

# THE EFFECT OF FIRM TYPE ON THE RELATIONSHIP BETWEEN ACCOUNTING QUALITY AND TRADE CREDIT IN LISTED FIRMS

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## Abstract

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In this study, it is evaluated how different types of organizations influence the connection between accounting quality and trade credit in Iraqi public companies. Trade credit, defined as accounts payable as a percentage of total assets, is the dependent variable of this study. Accounting quality is the independent variable, and it is measured in three ways: the ability to sustain profits, the ability to predict profits, and the ability to manage real earnings (Arora & Singh, 2021). The sample size is 35 different companies from the years 2011–2016. When we look at this time frame, we see a financial crisis between 2011 and 2013 (when ISIS invaded Iraq) and a period after the crisis, from 2014 to 2016, where things began to stabilize again. To test our assumptions, we employ panel data in Stata 14. According to the findings, firm type has no bearing on the connection between firm sustainability and trade credit, but it does moderate the connection between profit predictability and trade credit. Finally, firm type has a positive and statistically significant bearing on the connection between real earnings management and trade credit.

**Keywords:** Accounting Quality, Trade Credit, Profit Sustainability, Profit Predictability, Earnings Management, Firm Type

**Authors' individual contribution:** Conceptualization — L.T.M. and H.F.H.; Methodology — M.A.R.; Formal Analysis — H.K.S.; Investigation — A.M.M.; Data Curation — A.S.A.; Writing — Original Draft — H.K.S.; Writing — Review & Editing — H.F.H. and A.S.A.; Visualization — M.A.R.; Supervision — H.K.S.; Project Administration — H.F.H.

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## 1. INTRODUCTION

Today, one of the factors affecting the economic decisions of people working in the capital markets is access to reliable information that is relevant to

the field of decision. The lack of information or low quality of information increases the ambiguity of the decision-making process. Financial reports released by companies provide a source of information required to make a decision. In the process of making

financial and economic decisions by the venture capitalists, creditors, and other users of the management and financial information, not only is the availability of information of paramount importance, but the quality of the information provided matters as well (Salman et al., 2022). For example, cash is an element of financial statements that has long been of particular interest to financial statement holders. The importance of cash is entwined with the survival of a company so that a company will not be able to continue its operations in the absence of sufficient cash. Given the importance of this issue, companies have always had strong incentives to retain cash. The policy adopted by a business executive for the management of its current assets has an impact on the level of its cash reserve. Deciding how to use the internal cash flow is a major decision that may become the source of conflicts between shareholders and managers. During the economic growth of a company, with the increase of cash reserves, the managers need to decide whether the cash needs to be distributed among the shareholders, spent on in-house expenditures, used for external purchases of the company, or remain untouched. In this context, an abstruse issue for profit-seeking managers is to choose between the use or maintenance of cash reserves.

In any economy, achieving long-term and sustained growth is not possible without the optimal allocation of financial resources at the national level. Lack of access to sufficient financial resources is a major obstacle to the growth and development of small and medium-sized companies. However, such companies, which have great potential for economic growth, play an important role in the economies of developing and developed countries and they can reach high levels of productivity if find access to sufficient financial resources (Khazaei, 2016). One way of financing these companies is through financial markets, which include the money market, capital, and insurance. The money market, as a place for short-term financial claims, is further composed of banking and non-bank financial institutions (financial and credit institutions). These institutes act as intermediaries in the financial markets and their impact on the economy goes beyond their number and size. Experience has shown that credit institutions can significantly contribute to the growth of small and medium-sized enterprises, but in developing countries, the importance of financial and credit institutions is largely neglected and the quality or the extent and quality of service provided by these services is limited.

