The Relationship Financial Statements Components and Audit Fees in Developing Countries

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Abstract

The present study is concerned about the relationship between the cash flow statement and payment balance sheet of listed companies on the Iraq Stock Exchange, compared with the conducted studies on the Tehran Stock Exchange. In other words, the present study attempts to figure out whether or not the change of cash flow statement items and balance sheets can lead to an increase or decrease in the changes in audit fees.

The multivariable regression model was used for hypothesis testing. Research hypotheses were tested using a 774 firm-year sample on the Tehran Stock Exchange and 210 firm-year on the Iraq Stock exchange during 2012-2017 using multiple regression models based on the mixed data technique.

The obtained results indicate that there is a significant relationship between the change of cash flow statement items and balance sheet and audit fees, which means the relationship between changes in debts, assets, dividends, operational, investment, and financing cash flow and tenure, audit fee, and auditor change is significant. The current study is the first study that compares the relationship between cash flow statement items and balance sheet and audit fee of listed companies on the (Iran and Iraq) stock exchange, so this study contributes to the development of knowledge in this field.

Keywords: Audit Tenure, Audit Fee, Auditor Change, Cash Flow Statement.

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1. Introduction

The most important issue in every economic activity is to make wise decisions concerning reliable and fair financial information, so auditing is a part of the financial information reporting process that, through analysis, can accredit the reports and respond to the needs of users concerning the reliability and fairness of information so that they can make a decision confidently. The only way to guarantee the accreditation service presentation is to ensure that the economic resources are provided for professional services, namely auditors. Hence, studying the process related to contributing factors to audit fees is of utmost importance for presenting an appropriate audit fee model (Al-Mutairi et al., 2017). Financial reporting aims to propose financial information about the reporting firm, and financial statements are the main and central product of financial reporting. Financial statements currently aim to present pure and classified information about a business firm's financial status, performance, and flexibility, which is useful for a broad spectrum of financial statement users for making economic decisions (the International Accounting Standards Committee, 2007). On the other hand, optimal equipping and allocation of resources play a significant role in countries' economic development, and strengthening the supervisory arms is a requisite for these resources, among which auditing is the major regulatory tool. On the other hand, public accountability is a prerequisite for fulfilling the democratic process. Auditing and accountability, however, are two main tools of responsiveness. Auditing and accountability are two supervisory elements of every system. They are used extensively from the highest to the lowest level of a business firm (Yahia Kikhia, 2015) in that each system requires control and feedback to emphasize its continuity, but despite the scope of audit works and given their necessities, the manner of payment determination is not based on a scientific model in most countries. Based on a logical and defendable model, we cannot claim how much a project cost, given the firm's characteristics under study. The more accurate and clearer the audit fee, the more possible the working procedure is. One of the main questions the auditor is faced with is how to use human resources, given the available budget, indifferent project steps. Hence, if the audit fee is accurate and transparent based on a scientific and logical principle, the auditor feels less confused through the working procedure and is more confident that the project and auditing standards have the required correspondence (Daniels and Booker, 2011). The audit fee relies on different factors, and the significance of these factors is different in different countries. One of the auditing profession's main challenges is determining the minimum audit fee and dealing with some audit firms' price breaking. Considering auditing, however, as a homogenous product and defining a non-competitive price for that would endanger the dependence and quality of audit services. Among the contributing factors to audit fees, we can refer to balance sheet price and cash flow (Gnanakumar (2017). Mehrani and Jamshidi Ivanaki (2012) and Gnanakumar (2017) referred to a significant relationship between audit fees and balance sheet assets. They discovered that auditors receive higher payments from companies with a higher proportion of intangible assets in the balance sheet. Moreover, as mentioned previously, cash flow is one of the other contributing factors to the audit fee to compensate for the additional risk and auditor attempt. Since managers could invest their money in NPV positive projects and increase their wealth by exploring appropriate growth opportunities, a firm's free cash flow is of great importance for the shareholders' value creation analysis. However, regarding the theory of conflict of interests between managers and owners, managers do not necessarily invest free cash flows in NPV positive projects. According to Jensen and Meckling (1976), managers of business firms with high cash flow and low growth manage the earnings to satisfy some of their interests. The audit fee's growth is for compensating additional risk created due to the agency problems of free cash flow. For example, the

