Print ISSN: 2288-4637 / Online ISSN 2288-4645 doi:10.13106/jafeb.2021.vol8.no3.0469

Credit Impact on Firm Profitability in Iraqi, Jordanian, and Kuwaiti Stock Markets

Dalal Salih MAHDI¹, Adnan Tayeh AL-NAIMI²

Received: November 20, 2020 Revised: January 26, 2021 Accepted: February 03, 2021

Abstract

In this paper, the relationship between the profitability level of an enterprise and the credit policy adopted by an enterprise was measured. A sample of industrial firms listed on the stock exchanges of Iraq, Jordan, and Kuwait was analyzed. Five industrial firms were randomly selected from each exchange with a condition of having at least 5 year-activity. The total sample size was 15 industrial firms. The study financial data was imported from the sample firms' websites. The financial data was for the financial year 2017. The Regression Analysis was adopted to measure the impact of trade credit on the profitability of an enterprise using the SPSS software. It was found that the receivable accounts have a proportional relationship with the turnover property rights rate. Similarly, the statistical results showed that the turnover property rights rate increased with an increase in the turnover receivable accounts rate and the percentage of investment in receivable accounts. The influence of trade credit on the enterprise profitability percentage in the Iraq stock exchange, Amman stock exchange, and Boursa Kuwait were 0.938, 0.200, and 0.089, respectively. The results showed that the three secondary assumptions were incorrect, while the zeroth assumption, i.e., trade credit has no influence on profitability, was correct.

Keywords: Trade Credit, Profitability, Market Value Added, Economic Value Added, Receivable Accounts

JEL Classification Code: C15, G11, G15, G21, Z33

1. Introduction

Profit is the main driving force for any investor to invest his/her money in the market. Profit is the surplus revenue after a firm has paid all its costs. Profit can be seen as the monetary reward to shareholders and owners of a business. Profitability is a relation between the profits that an enterprise achieves and the investments that achieve these profits. Profitability is a business's ability to produce a return on an investment based on its resources in comparison with an alternative investment. Profitability is the difference between the achieved income and the costs that the enterprise

paid to achieve this income (Belhadj, 2017). Gaining and maximizing profitability are the main goals of all enterprises to ensure overall success. Earning a profit is important to a business because profitability impacts whether a company can secure financing from a bank, attract investors to fund its operations, and grow its business (Phan et al., 2020). To achieve these goals, the financial manager should obtain returns with less costs and risks. Therefore, huge efforts should be taken to optimize the available resource usage to maximize the income (Hamid et al., 2018; Nory, 2018). Profitability is measured by analyzing financial indicators such as sales, assets, capital, and normal share besides the relationship between profits and sales, or profits and investments (Abdul Hameed et al., 2018; Rakkakdh, 2016) Profitability is achieved when the gained economic results are greater than the used abilities. The relationship between the profitability and debt percentage is an interrelationship.

Debt capital can also have a positive effect on profitability. Debt allows companies to leverage existing funds, thereby enabling more rapid expansion than would otherwise be possible. the effective use of debt financing results in an increase in revenue that exceeds the expense of interest payments (Ngo et al., 2020). However, too

Email: alnaimy1967@yahoo.com

¹First Author and Corresponding Author. Assistance Lecturer, College of Pharmacy, Tikrit University, Iraq [Postal Address: Tikrit, Salahdeen, 34100, Iraq] Email: dalal.salih@tu.edu.iq

²Associate Professor, Department of Business and Management, University of Al-Ma'mun, Baghdad, Iraq.

[©] Copyright: The Author(s)

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (https://creativecommons.org/licenses/by-nc/4.0/) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

much debt is a bad thing for companies and shareholders because it inhibits a company's ability to create a cash surplus. The enterprises that have low profitability and good investment opportunities seek external finance. A company is said to be overleveraged when it has too much debt, impeding its ability to make principal and interest payments and to cover operating expenses. Being overleveraged typically leads to a downward financial spiral resulting in the need to borrow more. Therefore, the high profitability of an enterprise will create good investment opportunities, as the enterprise uses its profits to finance its investments reducing its overall debt (Al Shammari, 2018). To conclude, profits could be achieved in two steps. The first one is when the financial manager invests available money in a way that achieves the maximum possible return. The second is when the financial manager raises money (external financing) in a way that allows the enterprise owners to get the highest profits while reducing risk.