Therefore, decision-making is highly important in all domains of activities. Economic decisions must be based on information, which is generally provided by the accounting system. In fact, the ultimate goal of managers' decisions can be the optimal allocation of economic resources to profitable activities, so as to foster economic development and prosperity. The more managers exploit accounting information, the more reasonable and appropriate decisions are expected to be made. However, the use of accounting information depends on several factors, some of which are related to the users of this information and some to the quality and quantity of information supplied. The importance of accounting information is known

to anyone, and most companies have established accounting information systems due to legal requirements and broad applications of accounting information. Information acts as one of the basic management resources for managing organizations or other stakeholders. In this regard, particular attention should be dedicated to the nature and the quality of supplied information. Today, there is a great deal of evidence that information quality is an ongoing concern of organizations because the survival of an organization is linked to the execution of organization stakeholders' demands. And this is only realized when the supplied information is of adequate quality.

Accordingly, accounting information systems, as part of information systems, should place a greater emphasis on the concept of quality. Although the pragmatic definition of quality could be applied to many everyday uses, experts often use more sophisticated and complex models to define the concept of information quality. Nonetheless, in most information systems, this term is synonymous with quality. Still, many academics draw a fundamental distinction between the concept of data and information, placing a premium on the distinction between data quality and information quality and arguing that the distinction is rooted in the semantic and syntactic differences between these two concepts. For example, the semantic value of 1 can be expressed in various syntactic forms such as 0.0001, 1.000, 0.1, and 1. Thus, the difference in the nature of the data may necessarily indicate poor quality of information. In other words, information quality refers to the measurement of information values offered to the users. Quality can often be considered a subjective notion, but relevant information may vary depending on the user and how they put such information to use. Nevertheless, information quality is to a large extent a function of adherence to the principle of neutrality so that it does not produce the slightest distinction in the mind of analytical users.

This study aimed to investigate, on the basis of three hypotheses, the effect that the type of firm has on the relationship between accounting quality and trade credit in publicly traded companies. The purpose of this research was to investigate the effect that the type of firm has on this relationship. The findings have been checked for accuracy and thoroughly investigated in the manner that was required. By concentrating on the effect that the quality of accounting has on trade credit, this study has shed light on a problem that had not been investigated before.

This research has been broken down into the five primary sections that follow: Section 1 is an introduction, which discusses the research problems and the goals of the study. Section 2 is the literature review, which summarizes previous studies and identifies any gaps in knowledge. Section 3 presents the research methodology and outlines the process by which the results will be analyzed. Both the discussion and the results are provided in Section 4. Section 5 includes a conclusion, as well as an explanation and the findings themselves.

## 2. LITERATURE REVIEW

Quality of accounting information describes the precision of financial reporting in stating accounting information and firm performance, especially the expected cash flows that are presented to investors. Accounting information is an important and useful source of decision-making for the contracting parties, as well as a key source of assessing the job of advising managers (Yazdi & Taleban, 2008; Huang et al., 2019). The financial reporting supplies information on the expected cash flows. Therefore, accounting quality is concerned with the accuracy and soundness of information. The high quality of information reporting enables a company to retain a lower amount of cash and reduce non-cash-generating assets in the balance sheet (Velte, 2022; Sharaf, Ishak, Sapuan, & Yidris, 2020). These findings contribute to the literature on the role of accounting quality in reducing information asymmetry, which thwarts rigorous corporate capital policies and gives valuable insights to managers, investors, creditors, and researchers. Moreover, improving the quality of corporate accounting may improve cash management, reduce cash flow in the balance sheet and thus increase the return on investment capital. Hence, its economic implications are important to corporate executives. Creditors and investors may consider the quality of accounting information as a key factor in determining discount rates and debt contracts. Also, the high quality of accounting information boosts creditors' incentive to grant facilities to companies. Trade credit is an agreement between a buyer and a seller by virtue of which the seller allows the buyer to postpone the payment for the purchased goods (Mian & Smith, 1992; Pattnaik, Hassan, et al., 2020; Sharaf, Ishak, Sapuan, Yidris, & Fattahi, 2020). Suppliers, as the providers of short-term finances, consider several factors including the profit margin of sales on credit, the ability of the customer to fulfill his business obligations in a timely manner, and the long-term financial status of the customer when they contemplate granting credits to their customers. Business credit plays a central role in the activities of any company as it reflects the level of trust that creditors and suppliers placed in that company. Companies with good business credit can purchase goods, and services from customers without any cash payment. Banks and other creditors look for information that can be used to assess the status of companies before granting any facilities (Pattnaik, Kumar, et al., 2020; Sharaf, Ishak, Sapuan, Yidris, & Fattahi, 2021). Accounting is one of the most important sources of information that can be of particular value to creditors. Given the importance of accounting quality and its effect on trade credit, along with the type of company and its effect on the said relationship. The results of a survey conducted by Graham et al. (2005) show that service managers prefer to provide suppliers with smooth earnings to assure them about the sustainability of their business (one aspect of accounting quality). Earnings smoothness is not only considered to be less risky but can also reduce information asymmetry between suppliers and customer companies. In this context, product features can also influence the relationship between accounting