audit fee should be higher for firms with high cash flow and low growth outlook; because it is assumed that high cash flow and low growth outlook pursue the management to invest the cash illogically and to conceal such behavior by manipulating the financial statements (Choi et al., 2010). Recently, in developing countries, the market monopoly is broken up, and intense competition occurs among auditors, which occurred a long time ago in developed countries. From the early 70s to early 2000, most audit firms' focus has been on their growth than professional value. Audit firms' partners are under much pressure to find new customers, preserve the current customers, and consulting services. Any failure in implementing these developmental objectives in audit firms would have adverse consequences, including work dismissal. In other words, we could say that during the past two decades, the auditing profession has observed a dramatic change. The decrease in audit market regulations allowed the audit firms to be more concerned about economic objectives and seek for their income increase and cost reduction in every project (Healy and Palepu, 2003; Chancy et al., 2003). Under such circumstances, an auditor can have the best estimation of his/her payment, given the characteristics of the firm understudy to maintain the project quality and lower the costs. Given the facts mentioned above, the present study tries to answer whether there is a significant relationship between the cash flow statement and balance sheet and audit fees in listed companies on Iran and Iraq Stock Exchange or not. Moreover, the present study compares the relationship between cash flow statements and balance sheets and audit fees in Iran and Iraq. This paper is the first study on this topic, contributing to the development of knowledge in this area.

2. Theoretical Issues and Literature Review

Basic financial statements are the kinds of reports which are more important than other financial descriptions. Accounting can be defined as a process for recognition, measurement, classification, and reports of financial information to provide the possibility of wise judgment and to make logical decisions by financial users. The expectations, needs, and demands of users are extremely diversified. Typically, the determiner is the type of information that should be proposed to be set as a basis for judgment, evaluation, and decision-making. Financial statements are the final product of financial reporting. Each financial statement reflects some information that, in general, can present a clear image of the business unit understudy, so a major proportion of theories, studies, and accounting standards is allocated to financial statements. However, since accounting considers users' information needs, some definitions, qualitative characteristics, and guidelines could make it easier to access such objectives. Therefore, decision-making is associated with evaluating the chance of occurrence of future events. Agency problems occur as a result of a conflict of interests between managers and shareholders. Further, such a conflict of interest exists in another way between controlling shareholders of a firm (major shareholders) and minority shareholders. Such a conflict of interest would lead to the outbreak of some issues and agency problems and, finally, agency costs to the firm and beneficiaries. Given that those agency costs derived from the owners' attempts to control the managers are most significant and remarkable. On the other hand, managers are willing to confirm that they are responsible for shareholders' interests and increase their wealth (Jensen and Meckling 1976). Hence, both groups (owners and managers) are willing to use independent audit services, so auditing is an efficient strategy for limiting managers' authority in contractual issues. The financial report aims to present financial information about the reporting firm, and financial statements are the main product of financial reporting. Presently, financial statements aim to present purified and classified information about a business firm's financial status, financial performance, and financial flexibility to be useful for a broad spectrum of financial statement users in making economic decisions (Accounting Standards

Committee, 2007). The users of financial statements deal with several major problems, including users' disability to associate the information of each financial statement and business firm evaluation independent of its financial structure and absence of a certain standard for all aspects of financial statement (International accounting standards board, 2008). On the other hand, financial statements should satisfy the needs of different groups. Hence, the best choice is to select independent and experienced auditors by general assemblies of shareholders. The gathering of expert accountants with ample experience to carry out the operation in those associations where regulating the professional code of ethics was a prerequisite has created the auditing system. The Institute of Chartered Accountants in England was the first to serve as the template for other countries (Audit Organization, 2009). On the other hand, the audit fee contributes to the auditing profession (Rajabi, 2005). The audit fee reflects the audit quality for users of financial statements outside the organization. Independent auditing constitutes a significant part of the financial reporting system. The Independent audit report indicates the fulfillment of managerial commitments to investors. The audit fees can be considered a cost incurred by the client for such commitments to the auditor. A certain amount of money should be paid as audit fees to use the audit services, which the auditor determines and his/her evaluation of the volume and risk of auditing. The more the audit fee, the more the auditor's attempt and the higher is the quality. Hence, the market shows a positive reaction to a high quality of information. In contrast, high audit fees may make them economically dependent on their clients. Such a dependency may cause the independence of the auditor's right. In turn, the client cannot trust in secure information, which would lead to the market's negative reaction to low information quality. The auditor considers some conditions when determining the audit fee, involving the required time for planning and performing the audit process, number of required auditors and assistants, the size of the firm understudy, the difficulty level of the audit process, related complications, the fame of the firm under process, the ability to pay the audit fee, audit firm size and its reputation, number of reports required by the customer, the nature of the firm under study, and the range of its need for expertise and qualifications). Determining the audit fee is a significant issue for auditors, on the one hand, and customers, on the other hand. However, there is no scientific way to establish a fair audit fee to provide a sensible payment for the auditor's presented services and contain the required services against customers' costs at the same time. Determining the amount of audit fee at the beginning of a contract between auditor and client is even harder because the auditor is not fully aware of the nature of the firm under process, the volume of operation, and the amount of required audit procedures, duration, and required attempt for performing the process (Carcello and Nagy, 2004). Therefore, the decrease of audit fees is one of the auditing profession's contemporary challenges because customers of audit firms do not consider the nature and quality of the performed audit, so they try to replace the auditors for lower fees to save the audit fee. Such a procedure shows that such customers judge the auditing process as a legal superficial requirement, not protecting the existence and firm continuity (Abu Nassar, 1999). To prevent the influence of receivable fee on the auditor's independence, the American Institute of Certified Public Accountants (AICPA) adopted some certain criteria, the most important of which is that the receivable fee by the auditor should not be more than 15% of the total audit fee of his/her firm and that the auditor should not express his/her opinion about the soundness of financial statements prior to receiving the payable fee of the previous year (Matar, 1989). Audit fee relies on different factors, and the range of significance of these factors is different in different countries. One of the auditing profession's main challenges is determining the least audit fees rate and dealing with some audit firms' price breaking, but considering auditing as a homogeneous good and its non-competitive pricing would endanger the independence