The new indicators to measure profitability are the added market value (= market value per share – book value per share) (Pandya, 2016) and the added economic value (= Net profit after tax – capital cost × invested capital) (Huang & Wang, 2008).

The profitability is affected by many factors such as the firm size, debt percentage, assets ratio, productivity (Al-Khedhat, 2015). Some of these factors are under the control of the enterprise's management, while others are beyond its control (Al-Naimi, 2018).

Trade credit is one of the most recent business features. As a result, recently, trade credit has become one of the main supporters in countries' economies and the fuel that runs the economy wheel. Trade credit is a business-to-business (B2B) agreement in which a customer can purchase goods on the account without paying cash up front, paying the supplier at a later scheduled date. Trade credit is the loan extended by one trader to another when the goods and services are bought on credit. Trade credit facilitates the purchase of supplies without immediate payment. Trade credit is commonly used by business organizations as a source of short-term financing. (Al-Naimi & Al-kharshah, 2007).

Trade credit can also help companies to finance their current operations, especially during certain periods of high activity. It is also very useful for new businesses or startups which don't have yet access to bank loans or sufficient fundraising (Al-Naimi, 2018). However, credit can cause numerous problems for all its parties. Therefore, all parties must be cautious in using credit to ensure productivity and useful purposes. In the first place, giving credit depends on the mutual trust between the enterprise and the customer (Ahmed, 2003). Trade finance mitigates the credit and payment risks or default risk that suppliers hold, along with having banks or financial institutions providing additional security, that larger orders can be fulfilled.

Irrespective of the nature or size of a business, trade credit aims to focus on the trade cycle and underlying goods, rather than the primary borrower. Therefore, small businesses can trade larger volumes more easily as they work with a stronger credit of end customers (Imlau, 2017). Several concepts for trade credit were reported by many researchers in financial management. Trade credit is a mode of short to medium-term working capital, which provides the security of the stock or service being exported or imported; with supporting products or structures that allow risk mitigation. (Deustche Bundesbank, 2012). For countries where trade credit functions well, it enables firms that would otherwise be considered too risky, to link into expanding global value chains and thus contribute to employment and productivity growth (Baveld, 2012; Tang, 2014). Managers should try to keep the level of trade credit investment as close to the optimal point as possible to avoid the case that their profitability reduces when they move away from this point (Khawla, 2016).

2. Literature Review

Profitability and its relationship with trade credit have been studied in many works. Lazaridis and Tryfonidis (2006) showed that there is statistical significance between profitability, measured through gross operating profit, and the cash conversion cycle. Moreover, managers can create profits for their companies by handling correctly the cash conversion cycle and keeping each different component (accounts receivables, accounts payables, inventory) to an optimum level. Abuhommous and Ala'a Adden (2011) investigated the impact of trade credit motives (commercial, operational, and financial) on the relationship between accounts receivable and profitability. The results showed that firms can increase their profitability by investing in accounts receivable; this effect is greater in firms with highly volatile demand. Furthermore, we find that firms that invest higher than the average firms in the industry are more profitable.

Phan et al. (2020) studied the influence of the research and development strategy on the profitability of an industrial firm. The study sample comprised countries of the Euro region and Latin and Caribbean countries besides the USA, Japan, and South Korea. It was found that the research and development strategy had a significant impact on maximizing the profitability of an industrial firm. However, the research and development strategies were associated with high-risks due to high expenses incurred in the R&D process. Li (2011) investigated the determinants of trade credit relating to firm-specific characteristics based on listed firms in the Netherlands. There are 76 firms analyzed with 5-year observations from 2006–2010. The results showed that older firms grant less trade credit and resort more to trade credit. Smaller firms grant more credit to customers as a way of

marketing strategy to increase sales and build long-term relationships with customers. Moreover, it was observed that firms with a high capacity of generating internal cash, offer less trade credit to customers and borrow less from suppliers. Firms with access to cheaper external financing, offer less credit to customers and resort less to financing from suppliers.