quality and the use of trade credit. If a company is on the verge of bankruptcy, its suppliers are entitled to confiscate the products they have sold to the company. Suppliers can sell those goods to other buyers in the market and therefore gain (at least partially) the settlement value of their goods. On the other hand, service providers are unable to retrieve the services already offered to these customers. Consequently, it exacerbates the consequences of information asymmetry, and service providers are at greater risk of raising trade credit (Sharaf, Ishak, Sapuan, & Yidris, 2021; Jabbar et al., 2021; Hasan et al., 2021). The results of this research can be useful to different groups such as creditors, stockholders in financial markets, stock exchange officials, financial analysts, and scholars in order to provide transparent information, optimize portfolio design, help with optimum investment decisions in the stock exchange and provide new avenues of research for favorable analysis of other financial variables (Wu et al., 2022; Subhi et al., 2022).

Petersen and Rajan (1997) and Kadhim et al. (2020) illustrated that if companies face difficulty in bank financing, trade credit can be an attractive alternative for financing, even if it is costly. Wilson and Summers (2002) demonstrated that trade credit has diverse applications in various industries. Danielson and Scott (2004) found that since smaller companies have to deal with more barriers to obtaining credit from banks, they display a greater tendency towards trade credit compared to large companies. In addition, it was revealed that a decline in bank lending would reinforce trade credit. Bharath et al. (2008) suggested that an increase in the quality of accounting information would lead to easier financing (including financing through trade credit). The high quality of accounting information reduces information asymmetry and facilitates the purchase of credit (Bhattacharya et al., 2011; Almagsoosi et al., 2022). Giannetti et al. (2011) exhibited that companies prefer to fund new investments using in-house financial resources through short-term debt (including trade credit), interest-bearing debt, and new stock issuance. Companies struggling with liquidity problems can take advantage of trade credit and sustain their operations, thereby preventing any interruptions in their activities (Ferrando & Mulier, 2013; Raheemah et al., 2021). It is argued that about 40 to 60 percent of companies pay their debts to suppliers with delay. This late payment is not limited to small firms, and large corporations may be delayed in settlement for their business obligations. Murfin and Njoroge (2013) showed that late payment of big customers restricts the ability of suppliers to invest in property and equipment and reduce capital expenditures. Therefore, when granting trade credit to customers, suppliers should consider the possibility of late payment and in some cases default. Hui et al. (2012) and Dai and Yang (2015) found that suppliers grant more trade credit to companies that present more conservative financial reports. Ke (2013) found that with an improvement in earnings management, which leads to escalated information asymmetry, the level of business credibility drops. The study of Martinez-Sola et al. (2014) revealed that a lower level of earnings fluctuations increases the possibility of predictability, and a higher quality of reporting

boosts trade credit. Dhieux et al. (2015) also asserted that there is a positive relationship between accounting information quality and trade credit so creditors tend to grant fewer credits to customers whose financial reporting quality is low. Hyun (2017), in his study on the commercial credit of small and medium-sized enterprises in Korea during the financial crisis of 1993, stated that firms affected by the financial crisis were more likely to rely on their trade credit than other firms did.