and quality of audit services. Moreover, it is worth mentioning that independent auditing is based on economic transparency, public trust in the capital market, and governments' accountability to the people. However, it should not be considered as a good and common service. The amount of audit fees to auditors can influence audit quality. The more audit fee being considered for an auditor, the more intense his/her attempt, and the higher the audit quality. Still, in such cases, auditors are financially dependent on customers. Hence, they may not pursue the auditing procedures appropriately not to lose the project that would bear adverse financial consequences for them (DeAngelo, 1981; Simunic, 1984). Being aware of the process of audit fee determination is important both for the client and the auditor. The amount of audit fee for auditors can affect the audit quality in two ways, the higher the defined audit fee for the auditor, the more his/her attempt and the higher the quality. Still, in such circumstances, the auditors are financially dependent on their customers and lose their independence. Audit fees should be set based on the required time for implementing the audit operation. Within a competitive market for audit services, an auditor's additional fee is for the optimum use of time for providing credit services (Houghton and Jubb, 1999). Audit operations' fast completion may incur more costs because auditors are involved in overtime or cost increase in audit opportunities (Leventis et al., 2005). However, there is a different view through which the audit fee is positively associated with a delay in presenting the audit report. With the growth of the audit fees, the number of audit tests will increase (Rubin, 1992). Further, the relationship with senior staff or negotiation with management results from the audit process increases either (Leventis et al., 2005). Hoitash et al. (2007) declare that the fees paid to auditors may affect the audit quality in two ways; first, higher-paid fees to auditors may increase their attempts, so audit quality increase, as well. In another method, the higher paid fees to auditors make them economically dependent on their clients. Since they do not want to lose their interests in the firms' understudy, they continue their high-quality activity.

Ramzy (1988) divides the contributing factors to audit fee into three groups of size, complication, and other factors as follows:

Size factors:
- Transaction volume (turnover)
- Profit before tax
- Operational profit
- Inventory and goods in process
- Accounts receivable
- Cash and bank
- Total assets
- Current debts
- Accounts payable
- Current assets
- Capital commitments
- Capital and savings

Complicating factors
- Number of satellite companies
- A number of countries where the firm is operating
- Number of production lines
- Location of the factory
- Nature of firm activity (manufacturing, finance, etc.)
- Type of industry (electronic, petrochemical, food, etc.)
- Range of centrality of financial controls
- Degree and amount of computerized accounting records
- Number of audit reports

Other factors
- Quality of internal control systems of the firm
- The amount of risk involved in the audit process
- Range of responsibility
- Data of fiscal year of the firm
- Capabilities and experience of auditors
- Competition in the audit market
- The value of providing services
- Inflation
- Chance of initiating non-audit projects

Nikkinen and Petri (2005) indicate a direct association between audit fees and risk dimensions (financial risk, operational risk, and commercial risk). According to the study's findings, agency costs, the firm's operating volume, and auditing complications can describe audit services' fees. Nazem Sha'ban Jabar (2009) illustrates that financial statements' audit process enhances their credit, and auditing can provide the required confidence about not committing illegal acts during financial statement preparation and increases such data's reliability. The auditors' report understudy did not mention that the main responsibility in providing financial statements and presenting appropriate disclosure is toward the firm's management but claimed that to reach a professional and impartial consensus about financial statements and express his/her opinion is the auditor's responsibility. He should be ensured of the range of disclosure access, the adequacy of the attached descriptions to those statements, and their inclusion for all required issues. Majeed Abd Zeid Hamad (2009) noticed that several factors, including time, profession, and firm are essential for payment determination, such that the required time for project completion and presentation date of the firm to the auditor and number of staffs are among the most important factors which should be considered in the payment determination. In the light of such results, the "Iraqi Association of Accountants" and "Secretariat of the Professional Council" should be backed to see more effective results of the adopted regulations and auditing should generally have more space in the academic studies and particular attention should be paid to the auditing profession and professional ethics. Mohamed And Har Al-Hadisi (2010) realized that the main responsibility in providing financial statements and presenting appropriate disclosure is up to managing a business unit. This is while to reach an impartial and professional opinion about financial statements and confirm the accuracy, qualification, and efficiency of the attached notes are among the auditor's responsibilities. Munsif et al. (2011) found that the payment of audit fees to firms that still have some defections in reporting related to internal auditing is low. Ulhaq and Khan Leghari (2015) assessed the contributing factors to audit fees in Pakistan and discovered that the business size, complication, international understanding, and audit firms' dependency are among the significant determining factors for audit fees. This study also shows that auditors' ignoring the risk factors may bring about a serious threat to the audit firm's reputation and credit and point to the legal system's weakness in Pakistan. Al-Hazveh (2015) considers the contributing factors in auditing costs in audit firms in Jordan and notices that the foreign auditor's received audit fees are significant factors that affect the presented services' independence. The audit fee determination is a complicated process due to various factors that influence the cost estimation. Using a set of conventional evaluation methods, the auditor intends to reach an impartial technical view about financial statements' truth and accuracy. Castro et al. (2015) analyzed the contributing factors to audit fees in listed firms on BM & FBOVESPA Brazil. They observed a positive relationship between audit fee and measurement variables, clients' complexity, and auditor type. As for big and small customers, the auditor's perceived risk affects the fee's amount differently. As for smaller customers, lower audit fees are mainly