Pao and Chou (2014) constructed a trade credit supply and demand model to analyze determinants of trade credit. Using a panel analysis for listed firms in Taiwan and China, they examined different hypotheses on the use of trade credit, including transaction costs, discriminatory pricing, adverse selection, and moral hazard. In accounts receivable (supply side of trade credit), firms in Taiwan showed a substitution effect between trade credit and bank credit, while firms in China demonstrated the complementary effect. In accounts payable (demand side of trade credit), firms in both Taiwan and China indicate the substitution effects. Adverse selection and moral hazards in relation to accounts receivables and payables can be compared to the trade-off relationship between the marginal profits and costs. Imlau (2017) studied the relationship between international trade and industrial credits. The sample consisted of 23 industries from 30 countries between 1999 to 2009. The results showed that the industries that depend on trade credit benefited from the international trade credit but without extra earnings of the economic value.

The problem of the present study can be summarized by the following question: Has the credit policy adopted by an enterprise to sell its commodities and services have a statistical impact on the achieved profitability level? Also, the present study is important because it is the first study that focuses on the credit policy of business enterprises.

3. Methodology

In this section, the problem of the present study is highlighted. Besides, the assumptions that connect the credit policy and the enterprise profitability have been mentioned. In particular, the impact of granted trade credit or what is known as debtors are shown in accounts receivable. As it is well known, the granted trade credit is one of the most important investment decisions used to run the operating capital. As such it is necessary to identify the standard variables to express both the profitability and trade credit. After that, the research society and its sample are identified. Finally, the assumptions test method is identified.

3.1. Research Problem and Its Importance

The performance of businesses, based on partial economy, is considered a direct result to manage different economic

resources and efficiently using them in the enterprise's operational activities, i.e., investment and finance activities. The general purpose of the financial statements is to provide information about the results of operations, financial position, and cash flows of an organization. This information is used by the readers of financial statements to make decisions regarding the allocation of resources.

Financial statements are neutral; they present an accurate picture of the activities of the business over a defined period. The business manager then evaluates the data to make operating decisions, such as whether the business is positioned to free up existing cash for operating expenses or needs to obtain additional credit. Lenders use the entire set of information in the financials to determine whether they should extend credit to a business, or restrict the amount of credit already extended.

Analysis of financial statements reveal important facts concerning managerial performance and the efficiency of the firm. Broadly speaking, the objectives of the analysis are to comprehend the information contained in financial statements to know the weaknesses and strengths of the firm and to make a forecast about the future prospects of the firm thereby, enabling the analysts to make decisions regarding the operation of, and further investment in the firm. The qualitative analyzing processes reveal how to use the available sources through a value creation process.

There is no doubt that business enterprises aim to grow and sustain their competitive edge in their industry. This ultimately depends on the management's ability to set ambitious goals, ensure that the enterprise stays on track, and adopt sustainable practices while maximizing the shareholders' wealth.

Maximizing the shareholders' wealth can be achieved by maximizing the enterprise's value through maximizing its share value in the stock market. To achieve these goals, the enterprise's management has to make necessary investments and financial decisions. These goals will not be achieved without gaining appropriate profitability. Therefore, the management has to analyze the internal and external environment. This analysis is necessary to determine which factors have a positive impact and which ones have a negative impact on profitability. Profitability is the actual representation of the enterprise achieved results that concern other parties, i.e., investors, enterprise owners, lenders, suppliers, and workers.