In Iran, scant attention has been paid to the topic of trade credit and its associated factors. For example, Izadi Nia and Taheri (2016) showed that earnings smoothness and conservatism are not significantly related to trade credit, but they reported a negative and significant relationship between earnings management and trade credit. Kordlar and Taheri (2015) showed that there is a positive and significant connection between accruals quality and trade credit, but earnings fluctuation is not significantly related to trade credit.

Kamyabi and Mehlabani (2017) found that accounting conservatism enhances trade credit, but the implementation of monetary policies in the country weakens the effect of accounting conservatism on trade credit. According to the above-mentioned theoretical concepts, our hypotheses are as below:

*H1: Firm type (Service/Trading) has an effect on the relationship between earnings sustainability and trade credit.*

*H2: Firm type (Service/Trading) has an effect on the relationship between earnings predictability and trade credit.*

*H3: Firm type (Service/Trading) has an effect on the relationship between real earnings management and trade credit.*

### 3. RESEARCH METHODOLOGY

#### 3.1. Sample selection, variable measurement, and research design

In this study, the data is gathered by documentary research for literature review. For this purpose, we used articles, journals along with other sources available at universities.

In this model,  $Earn_{it}$  equals the operational profit of firm  $i$  in year  $t$  and  $Total\ asset$  equals total assets.

If the explanatory variable coefficient of the profit sustainability model ( $\delta$ ) is near one or

$$\frac{Earn_{it}}{Total\ asset_{it-1}} = \alpha + \delta * \frac{Earn_{it-1}}{Total\ asset_{it-1}} + V_{it} \quad (1)$$

#### 3.2. Sample selection

In order to acquire the necessary financial information, a thorough review of the annual reports of the companies was carried out. During the process of the investigation, all of the data that was obtainable for Iranian companies that were traded on the Tehran Stock Exchange market was used to compile our sample. This data was made ready for analysis by the use of Microsoft Excel software. The information was gathered by surveying 35 different companies between the years 2011 and 2016. During this time, between 2011 and 2013, we experienced a financial crisis, and between 2014 and 2016, we experienced the era after the crisis. For the purpose of conducting our analysis, we utilized Stata 14 in addition to other statistical software. Firms that entered the market during the examination period but were not included in the sample because they were delisted; the investment, banking, and insurance industries because of the unique characteristics of these fields; firms that changed their fiscal year during the examination period; firms whose fiscal year does not end in March according to the solar calendar. This brings the total number of businesses to 35.

#### 3.3. Variable measurement

The variable that is being examined here as the dependent variable is trade credit. Trade credit can be determined by dividing accounts payable by total assets (Petersen & Rajan, 1997; Giannetti et al., 2011; Ke, 2015). The proposed method can be utilized in the examination of a variety of hypotheses. The independent variable in this situation is the accounting quality, which is represented by three indicators: real earnings management, profit predictability, and profit sustainability. We utilized a model first developed by Kormendi and Lipe (1987), then Francis et al. (2004), and finally, Roychowdhury (2006) for each of these indicators, in turn. The ability of a business to keep generating profits over an extended period of time is referred to as its profit sustainability. According to the methodology developed by Kormendi and Lipe (1987), the following is how profit sustainability is determined:

above it, it shows that profit is sustainable, zero shows otherwise.

Profit predictability by the model of Francis et al. (2004) is calculated as below:

$$Predictability_{it} = \sqrt{\sigma^2 (\hat{v}_{it})} \quad (2)$$

The small amount shows higher profit predictability, thereby profit quality is on a high level, and vice versa.

Real earnings management by the model of Roychowdhury (2006) is calculated as below.