for high-risk and influential customers, and for larger customers, stronger sovereignty is used for auditing. Yahia Kikhia (2015) concluded that some variables like auditor tenure have no significant effect on audit fees. Audit risk had a negative and significant association with audit fees, and the factor of size is also considered one of the contributing factors of external audit fees. Muzatko and Teclezion (2016) conducted a study on the relationship between audit fees and earnings quality in financial institutions. They perceived that those auditors who earn fees present high-quality audit and attempt more seriously. Moreover, auditors with higher fees are economically dependent on these fees and influence the earnings report. In general, the obtained results indicate that banking companies that pay relatively higher audit fees have lower earnings quality in terms of optional commitments. Nikbakht et al. (2016) show that managerial overconfidence has a positive effect on the audit fee. The consequences and risks of financial reporting, which is occurring due to managerial overconfidence, would create a positive relationship between managerial overconfidence and audit fees. Mashayekhi et al. (2016) analyzed the effect of internal audit quality on independent audit fees. They discovered that internal audit qualification, namely, tenure and its presence in the firm, has a negative relationship with audit fee and calculation and IT skills, professional and scientific certificates, and duration of training hours have no relationship with audit fee. Broadly, the results show that internal audit quality has no impact on independent audit fees.

Given the facts described above, the hypotheses of the study are formulated as follows:

H_1: There is a significant relationship between current asset changes and audit fees (Iran and Iraq).

H_2: There is a significant relationship between changes in noncurrent assets and audit fees (in Iran and Iraq).

H_3: There is a significant relationship between current debt changes and audit fee changes (Iran and Iraq).

H_4: There is a significant relationship between changes in noncurrent debts and audit fees (Iran and Iraq).

H_5: There is a significant relationship between changes in incomes and changes in audit fees (Iran and Iraq).

H_6: There is a significant relationship between changes in costs and audit fees (in Iran and Iraq).

3. Research Methodology

This paper is causal-correlational, and in terms of methodology, it is quasi-experimental and retrospective and counts as a type of positive accounting study with real data. In terms of nature and objectives, this project is practical. Practical studies aim to develop practical knowledge within a particular field of study. In terms of data collection and analysis, however, this paper is causal-correlational.

3.1. Statistical population

The statistical population of the present study is limited to the following firms:

1- Have no change in their fiscal year during the period of study (2012-2017) in Iran and Iraq;
2- Their financial information is available;
3- Are not affiliated with financial companies (like banks, financial institutions), investment companies, or financial intermediaries; and,
4- Are active during the period of the study.

Considering the qualification criteria, 129 Iranian firms and 35 Iraqi firms were selected for the hypothesis testing.

Table 1. No. of firms in the statistical population by imposing the conditions to select a sample of Iranian firms

Description	Eliminated firms within the total periods	Total No. of firms
Total listed firms on the Tehran Stock Exchange		445
Eliminating financial intermediaries, financial supply, insurance, and investment firms	88	
Firms with financial yearend other than March 20th	87	
Firms with more than six months of transaction halt	112	
Eliminating firms that were not listed on the stock exchange during the period of study	4	
Elimination due to unavailability of data	25	
Statistical population		129

Table 2. No. of firms in the statistical population by imposing the conditions to select a sample of Iraqi firms

Firms affiliated with Iraq Stock Exchange	No. of firms	Eliminated firms	Selected firms
No. of banking firms	39	39	
No. of insurance firms	5	5	
No. of investment firms	9	9	
No. of service firms	10	4	6
No. of industrial firms	25	10	15
No. of hotel and tourism firms	10	2	8
No. of agricultural firms	6	0	6
Communication firms	2	2	
Financial transfer firms	17	17	
Total no. of sample firms	123	88	35

3.2. Data collection method

The required data of the study were gathered from different resources based on their types. Data related to the research literature and theoretical issues were collected from library resources, like Persian and Latin books and journals, official websites, and data related to firms (balance sheets and profit and loss statements) were used as the study tools.