Among other factors that impact the profitability of an enterprise is the credit policy followed by the enterprise, which is highlighted in this study. The importance of the present work is to study the aim of the enterprise in maximizing its market value. Maximizing the market value of an enterprise is considered one of the long-term goals. This goal considers the expected profitability from a share, the time of the monetary flow of a share, the time value of money, and the expected risk level in share returns.

The expected risk level in share returns should be considered by an enterprise's management when making decisions and executing its plans.

3.2. Research Assumptions and Modeling

The main assumption of the present study is that the granted trade credit, selling commodities and services by an enterprise to its clients, assuming other factors are fixed and impacts the enterprise profitability. In other words, the growth of the granted trade credit by an enterprise impacts its profitability. The other factors terms refer to political factors; economic factors, for example, inflation, and; administrative factors, for example, workers strikes. From the main assumption, the following sub-assumptions are formed:

- The granted trade credit has a statistical impact on the enterprise profitability presented by the size of trade credit, i.e., the size of the debt account. The enterprise profitability is expressed in terms of return rate on property rights. Increasing the amount of debt account increases the return rate on property rights and vice versa.
- 2. The granted trade credit, expressed by the rate of turnover of the accounts receivable, has a statistical impact on the enterprise's profitability. The enterprise profitability is expressed in terms of return rate on property rights. Increasing the turnover of the accounts receivable will increase the return rate on property rights, and vice versa.
- 3. The granted trade credit, expressed in the percentage of investment in accounts receivable to the total investment in assets, has a statistical impact on the enterprise's profitability. The enterprise profitability is expressed in terms of return rate on property rights. Increasing the percentage of investment in accounts receivable will increase the return rate on property rights, and vice versa.

3.3. Research Goals

The present study aims to achieve the following targets:

- Measure the relationship between the achieved profitability gained by an enterprise and trade credit that is specified by its credit policy, i.e., credit sale and the state of the accounts receivable in its financial documents.
- 2. Measure the enterprise's credit impact on trade credit. In other words, find if there is any possibility to predict the profitability behavior of the enterprise by changing the credit policy, i.e., predict the profitability size through the size of the accounts receivable.

- 3. Identify the credit policy and its importance for business enterprises by presenting the credit concept, types, and importance.
- 4. Identify the credit manager's responsibilities and the conditions to get trade credit.
- 5. Identify the classic and modern profitability indicators.
- 6. Draw conclusions that serve business enterprises, in general, and industrial enterprises, in particular.
- 7. Offer recommendations that open doors for business enterprises and researchers.

3.4. Research Variables and the Methods to Express It

As aforementioned, the present study depends on two variables: enterprise profitability, in terms of return on property rights rate, and the granted trade credit.

- 1. Enterprise profitability: which is the return rate on property rights is a dependent variable because it is the core of the present problem. Profitability, which is the main goal for business enterprises, depends on external and internal factors. Profitability can be expressed in terms of the return rate on property rights as (turnover property rights rate (%) = Net profit/ Total property rights).
- 2. The granted trade credit: which means that the enterprise permits its clients to repay for commodities and services after the approved repayment period, following the receipt of a commodity or service. The granted trade credit is an independent variable that has an influence on the dependent variable, i.e., the enterprise achieved profitability. The following indicators express the granted trade credit:
 - Size of the accounts receivable, i.e., the amount of investment in the accounts receivable, measured with the amount of money as reported in the enterprise general budget, financial position.
 - Percentage of investment in accounts receivable, which is the percentage of investment in accounts receivable to the total investment in assets. The percentage of investment in accounts receivable can be calculated from (percentage of investment in accounts receivable (%) = Amount of accounts receivable/ Net sales).
 - Rate of turnover of accounts receivable, which
 is calculated based on the number of times that
 sales turn into accounts receivable, and it can be
 determined from (Turnover accounts receivable rate
 (times) = Net sales/ counts receivable).