In this model,  $CFO$  is net operating cash flow;  $S$  is sales, and  $TA$  is total assets.

$$\left(\frac{CFO_{it}}{TA_{it-1}}\right) = \beta_0 + \beta_1 \left(\frac{1}{TA_{it-1}}\right) + \beta_1 \left(\frac{S_{it}}{TA_{it-1}}\right) + \beta_1 \left(\frac{\Delta S_{it}}{TA_{it-1}}\right) + \varepsilon_{it} \quad (3)$$

4. RESULTS AND DISCUSSION

In hypothesis testing, *AP* equals trade credit which is accounts payable divided by total assets. *PS* equals profit sustainability. *SERVICE* is a firm type that is equal to one if a firm is a service company, zero otherwise. *SIZE<sub>it</sub>*, which is firm size derived from the natural logarithm of total assets. *SG<sub>it</sub>* equals current sales minus the previous year's sales divided by the previous year's sales. *AGE<sub>it</sub>* equals the natural

logarithm of the number of years in which a firm is doing business. *AGE<sup>2</sup><sub>it</sub>* is the sum of squares of the age of a company. *ROA<sub>it</sub>* is the return on assets. *AR<sub>it</sub>* equals total accounts receivable divided by total assets. *TQ<sub>it</sub>* equals the market value of equity plus the book value of debts divided by the book value of total assets. *CASH<sub>it</sub>* equals total cash and its equivalents divided by total assets. *DEBT<sub>it</sub>* is for total debts divided by total assets. *MS<sub>it</sub>* equals total sales divided by total exports in a fiscal year.

The first hypothesis (H1) testing

$$AP_{it} = \beta_0 + \beta_1PS_{it} + \beta_2SERVICE_{it} + \beta_3PS * SERVICE_{it} + \beta_4SIZE_{it} + \beta_5SG_{it} + \beta_6AGE_{it} + \beta_7AGE_{it}^2 + \beta_8ROA_{it} + \beta_9AR_{it} + \beta_{10}TOBINSQ_{it} + \beta_{11}CASH_{it} + \beta_{12}DEBT_{it} + \beta_{13}MS_{it} + \epsilon_{it} \tag{4}$$

The second hypothesis (H2) testing

$$AP_{it} = \beta_0 + \beta_1P_{it} + \beta_2SERVICE_{it} + \beta_3P * SERVICE_{it} + \beta_4SIZE_{it} + \beta_5SG_{it} + \beta_6AGE_{it} + \beta_7AGE_{it}^2 + \beta_8ROA_{it} + \beta_9AR_{it} + \beta_{10}TOBINSQ_{it} + \beta_{11}CASH_{it} + \beta_{12}DEBT_{it} + \beta_{13}MS_{it} + \epsilon_{it} \tag{5}$$

The third hypothesis (H3) testing

$$AP_{it} = \beta_0 + \beta_1EM_{it} + \beta_2SERVICE_{it} + \beta_3EM * SERVICE_{it} + \beta_4SIZE_{it} + \beta_5SG_{it} + \beta_6AGE_{it} + \beta_7AGE_{it}^2 + \beta_8ROA_{it} + \beta_9AR_{it} + \beta_{10}TOBINSQ_{it} + \beta_{11}CASH_{it} + \beta_{12}DEBT_{it} + \beta_{13}MS_{it} + \epsilon_{it} \tag{6}$$

Descriptive statistics of the current study is in Table 1 below. The average amount of *Trade credit* is 0.298, whereas the average amount of *Profit sustainability* is 0.005, as shown in Table 1. According to these findings, publicly traded companies in Iraq have a history of profitability, even if it has been on a very small scale. Additionally, the mean scores for *Profit predictability* and *Earnings management* are 0.134 and 0.008,

respectively. The following are the values that correspond to the median for *Firm size* (9.703), *Sales growth* (0.259), and *Firm age* (31.042). In addition, *Natural logarithm of age*, *Sum square of age*, *Return on asset*, *Accounts receivable ratio*, *Tobin's Q ratio*, *Cash ratio*, *Debt ratio*, and *Market share* each have a mean value of 3.358, 11.419, -0.012, 0.263, 4.153, 0.163, 0.395, and 0.113, correspondingly. *Market share* has a mean value of 0.113.

