negatively.
- Adjusted R^2 ranged from 35.3% to 66.3%, which reflects the explanatory power for independents variables explain large proportion of the change in the dependent variable. However, the first model, which includes only fraud risk factors related to misappropriation of assets and resulted from attitudes/rationalizations, considered the basic model because it explains around 35% of the change in audit program plan.

- Durbin-Watson statistic was 1.7, which reflects that there is no serial correlation (autocorrelation) in the dependent variable since it is relatively close from the optimal value (2).
- F-statistic and its significant denotes the goodness of fit for all models (1, 2 and 3). In other word, f-statistic indicates that the three models, in general, are properly specified to reflect the effect of fraud risk factors on audit program plan.
- Finally, *MAR*, *FAR* and *FIP* are the only variables that have a positive and significant effect (at 5% significant level) on *AuditPP*, while the other independent variables (*FOP*, *MIP* and *MOP*) were excluded from the model due to their insignificant effects on *AuditPP*.

4.3 Hypotheses Testing Results

Based on the above discussion, the result of testing the study hypotheses can be summarized as shown in table 11:

Table (11) Results of Hypotheses Testing

No.	Hypothesis	Result
$H1_{(FIP)}$	*Fraud risk factors related to fraudulent financial reporting and resulted from incentives/pressures affect audit program plan.*	*Accept*
$H2_{(FOP)}$	*Fraud risk factors related to fraudulent financial reporting and resulted from opportunities affect audit program plan.*	*Reject*
$H3_{(FAR)}$	*Fraud risk factors related to fraudulent financial reporting and resulted from attitudes/rationalizations affect audit program plan.*	*Accept*
$H4_{(MIP)}$	*Fraud risk factors related to misappropriation of assets and resulted from incentives/pressures affect audit program plan.*	*Reject*
$H5_{(MOP)}$	*Fraud risk factors related to misappropriation of assets and resulted from incentives/pressures affect audit program plan.*	*Reject*
$H6_{(MAR)}$	*Fraud risk factors related to misappropriation of assets and resulted from attitudes/rationalizations affect audit program plan.*	*Accept*

Concluding Comments

In this study, I seek to contribute to the extant research on auditors' fraud risk assessments and planning the audit programs in the eastern developing countries such as Kurdistan Region/Iraq. More specifically, I examine the extent of auditors' reliance on fraud risk factors, listed by ISA 240 and SAS 99, during audit risk assessment stage as well as whether the auditors modify/reconsider nature, extent and timing of their planned audit procedures based on the assessed fraud risk factors.

The study results suggest that auditors' reliance on fraud risk factors, in order to assess material misstatements due to fraud, is relatively high. However, the auditors are more interested in assessing fraud risk factors related to misappropriation of assets compared to ones related to fraudulent financial reporting whereby the weighted average score for factors related to misappropriation of assets was 4.23 out of 5 (about 85%) compared to 3.77 out of 5 (about 75%) for factors related to fraudulent financial reporting. In particular, the weighted

average score of using fraud risk factors ranged from 3.41 to 4.39 out of 5 (from 68.24% to 87.78%) whereby factors related to misappropriation of assets and resulted from incentives/pressures were at the top of list, while factors related to fraudulent financial reporting and resulted from attitudes/rationalizations were at the bottom of the factors used.

The results suggest also that auditors have relatively high response rate (around 75%) regarding modify/reconsider their planned audit procedures based on the assessed material misstatements due to fraud. However, only about 35% of such response can be explained by the assessed fraud risk factors.

Furthermore, the study findings confirmed the existence of a positive and significant effect of using each of fraud risk factors related to fraudulent financial reporting that resulted from incentives/pressures and attitudes/rationalization and fraud risk factors related to misappropriation of assets that resulted from attitudes/rationalization on nature, extent and timing of planned audit procedures, while the other risk factors in study model do not show any significant effect on audit program plan.

Finally, the study has some limitations regarding limited access to respondents. More specifically, majority of respondents (about 57%) are mainly at the junior/assistant levels (with 5 years' experience or less) while the principal levels (assistant managers and above), who are mainly responsible for audit risk assessment, are minority (about 43%). Therefore, the study findings might be biased to the majority's point of view. However, standard deviation statistics for all respondents were relatively low which indicates that the respondents' answers, in all levels, are consistent and close to each other.

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