3.5. Location and Time Limitations of the Research

In this section, the research location limitation is specified by defining the population of the study, and the assumptions test process was conducted. In the present study, the population was firms listed on the stock markets of Iraq, Jordan, and Kuwait respectively. The selected samples to be studied from these markets were a set of industrial firms. Choosing these markets was based on the close geographical location and foundation date of the firms (establishment date of the firms).

To conduct the empirical part of the present study and test the assumptions, five industrial firms were selected from each market, i.e., the sample size was 15 firms. The selection was random with the condition that any selected firm has an activity (business activities) of more than 5 years. The selected markets and firms are tabulated in Table 1. The financial data, profitability, and trade credit data were for the financial year 2017. The data was obtained from the available of the selected firms' financial reports in their markets' websites.

3.6. Statistical Methods

The main and secondary assumptions were tested to measure the impact of the granted trade credit in terms of receivable accounts on the achieved profitability of an enterprise. The achieved profitability of an enterprise is expressed in terms of turnover accounts receivable rate. The statistical method used to analyze the studied data was Regression Analysis implemented in Statistical Package for the Social Sciences – SPSS.

4. Results and Discussion

In this section, a study assumptions test process was performed to measure the impact of trade credit; in terms of receivable accounts amount, percentage of investment in receivable accounts, and turnover receivable accounts rate on the enterprise profitability which is expressed in terms of turnover property rights rate. In Table 2, the financial indicators that express the studied variables obtained from the financial reports of the research sample firms are listed.

4.1. Test the Study Assumptions per Market

In this section, the three secondary assumptions were tested on the industrial firms for each of the three studied markets to compare their results (test results) from the test process; the results are as follows.

4.1.1. First Secondary Assumption Test

In this section, the results of the first secondary assumption test are reported. Assuming the risk and return factors are fixed, the results showed a statistical influence of the granted trade credit in terms of receivable accounts size, i.e., the amount of receivable accounts on the enterprise profitability which is expressed in terms of turnover property rights rate. Increasing the amount of the receivable account increased the turnover property rights rate and vice versa. Table 3 lists the results of the first secondary assumption on the industrial firms for each market.

Table 3 shows that influence of the granted trade credit, in terms of accounts receivable amount, on the enterprise profitability, which is expressed in terms of turnover property rights rate for the three markets was different. The R square was the highest for the Amman stock exchange, then the Boursa Kuwait stock exchange, and then the Iraq stock exchange. The R square for the three markets had insignificant values (Sig.). Therefore, it can be concluded that the first secondary assumption was incorrect.

Table 1	۱:	Studied	Firms
---------	----	---------	-------

No.	Iraq stock exchange firms	Amman stock exchange firms	Boursa Kuwait firms
1	Baghdad for Packing Materials	Assas For Concrete Products Co. LTD	Gulf Cable and Electrical Industries Company
2	Baghdad Soft Drinks	The Jordanian Pharmaceutical Manufacturing	Ras Al Khaimah Co. For White Cement Construction Materials
3	Iraqi Date Processing and Marketing	National Cable & Wire Manufacturing	Heavy Engineering Industries and Ship Building Co
4	Al-Mansour Pharmaceuticals Ind.	Jordan Vegetable Oil Industries	National Industries Company
5	Ready-Made Clothes	The Jordan Cement Factories	KGL Logistics Company