Table 1. Descriptive statistics of quantitative variables

Variable	Symbol	Mean	Median	Std. dev.	Max.	Min.	Skewness	Kurtosis	Normality
Trade credit	AP	0.298	0.235	0.261	0.920	0.010	0.930	2.964	0.000
Profit sustainability	PS	0.005	-0.010	0.121	0.380	-0.200	0.966	4.259	0.000
Profit predictability	P	0.134	0.09	0.133	0.550	0.010	1.645	5.330	0.000
Earnings management	EM	0.008	0.010	0.130	0.390	-0.240	0.646	4.295	0.000
Firm size	SIZE	0.703	9.752	0.567	11.290	8.370	0.366	3.692	0.000
Sales growth	SG	0.259	0.010	1.097	4.03	-0.980	2.476	9.217	0.000
Firm age	AGE	31.042	23	13.303	70	10	1.254	3.493	0.000
Natural logarithm of age	LNAGE	3.358	3.26	0.382	4.25	2.30	0.544	2.960	0.000
Sum square of age	AGE <sup>2</sup>	11.419	10.62	2.657	18.05	5.30	0.808	2.923	0.000
Return on asset	ROA	-0.012	0.02	0.190	0.29	-0.67	-1.637	6.140	0.000
Accounts receivable ratio	AR	0.263	0.20	0.238	0.95	0.01	1.003	3.312	0.000
Tobin's Q ratio	TQ	4.153	2.215	4.534	16.88	0.36	1.751	5.014	0.000
Cash ratio	CASH	0.163	0.11	0.169	0.68	0.01	1.277	3.806	0.000
Debt ratio	DEBT	0.395	0.25	0.453	1.97	0.02	2.082	7.260	0.000
Market share	MS	0.113	0.02	0.209	0.91	0.001	2.673	9.618	0.000

The results of the test to determine whether or not something follows a normal distribution showed that the quantitative variables that were being considered do not follow a normal distribution. In spite of this, we are able to reach the conclusion that the distribution of the variables is normal since there is not a significant gap between the mean and the median, and also because there are

210 observations. These two factors combined allow us to reach this result. The coefficient of correlation between two variables can be used to determine the degree to which they are linearly dependent on one another. The following table presents the key research variables, together with their respective coefficients of correlation:

Table 2. Pearson coefficient correlation among the main research variables

	AP	PS	P	EM	SIZE	SG	AGE	AGE <sup>2</sup>	ROA	AR	TQ	CASH	DEBT	MS
AP	1													
PS	0.08	1												
P	0.37	0.05	1											
EM	0.04	0.15	0.01	1										
SIZE	0.15	-0.04	-0.23	-0.09	1									
SG	-0.07	0.28	-0.03	-0.08	0.04	1								
AGE	0.19	-0.13	0.19	-0.09	0.02	0.02	1							
AGE <sup>2</sup>	0.18	-0.14	0.20	-0.10	0.01	0.03	0.99	1						
ROA	-0.42	0.40	-0.25	0.15	0.02	0.16	-0.42	-0.42	1					
AR	0.42	0.03	0.09	-0.01	0.26	-0.07	-0.16	-0.17	-0.06	1				
TQ	0.22	0.13	0.31	0.04	-0.26	0.02	-0.13	-0.14	0.01	0.17	1			
CASH	-0.16	0.18	-0.10	0.12	-0.12	0.03	-0.24	-0.24	0.29	0.24	-0.12	1		
DEBT	0.86	0.04	0.39	0.01	0.10	-0.04	0.29	0.29	-0.59	0.30	0.10	-0.14	1	
MS	0.00	0.17	-0.14	-0.04	0.65	0.09	-0.23	-0.24	0.26	0.05	-0.04	0.17		1

Table 3. Test results of H1

Variable	Coefficient	Std. dev.	Z-value	Z-probability
Constant	-1.757	0.732	-2.40	0.016**
PS	0.041	0.070	0.59	0.558
SERVICE	-0.018	0.027	-0.68	0.500
PS * SERVICE	-0.007	0.101	-0.08	0.938
SIZE	0.101	0.027	3.63	0.000*
SG	-0.005	0.004	-1.14	0.255
AGE	0.509	0.393	1.29	0.196
AGE <sup>2</sup>	-0.073	0.055	-1.32	0.187
ROA	0.114	0.067	1.68	0.092***
AR	0.057	0.043	1.31	0.189
TQ	0.006	0.001	3.33	0.001*
CASH	-0.013	0.037	-0.35	0.726
DEBT	0.443	0.034	12.88	0.000*
MS	-0.116	0.104	-1.12	0.264
R <sup>2</sup>	0.836			
Wald test	454.75			
Wald test Sig.	0.000*			

Note: \* Significant at the 0.01 level; \*\* Significant at the 0.05 level; \*\*\* Significant at the 0.10 level.