Raw data and initial information were gathered for hypothesis testing from the information bank of Tehran Stock Exchange, including Tadbir Pardaz and Rah Avard-e Novin and also from published reports of the Tehran Stock Exchange via direct access (which is done by analyzing the disclosed reports of the Codal Website and is gathered manually) to CDs provided by Tehran Stock Exchange, on the www.rdis.ir website, and other resources.

3.3. Data analysis

The data analysis method is cross-sectional and year-by-year (panel data). In this paper, the multivariable linear regression method is employed to test the hypotheses. Descriptive and inferential statistical purposes were used for analyzing the obtained data, such that the frequency distribution table is used for describing data. At the inferential level, F-Limer, Hausman, normality, and multiple linear regression tests were used for hypothesis testing.

3.4. Research model

The following multivariable regression model is used for testing the hypotheses of the study:

$$\Delta LnAfee_{it} = a_0 + a_1 VCA_{it} + a_2 VFA_{it} + a_3 VCL_{it} + a_4 VLTL_{it} + a_5 VRE_{it} + a_6 VEquity_{it} + a_7 Growth.Sales_{it} + a_8 VFCF_{it} + a_9 VCCF_{it} + a_{10} Loss_{it} + a_{11} LEV_{it} + a_{12} ROA_{it} + a_{13} ROE_{it} + a_{14} MTB_{it} + a_{15} Age_{it} + a_{16} Size_{it} + a_{17} Industry_{it} + a_{18} Year_{it+} + \varepsilon_{it}$$

Where

ΔLnAfee: audit fee changes, equal to the natural logarithm of audit fee changes.

ΔVCA: current assets changes

ΔVFA: noncurrent assets changes

ΔVCL: current liabilities changes

ΔVLTL: noncurrent liabilities changes

ΔVRE: firm revenue changes

ΔVFCF: firm free cash flow changes

ΔVCCF: firm capital cash flow changes

ΔVEquity: firm equity changes

Size: firm size, equal to the natural logarithm of firm assets

LEV: firm financial leverage, equal to total liabilities to total firm assets

ROA: return on assets, equal to net profit to total firm assets

ROE: return on equity, equal to net profit to book value of equity

Growth Sales: growth in sales, equal to sales of this year minus previous year divided by sales of the previous year

Age: firm age, equal to the time lapse between foundation date and the year understudy

Loss: firm loss, a dummy variable, which is one of the firms is losing; otherwise, it is 0

MTB: book value to firm equity market

Year: a dummy variable for year

Industry: a dummy variable for the industry

it is worth mentioning that the model mentioned above is tested once for the Iranian firms' data, and once for the Iraqi firms, the output will be compared and assessed.

3.5. Research variables

3.5.1. Dependent variables: Audit fee (AFEE)

3.5.2. Control variables: Firm size (SIZE), financial leverage (LEV), firm age (AGE)

3.5.3. Independent variables: current assets changes (VCA), noncurrent assets changes (VFA), current liabilities changes (VCL), noncurrent liabilities changes (VLTL), revenue changes (VRE), changes in cash flow equity (VECF), free cash flow changes (VFCF), capital cash flow changes (VCCF), equity changes (VEquity).

4. Data Analysis

Table 3. Descriptive statistics of variables for Iran

Symbol	Variable	No. of observation	Total mean	Std. dv.	Min.	Max.
$\Delta Afee$	Changes in audit fee	645	0.0080	0.0596	-0.5129	0.6122
VCA_Δ	Changes in current assets	645	0.05023	0.2833	1.62	3.09
VFA_Δ	Changes in noncurrent assets	645	0.3113	1.4937	-5.1340	1.81
VCL_Δ	Changes in current liabilities	645	0.5618	3.6947	-2.45	5.51
$VLTL_\Delta$	Changes in noncurrent liabilities	645	0.0927	0.9099	-4.7225	1.51
VRE_Δ	Change of firm revenues	645	0.6927	6.1855	-3.69	1.02
$VFCF_\Delta$	Changes in free cash flow of the firm	645	0.1565	3.5027	-1.72	5.68
$VCCF_\Delta$	Changes in investment cash flow of firm	645	-0.0238	1.2614	-1.34	5.2597
$VEquity_\Delta$	Changes in firm equity	645	0.3999	2.0338	-9.9397	1.76
$Size$	Firm size	645	14.2004	1.1576	10.5330	19.1500
LEV	Financial leverage	645	0.6023	0.2268	0.0902	2.3152
ROA	Return on assets	645	0.1112	0.1513	-0.7896	0.6313
ROE	Return on equity	645	0.2564	0.9418	-16.8456	6.8885
$Gross\,Sale$	Sales growth	645	0.2079	0.5455	-0.8453	7.7053
Age	Firm age	645	38.0310	12.8016	10.0000	65.0000
$Loos$	Firm loss	645	0.1256	0.3316	0.0000	1.0000
MTB	Book value to market equity of the firm	645	0.3760	3.2859	-3.2859	1.9061