 Table 2: The Financial Indicators that Express the Studied Variables

Market	No.	Firm	Accounts receivable (amount)	Accounts percentage (%)	Turnover of accounts receivable (time)	Turnover rate (%)
Iraq stock	1	Baghdad for Packing Materials	50001169	0.047	2.294946344	0.002
exchange	2	Baghdad Soft Drinks	9685289749	0.030	30.5442884	0.210
	3	Iraqi Date Processing and Marketing	11292865000	0.566	0.313460705	0.0
	4	Al-Mansour Pharmaceuticals Ind.	2553054437	0.317	0.630384953	0.026
	5	Ready Made Clothes	292563895	0.124	22.90634607	0.088
Amman	6	Assas For Concrete Products Co. LTD	1931721	0.120	4.00931708	-0.064
stock 7 Th	The Jordanian Pharmaceutical Manufacturing	15463905	0.338	1.777571189	0.075	
	8	National Cable & Wire Manufacturing	3738805	0.069	8.460932303	0.025
	9	Jordan Vegetable Oil Industries	1611284	0.136	8.383752337	0.0996
	10	The Jordan Cement Factories	18240577	0.099	4.544251204	-0.917
Boursa Kuwait	11	Gulf Cable and Electrical Industries Company	59975202	6.743	2.965724651	7.799
	12	Ras Al Khaimah Co. For White Cement Construction Materials	253174916	8.323	4.355009151	11.624
	13	Heavy Engineering Industries and Ship Building Co.	170272976	28.072	0.94893041	0.970
	14	National Industries Company	45141856	15.192	2.519580941	41.140
	15	KGL Logistics Company	40005680	6.739	3.434118055	6.539

Table 3: The Results of the First Secondary Assumption on each Studied Market

Market	R	R square	Adjusted R square	Std. error of the estimate	F	Sig.
Iraq stock exchange	0.301ª	0.091	-0.213	0.0973955	0.299	0.623 ^b
Amman stock exchange	0.656ª	0.431	0.241	0.3743773	2.271	0.229b
Boursa Kuwait	0.342ª	0.117	-0.178	17.2047681	0.397	0.574 ^b

Table 4: The Results of the Second Secondary Assumption on Each Studied Market

Market	R	R square	Adjusted <i>R</i> square	Std. error of the estimate	F	Sig.
Iraq stock exchange	0.566ª	0.320	0.094	0.0841990	1.414	0.320b
Amman stock exchange	0.335ª	0.112	-0.184	0.4676724	0.378	0.582b
Boursa Kuwait	0.070a	0.005	-0.327	18.2621328	0.015	0.911 ^b

4.1.2. Second Secondary Assumption Test

Assuming the risk and return factors are fixed, the results showed a statistical influence of the granted trade credit, in terms of turnover receivable accounts rate, on the enterprise profitability, which is expressed in terms of turnover property rights rate. Increasing the turnover receivable accounts rate increased the turnover property rights rate and vice versa. Table 4 lists the results of the second secondary assumption on the industrial firms for each studied market.

Table 4 indicates that the results of the second assumption, i.e., turnover receivable accounts rate on the enterprise profitability which is expressed in terms of turnover property rights rate, were opposite to the achieved results from the first assumption. The *R* square of trade credit in the Iraq stock exchange was the highest compared to the Amman stock exchange and the Boursa Kuwait stock exchange. However, the *R* square for the markets had insignificant values (Sig.). Therefore, it can be concluded that the second secondary assumption was incorrect.

4.1.3. Third Secondary Assumption Test

Assuming the risk and return factors are fixed, the results showed a statistical influence of trade credit in terms of the percentage of investment in accounts receivable to the total investment in assets on the enterprise profitability expressed in terms of turnover property rights rate. Increasing the percentage of investment in receivable accounts increased the turnover property rights rate and vice versa. Table 5 shows the results of the third secondary assumption on the industrial firms for each studied market.

The results showed that trade credit in terms of the percentage of investment in accounts receivable to the total investment in assets on the enterprise profitability, which is expressed in terms of turnover property rights rate, was the highest in the Iraq stock exchange. For the Iraq stock exchange, the *R* square value was 0.938, for the Amman stock exchange it was 0.200, and Boursa Kuwait stock exchange it was 0.089. Also, the influence of trade credit had significant values (Sig.), i.e., 0.018, with low Std. error of the estimate. Therefore, it can be concluded that the third secondary assumption was correct only in the Iraq stock exchange.

4.2. The Study Assumptions Test on The Studied Sample

In this section, the three assumptions were tested on the study sample, i.e., all selected firms in the three studied stock exchange markets; the results are shown in Table 6.