The results presented in Table 3 indicate that the independent variables and the control variables are responsible for approximately 84 percentage points of the dependent variable. The entire significance of the H4 model is shown by the Wald test significance, which is 454.75. According to the findings, there is no discernible relationship between the *Type of firm* and *Trade credit*. Furthermore, *PS \* CRISIS* has no influence whatsoever on the connection that exists between

*Profit sustainability* and *Trade credit*. As a result, our H4 application was not accepted. In other words, the connection between *Profit sustainability* and *Trade credit* is unaffected by the type of firm that is being examined. According to the findings, a significant and favorable link exists between *Trade credit* and *Firm size*, *ROA*, *Tobin's Q ratio*, and *Debt ratio*. On the other hand, there is no statistically significant connection between *Trade credit* and the other control variables.

Table 4. Test results of H2

Variable	Coefficient	Std. dev.	Z-value	Z-probability
Constant	-2.108	0.574	-3.67	0.000*
P	0.171	0.087	1.97	0.049**
SERVICE	-0.022	0.035	-0.63	0.526
P * SERVICE	0.119	0.182	0.66	0.512
SIZE	0.122	0.027	4.39	0.000*
SG	-0.003	0.004	-0.73	0.467
AGE	0.602	0.297	2.02	0.043**
AGE <sup>2</sup>	-0.089	0.042	-2.10	0.036**
ROA	0.130	0.062	2.10	0.036**
AR	0.043	0.044	0.97	0.332
TQ	0.006	0.002	2.92	0.004*
CASH	-0.006	0.035	-0.20	0.844
DEBT	0.431	0.035	12.16	0.000*
MS	-0.112	0.100	-1.11	0.266
R <sup>2</sup>	0.843			
Wald test	451.99			
Wald test Sig.	0.000*			

Note: \* Significant at the 0.01 level; \*\* Significant at the 0.05 level; \*\*\* Significant at the 0.10 level.

The coefficient of determination, R<sup>2</sup>, demonstrates that the independent variables and the control variables are responsible for 84 percent

of the dependent variable. The entire significance of the H5 model is shown by the Wald test significance, which is 451.99. According to the findings, there is

no discernible relationship between the *Type of firm* and *Trade credit*. In addition, the relationship between *Profit predictability* and *Trade credit* is unaffected by the *P \* CRISIS* model in any way. As a result, our *H5* proposal gets rejected. To put it another way, the connection between *Profit predictability* and *Trade credit* is unaffected by the *Type of firm* being considered. According to the findings, there is a strong positive association between *Trade credit* and *Firm size, ROA, Tobin's Q ratio, and Debt ratio*; on the other hand, there is a significant negative relationship between *Trade credit* and *Sum square of age*. On the other hand, there is no statistically significant connection between *Trade credit* and the other control variables.  $R^2$  indicates that the independent variables and the control variables are responsible for approximately 84 percent of the dependent variable.

This is shown in Table 5. The entire significance of the *H6* model is shown by the Wald test significance, which is 459.87. According to the findings, there is no statistically significant relationship between *Type of firm* and *Trade credit*. In addition, *Earnings management* and *Trade credit* are significantly improved as a result of the large beneficial influence that *EM \* CRISIS* has. As a result, the *H6* proposal gets approved. To put it another way, the relationship between *Earnings management* and *Trade credit* is significantly influenced in a constructive direction by the type of firm. According to the findings, a significant and favorable link exists between *Trade credit* and *Firm size, ROA, Tobin's Q ratio, and Debt ratio*. On the other hand, there is no statistically significant connection between *Trade credit* and the other control variables.