Resource: databank of the study

4.1. Results of unit root test of variables

By evaluating unit root for Iranian data, we observed that all variables are mostly at the non-unit root level (stationary). The obtained LM statistic for each variable is reported in Table 5. Only the variables of VCL_{it} VRE_{it}, and Age_{it} are at the unit root level. The obtained LM statistic for the unit root test of these variables rejects the null hypothesis concerning the absence of unit root at the 99% probability level for variables of VCL_{it} and Age_{it} and the 90% probability level for the variable of VRE_{it}. By differentiating for only one time, the variables of VRE_{it}, and Age_{it} have not unit root. Moreover, the second-order differentiation of the variable VCL_{it} also has no unit root.

By evaluating unit root for Iraqi data, we observed that all variables are mostly at the non-unit root level (stationary). The obtained LM statistic for each variable is reported in Table 5. Only the variables of VFA_{it} are at the unit root level. The obtained LM statistic for this variable's unit root test rejects the null hypothesis concerning the absence of unit root at the 99% probability level. By differentiating for only one time, this variable still has a unit root. The second-order differentiation of the variable of VFA_{it} has no unit root.

Table 4. Descriptive statistics of variables for Iraq

Symbol	Variable	No. of observation	Total mean	Std. dv.	Min.	Max.
$\Delta Afee$	Changes in audit fee	95	1.9561	8.4607	1.08	6.53
VCA_Δ	Changes in current assets	174	7.64	7.35	3.78	7.22
VFA_Δ	Changes in noncurrent assets	174	8.07	5.85	-2.13	7.45
VCL_Δ	Changes in current liabilities	174	8.10	6.10	-7.06	6.99
$VLTL_\Delta$	Changes in noncurrent liabilities	175	2.08	1.46	-5.00	8.95
VRE_Δ	Change of firm revenues	158	1.03	1.06	-1.80	1.24
$VFCF_\Delta$	Changes in free cash flow of the firm	113	4.82	7.26	-2.36	3.96
$VCCF_\Delta$	Changes in investment cash flow of the firm	123	-5.14	8.40	-6.61	3.42
$VEquity_\Delta$	Changes in firm equity	174	4.99	7.87	-5.32	5.08
$Size$	Firm size	174	22.3749	1.3127	19.2560	26.2976
LEV	Financial leverage	174	0.4318	0.6082	0.0029	4.0694
ROA	Return on assets	174	-0.0387	0.3183	-3.1817	0.3377
ROE	Return on equity	173	-0.1715	3.0238	-38.6741	2.7860
$Gross\,Sale$	Sales growth	164	3.3030	36.0296	-5.5062	459.7828
Age	Firm age	175	31.4571	13.3139	11.0000	70.0000
$Loos$	Firm loss	175	0.3657	0.4830	0.0000	1.0000
MTB	Book value to market equity of the firm	175	0.6606	1.1544	-1.6325	9.8113

Resource: databank of the study

As can be seen in these tables, the results of the robust model estimation are reported. In this panel data model, four classic econometric hypotheses are analyzed, and the reliable results will be reported. These four hypotheses include variable linearity, exogeneity of explanatory variables, homogeneity variance, and absence of serial autocorrelation among disruptive components.

Given the used regressions, the intercept of the first model is not significant for Iranian firms. The intercept of this model is -7.3512, which is significant at the 95% level. For Iraqi firms, the intercept of the first model is significant. The intercept of this model is

3.44e+07, respectively, which is significant at the 99% level.

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Table 5. The results of the Hadri unit root test for the Iranian data

Variable	Level	First-order difference	Second-order difference	Variable	Level	First-order difference
$\Delta Afee$	0.9942			$VEquity_\Delta$	0.9864	
$Loos$	0.9153			$Size$	0.5917	
MTB	0.6690			LEV	0.7314	
VCA_Δ	0.9891			ROA	0.9824	
VFA_Δ	0.9917			ROE	0.7792	
VCL_Δ	0.0000	0.0030	0.9997	$Gross\,Sale$	0.9533	
$VLTL_\Delta$	0.9999			Age	0.0000	0.5164
VRE_Δ	0.0983	1.0000				
$VFCF_\Delta$	0.9973					
$VCCF_\Delta$	0.9998					

Note. The null hypothesis is the absence of unit root for variables. The LM statistic is reported. *** and * show significance at 99 and 95% level.