The results in Table 6 show that the second secondary assumption revealed a medium influence of trade credit, in terms of the percentage of investment in accounts receivable, on the enterprise profitability expressed in terms of turnover property rights rate. For the second secondary assumption, *R* square was 0.454, which means that trade credit had about 45% influence on the enterprise profitability. The rest, i.e., 55%, was caused by the risk and return factors. The results also showed that Sig. values were insignificant. The significance values (Sig.) were 0.089 which was slightly higher than the significance grade, i.e., 0.05. Therefore, it can be concluded that the three secondary assumptions were incorrect, while the zero assumption, i.e., trade credit has an insignificant influence on the enterprise profitability, was correct.

Table 5: The Results of the Third Secondary	Assumption on Each Studied Market
--	-----------------------------------

Market	R	R square	Adjusted R square	Std. error of the estimate	F	Sig.
Iraq stock exchange	0.938ª	0.880	0.840	0.0354008	21.970	0.018 ^b
Amman stock exchange	0.200a	0.040	-0.280	0.4861928	0.126	0.747 ^b
Boursa Kuwait	0.089ª	0.008	-0.323	18.2331874	0.024	0.886b

 Table 6: The Results of the Three Secondary Assumptions on All Studied Markets

Market	R	R square	Adjusted <i>R</i> square	Std. error of the estimate	F	Sig.
First assumption	0.185ª	0.034	-0.040	10.9976204	0.462	0.508 ^b
Second assumption	0.454ª	0.206	0.145	9.9707104	3.378	0.089b
Third assumption	0.181ª	0.033	-0.042	11.0075273	0.438	0.520b

5. Conclusion

The main goal of business enterprises is maximizing the wealth of shareholders. The share price is the simplest and easiest way to measure the maximization of the shareholders' wealth. Therefore, the enterprise and the financial manager have to make the necessary decisions and arrangements to maximize the share price in stock markets. To achieve this goal, many factors should be considered. Among these factors are return and risk.

The present work studies the influence of trade credit, in terms of receivable accounts, on the enterprise profitability, in terms of property rights. The main assumption of the work is, assuming the other factors are fixed, trade credit has a statistical influence on the enterprise profitability. The main assumption branches into three secondary assumptions as detailed in Section 3.2. (Research assumptions and modeling).

The study sample consisted of industrial firms listed on the Iraq, Jordan, and Kuwait stock exchanges respectively. Five firms per market were randomly selected under the condition of five-year activity. The total sample was 15 firms. The results showed that the first and second secondary assumptions were incorrect. As for the third assumption, the results showed that the influence of trade credit on the enterprise profitability in the Iraq stock exchange was the highest. The influence of trade credit on the enterprise profitability percentage in the Iraq stock exchange was 0.938, Amman stock exchange was 0.200, and Boursa Kuwait was 0.089. Therefore, the third assumption can be considered correct.

References

- Abdul Hameed, M. K., Hussein, N. K., Al Shammari, D. S., & Abdul Hameed, A. A. S. (2018). Using Swarm algorithm to build an efficient portfolio. *Journal of the University of Human Development*, 3(1), 221–235. https://doi.org/10.21928/juhd
- Abuhommous, & Ala'a Adden, A. (2011). The Impact of Offering Trade Credit on Firms' Profitability. *Journal of Corporate Accounting & Finance*, 28,(6), 29–40. https://doi.org/10.1002/jcaf.22298
- Ahmed, M. F. H. (2003). *The export credit guarantee in international trade*. Baghdad: The University of Baghdad.
- Al-Khedhat, M. A. A. (2015). The factors that affect on financial performance in the public shareholding industrial Jordanian companies as measured by return on assets and property rights for 2005–2011. Amman, Jordan: The Islamic University Economic and Management Studies.
- Al-Naimi, A. T. (2018). The nature of the activity and the market value of the entity: A comparative study in the Iraqi market and Amman Stock Exchange. Baghdad: University of Al-Ma'mun