Table 5. Test results of *H3*

Variable	Coefficient	Std. dev.	Z-value	Z-probability
Constant	-1.742	0.767	-2.27	0.023**
EM	0.025	0.046	0.55	0.583
SERVICE	-0.017	0.025	-0.70	0.485
EM * SERVICE	0.132	0.065	2.02	0.043**
SIZE	0.098	0.027	3.63	0.000*
SG	-0.003	0.004	-0.81	0.416
AGE	0.514	0.406	1.26	0.206
AGE <sup>2</sup>	-0.073	0.057	-1.28	0.200
ROA	0.131	0.060	2.17	0.030**
AR	0.056	0.045	1.26	0.207
TQ	0.006	0.001	3.40	0.001*
CASH	-0.023	0.039	-0.59	0.556
DEBT	0.447	0.033	13.42	0.000*
MS	-0.108	0.104	-1.04	0.300
R <sup>2</sup>			0.839	
Wald test			459.87	
Wald test Sig.			0.000*	

Note: \* Significant at the 0.01 level; \*\* Significant at the 0.05 level; \*\*\* Significant at the 0.10 level.

## 5. CONCLUSION

In conclusion, there is not a discernible difference in the level of impact that the type of business has on trade credit. In addition, the *H1* is rejected on the grounds that there is no evidence to suggest that *PS \* SERVICE* has any bearing on the relationship that exists between *Profit sustainability* and *Trade credit*. According to the data, there is also a powerful and favorable connection between *Trade credit* and *Firm size, ROA, Tobin's Q ratio, and Debt ratio*. The findings provided evidence for this assertion. On the other hand, there is no correlation that can be established by statistical analysis between the *Trade credit* variable and the other control variables. In contrast to the findings of the earlier studies, the findings of the research carried out by Dai and Yang (2015), Kamyabi and Mehlabani (2017), and Izadi Nia and Taheri (2016) are not in agreement with our findings. A further point to consider is that the nature of the company does not have a significant bearing on the trade credit. In addition, the *H2* is rejected because there is no evidence to suggest that *P \* SERVICE* has any bearing on the link that exists between *Profit predictability* and *Trade credit* in any way. The data also indicated that there is a strong positive link between *Trade credit* and *Firm size, ROA, Tobin's Q ratio, and Debt ratio*. On the other hand, there is a significant negative relationship between *Trade credit* and the *Sum square of age*.

These associations were found to exist. On the other hand, there is no correlation that can be established by statistical analysis between the *Trade credit* variable and the other control variables. We may point to studies by Dai and Yang (2015), Anthony et al. (2015), Garcia et al. (2014), Kamyabi and Mehlabani (2017), and Izadi Nia and Taheri (2016), all of which support our conclusions and are consistent with those of the other studies, when comparing our findings to the findings of other studies. Dai and Yang (2015), Anthony et al. (2015), Garcia et al. (2014), and Kamyabi and Mehlabani (2017). There does not appear to be any connection between the *Type of firm* and *Trade credit* at all. In addition, the *H3* is acknowledged for this reason in light of the fact that *EM \* SERVICE* exerts a sizeable and positive influence on the connection between *Earnings management* and *Trade credit*. According to the data, there is also a powerful and favorable connection between *Trade credit* and *Firm size, ROA, Tobin's Q ratio, and Debt ratio*. The findings provided evidence for this assertion. On the other hand, there is no correlation that can be established by statistical analysis between the *Trade credit* variable and the other control variables. In contrast to the conclusions of the earlier studies, the research that was carried out by Dai and Yang (2015), Anthony et al. (2015), Garcia et al. (2014), Kamyabi and Mehlabani (2017), and Izadi Nia and Taheri (2016) does not concur with our findings.

The future perspective of the current research can be represented in the evaluation of how different types of organizations influence the connection between accounting quality and trade

credit in Iraqi public companies or any other country or it can be done in Iraq without these terrorist groups and comparing between them.

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