Table 6. The results of the Hadri unit root test for the Iraqi data

Variable	Level	First-order difference	Second-order difference	Variable	Level	First-order difference
$\Delta Afee$	0.7943			$VEquity_\Delta$	0.4298	
$Loos$	0.2487			$Size$	0.3984	
MTB	0.9940			LEV	0.7651	
VCA_Δ	0.8615			ROA	0.8958	
VFA_Δ	0.0000	0.0012	0.8795	ROE	0.2549	
VCL	0.8451			$Gross\,Sale$	0.8754	
$VLTL_\Delta$	0.2591			Age	0.2936	
VRE_Δ	0.2758					
$VFCF_\Delta$	0.6203					
$VCCF_\Delta$	0.7637					

Note. The null hypothesis is the absence of unit root for variables. The LM statistic is reported. *** shows significance at the 99% level. The study models' estimation results are depicted in tables 7 and 8 for the Iranian and Iraqi firms. The first column of these tables illustrates the name of contributing variables to the above dependent variables.

By considering model 1 estimation for the Iranian and Iraqi firms, the impact of current assets changes (VCA) on audit fee changes is negative for the Iranian data. It is significant at the 99 % level. In contrast, the effect of changes in current assets on audit fee changes is positive for the Iraqi data and is significant at the 99% level. By a 1% increase in current assets changes, the Iranian firms' audit fees decrease by -0.0107, and changes in audit fees of the Iraqi firms increase by 0.0036.

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Table 7. The results of model estimation for the Iranian firms

Variable	Model 1 Coefficient (standard error)
Constant	-37328.15 (29321.2)
$VCA_{it}\,\Delta$	-0.0107*** (0.0022)
$VFA_{it}\,\Delta\Delta$	-0.0187*** (0.0037)
$VCL_{it}\,\Delta$	0.009*** (0.0018)
$VLTL_{it}\,\Delta$	0.0219*** (0.0032)
$VRE_{it}\,\Delta$	0.0024*** (0.0007)
$VFCF_{it}\,\Delta$	-0.0035*** (0.0012)
$VCCF_{it}\,\Delta$	-0.0112*** (0.0026)
$VEquity_{it}\,\Delta$	0.0092*** (0.0022)
$Size_{it}$	2987.198* (2028.151)
LEV_{it}	-20226.05* (12018.33)
ROA_{it}	-32393.18* (24913.48)
ROE_{it}	-4651.829 (4088.84)
$Gross.Sale_{it}$	655.1433 (4057.504)
Age_{it}	264.7858* (184.0248)
$Loos_{it}$	-13234.36* (8645.26)
MTB_{it}	27435.95** (12906.66)
Number of obs.	382
Adj. R - squared	0.4121

Note. ***, **, and * show significance at 99, 95, and 90% level.
Resource: research variables

The changes in noncurrent assets (VFA) cause a decrease in Iran's audit fee changes and an increase in Iraq's audit fee changes. By a 1% increase of the VFA variable, the changes in audit fees at the 99% level for the Iranian firms decrease by -0.0187% and increase by 0.0038% of the Iraqi firms. Changes in current liabilities (VCL) would increase Iran's audit fee changes and decrease Iraq's audit fee changes. This variable's coefficient in the first model for Iran and Iraq at 99% confidence level is 0.0099 and -0.0035, respectively (except for the coefficient of changes in current liabilities for auditor change in Iran, which is significant at 95% confidence level). The changes in noncurrent

liabilities (VLTL) would increase audit fee changes in Iran and Iraq. By a 1% increase in the VLTL variable, the changes in audit fees will increase in Iran and Iraq, at 99 and 95% level, by 0.0219 and 0.0048%, respectively. The changes in firm revenues (VRE) would increase Iran's audit fee changes and decrease Iraq's audit fee changes. By a 1% increase of the VRE variable, the Iranian firms' audit fees' changes will increase by 0.0024% (at 99% confidence level). The changes in Iraqi firms' audit fees will decrease by -0.0006% (at 95% confidence level).

Table 8. The results of model estimation for the Iraqi firms

Variable	Model 1 Coefficient (standard error)
Constant	0.0036*** (0.0004)
$VCA_{it}\,\Delta$	0.0038*** (0.0004)
$VFA_{it}\,\Delta$	-0.0035*** (0.0003)
$VCL_{it}\,\Delta$	0.0048** (0.0022)
$VLTL_{it}\,\Delta$	-0.0006** (0.0003)
$VRE_{it}\,\Delta$	-0.0014*** (0.0002)
$VFCF_{it}\,\Delta$	-0.0006*** (0.0002)
$VCCF_{it}\,\Delta$	-0.0005*** (0.0001)
$VEquity_{it}\,\Delta$	-1501219*** (585806.3)
$Size_{it}$	-1.34e+07*** (4105863)
LEV_{it}	-2.09e+08*** (3.54+e07)
ROA_{it}	1.85+e08*** (2.61e+07)
ROE_{it}	-405403.8** (182775.5)
$Gross.Sale_{it}$	-2451751* ((51856.03)
Age_{it}	-2451751 (1832397)
$Loos_{it}$	2399927*** (627126)
MTB_{it}	3.44e+07*** (1.31e+07)
Number of obs.	72
Adj. R - squared	0.9901