- Al-Naimi, A. T., & Al-Kharshah, Y. K. (2007). Principles in financial management. Amman, Jordan: Dar Al Massira For Publishing, Printing & Distribution.
- Al Shammari, D. S. (2018). Build an efficient investment portfolio according to the usual methods and the swarm algorithm applied to study in the Iraq Stock Exchange. Salahdeen Province, Iraq: Tikrit University.
- Baveld, M. B. (2012). Impact of working capital management on the profitability of public listed firms in the Netherlands during the financial crisis. Enschede, Netherlands University of Twente.
- Belhadj, N. (2017). The impact of liquidity indicators and profitability on the financial leverage. Ouargla, Algeria: University of Ouargla and Rqlh- Algeria.
- Deustche Bundesbank (2012). The importance of trade credit for corporate financing in Germany: Evidence from financial statements statistics. https://www.bundesbank.de/resource/blob/622268/77e28dc611c6ca3064e80d8c1f0d34d1/mL/2012-10-trade-data.pdf
- Hamid, M., Ahmad, S., Haider, Z., & Rehman, S. (2018). Relationship between working capital management and profitability: A case study from textile sector of Pakistan. SSRN Electronic Journal, 3(2), 13–20. https://doi.org/10.2139/ ssrn.2907661
- Huang, C., & Wang, M. (2008). The effects of economic value-added and intellectual capital on the market value of firms: An empirical study. *International Journal of Management*, 25(4), 722–731. http://120.126.125.190/~td/ files/0020091130144325.pdf
- Imlau, S. I. (2017). The international trade credit channel: Implications for industry performance (Issue May). Madison, USA: University of Wisconsin - Madison.
- Khawla, A. (2016). The contribution of the financial analysis of the budget in the financial decision-making: The case of Sonelgaz Foundation - Biskra study. Algeria: University of Mohamed Khadhar - Biskra.
- Lazaridis, I., & Tryfonidis, D. (2006). The relationship between working capital management and profitability of listed companies in the Athens stock exchange. *Journal of Financial Management and Analysis*, 19(1). https://ssrn.com/abstract_id=931591
- Li, X. (2011). 4 Determinants of trade credit: A study of listed firms in the Netherlands (Master Thesis, University of Twente, Enschede, Netherlands). https://essay.utwente.nl/62672/
- Ngo, V. T., Tram, T. X. H., & Vu, B. T. (2020). The Impact of Debt on Corporate Profitability: Evidence from Vietnam. *Journal of Asian Finance, Economics, and Business*, 7(11), 835–842. https://doi.org/10.13106/jafeb.2020.vol7.no11.835
- Nory, R. S. (2018). *Measure company profitability using financial indices*. Al Diwaniya, Iraq: University of Al-Qadisiyah.
- Pandya, B. (2016). Impact of financial leverage on market value added: Empirical evidence from India. *Journal of*

- Entrepreneurship, Business, and Economics, 4(2), 40–58. http://scientificia.com/index.php/JEBE/article/view/42
- Pao, C., & Chou, J. (2014). Determinants of trade credit demand and supply: Evidence from firm-level panel data in Taiwan and China Chiao-Jui Pao. http://www.irabf.org/publication/IRABF%202014%20V01%206%20No%203_4%20paper2.pdf
- Phan, H. T., Hoang, T. N., Dinh, L. V., & Hoang, D. N. (2020). The determinants of listed commercial banks' profitability in
- Vietnam. Journal of Asian Finance, Economics, and Business, 7(11), 219–230. https://doi.org/10.13106/jafeb.2020.vol7.no11.219
- Rakkakdh, N. (2016). A standard study of factors that affect the profitability of commercial banks, state of Societe générale Algeria bank for the period (2004–2014). Algeria: Kasdi Merbah Ouargla University.
- Tang, Y. (2014). Trade credit and profitability in small and medium enterprises (Bachelor Thesis, The University of Twente, Netherlands). https://essay.utwente.nl/65357/1/Tang MB IBA.pdf