Note. ***, **, and * show significance at 99, 95, and 90% level. Resource: research variables

The changes in the firm's free cash flow (VFCF) would cause a decrease in audit fee changes in both countries. This variable's coefficient in the first model is 0.0035 and -0.0014, respectively, which is significant at the 99% level. The firm's capital cash flow

(VCCF) decreases audit fee changes in both countries. This variable's coefficient in the first two models for Iran and Iraq is -0.0112 and -0.00006, respectively, significant at the 99% level. The changes in firm equity (V Equity) would increase Iran's audit fee changes and decrease Iraq's audit fee changes. This variable's coefficient in the first two models for Iran and Iraq is 0.0092 and -0.0005, respectively, significant at the 99% level. In the second model, the V Equity variable's coefficient for both countries at the 99% level of significance is -2.60e-07 and -9.14e-12, respectively. The coefficient of firm equity changes in the third model for Iran and Iraq is -4.57e-08 at the 95% level of significance and -1.22e-11 at the 90% level of significance.

5. Conclusion

The present study is concerned about the relationship between cash flow statements and balance sheets and audit fees in Iran and Iraq. The hypothesis testing results indicate a significant relationship between cash flow and balance sheet and audit fees in Iran and Iraq. In other words, the study posits that the impact of changes in current assets on changes in audit fees is negative for Iran and positive in Iraq. This means that with a 1% increase in the changes in current assets, the changes in Iranian firms' audit fees drop, and the changes in audit fees of the Iraqi firms will go up. Moreover, the present study analyzes the relationship between changes in noncurrent assets and changes in audit fees in an Iranian and an Iraqi firm, which means the changes in noncurrent assets cause a decrease in Iran's audit fees and an increase in changes in audit fees in Iraq. By 1% growth of the variable, the changes in audit fees will go down for the Iranian firms and enhance the Iraqi firms. These findings confirm with that of the Majeed Abd Zeid Hamad (2009), Castro et al. (2015), Munsif et al. (2011), Ramzy (1988), Brinn et al. (1994), Francis and Wilson (1988), Chen et al. (1993), Lyer and Lyer (1996), Johnson et al. (1995), DeFond et al. (2002), and Mehrani and Jamshidi Ivanaki (2011) who declare that changes in current and noncurrent assets are significantly associated with the changes in audit fees and the results are in contrast with that of the Nikbakht and Tanani (2009). They argue that there is no relationship between current asset changes and changes in audit fees in firms. The changes in current debts would increase Iran's audit fees and decrease Iraq's audit fees changes. By a 1% increase in the variable, the Iranian and Iraqi firms' changes in audit fees will increase. This result is in line with that of Naser and Al-Khatib (2000), Majeed Abd Zeid Hamad (2009), Castro et al. (2015), who claim that the changes in debts would lead to an increase in the changes in audit fees.

The changes in firm revenues would increase Iran's audit fees and decrease audit fees in Iraq. By a 1% increase in this variable, the changes in the Iranian firms' audit fees will increase, and the Iraqi firms will decrease. This finding is in line with the results of Moutinho et al. (2012), who express that there is a significant relationship between the operational earnings of firms and audit fees. The firm's free cash flow changes would decrease the changes in audit fees in both countries, which means there is a negative relationship between changes in the firm's free cash flow and changes in audit fees. This result is in contrast with that of Mousavi, and Daroghe Hazrati (2011) and Hejazi et al. (2012), who posit that firms with high free cash flow have more audit fee and firms with free cash flow, debt level, dividends, and sales have higher audit fee. The changes in a firm's capital cash flow are factors for the decline of audit fee changes in both countries. There is a negative and significant relationship between capital cash flow changes in a firm and audit fee changes in both countries. This finding contrasts with that of Hejazi et al. (2012), who declare that cash flow changes positively and significantly affect audit fees.

Further, this result is also in contrast with that of Munsif et al. (2011), who argue that there is no association between these two variables. Changes in firm equity would cause

an increase in changes in audit fees in Iran and a decrease in audit fees in Iraq, which show there is a positive relationship between change in equity and changes in audit fees in the Iranian firms and a negative and significant relationship for the Iraqi firms. This means that the increase in the Iranian firms' equity changes would increase audit fees and the Iraqi firms, causing a decrease in audit fees. This finding is in line with that of Fernando et al. (2010). They claim a negative and significant relationship between qualitative characteristics of auditing (including audit firm size, expertise, tenure, and audit fee) and cost of equity.

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