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Investigating the Relationship between Ownership Structure and Accounts Receivable Management in Iraq Stock Exchange

By

Mahdi Vakilian Aghouei
Department of Accounting, Master of Accounting, Imam Reza University, Mashhad, Iran
Email: mvakilian@imamreza.ac.ir

Mohammed Hasan Mohammed Aljari
Department of Accounting, Master of Accounting, Imam Reza University, Mashhad, Iran
Email: mh0051836@gmail.com

Abstract

The main objective of this study was to investigate the effect of ownership structure (institutional ownership, managerial ownership, and major ownership) on accounts receivable management. In this regard, three hypotheses are codified for the study. To test the hypotheses using the systematic deletion method, a sample formed of 35 firms was selected from the companies listed on Iraq Stock Exchange for 5 years (2015-2019). The study used multivariate regression models using combined data for the data analysis and to test the hypotheses. The results of the study showed that institutional ownership is in a positive and significant correlation with receivable accounts management; although managerial ownership is in a negative and significant correlation with it. Also, major ownership has no significant effect on receivable accounts management.

Keywords: Accounts receivable, Institutional ownership, Managerial ownership, Major ownership, Iraq Stock Exchange.

Introduction

Today, ownership structures are challenging and key issues in companies, especially those listed on the stock exchange for the stockholders of the companies and all employees and beneficiaries. This is because; the type of firm structure plays a key role in investment decisions.

Accounts receivable of firms are associated with the products and services received by the customers. It can be not only the main account for total assets but also a source of operational value in accounting transactions. Previous studies in the field of accounts receivable can be categorized into two groups. One group considers accounts receivable policies and tends to obtain an optimal value model for accounts receivable to achieve maximum profitability (Schiff & Lieber, 1974; Stanford, 1989; Liu et al., 2007). Another group analyzes the accounting risks caused by manipulations and diagnoses the collected items (Healy, 1985; Deangelo, 1986; Bowen et al., 1987).

The stability of the owners can be another underlying issue affecting accounts receivable management in joint stock companies. In those companies facing successive changes of managers and owners in a certain period, a different decision would be taken because of the different approach of every manager in the firm. As a result, there would be various ways to achieve accounts receivable management, and this can be very important to make fluctuations in the performance and irregular and declining financial functions. The firm ownership structure and its effect on the accounts receivable management can be an underlying issue affecting the incentives of managers to analyze the relevant aspects. Hence, it can be effective in the efficiency of companies. The lower the manageability of accounts receivable of the firm is, the lower the attractiveness of that firm would be for investment; unless the owner gets more returns. The management level of stock accounts receivable can also affect the decisions of investors to form an investment portfolio. In other words, logical investors demand more risk for the stock with fewer accounts receivable management. Hence, the expected return would be increased for these investors.

The receivable to total asset ratio differs depending on economic conditions in various countries. Receivables from an underlying factor in the total financial policies of firms. In the competitive market, firms sell products on credit, and hence, accounts receivable management can make value for the firm (Shin and Soenen, 1998). Accounts receivable can cause costs on the firm on one hand (because of the time value of money) and can increase the operating revenues on the other hand. Thus, this issue should be controlled by management. This study tends to investigate the correlation between ownership structure and accounts receivable.

Theoretical framework

Accounts receivable encompass two underlying consequences for the financial policy of firms. First, the finance required for credit the accounts receivable is considerable; second, the assets need frequent refunds because of being short-term. Therefore, accounts receivable refers to those created during the business course of the firm and could be inevitable in a competitive market. Hence, efficient management of accounts receivable has valuable implications for the companies (Shin and Soenen, 1998). On one hand, accounts receivable can be an additional cost for the firm and revenue can be increased by selling more. Therefore, there is a balance between the advantages and accounts receivable costs. In addition to the balance between advantages and accounts receivable costs, management of them is affected by conflict of representation between managers and owners (Krishnankutty & Jadiyappa, 2020). In a company where managers own a low percentage of stocks, there would be low motivation for efficient management of accounts receivable (Jensen & Meckling, 1976). Managers may act freer on policies of accounts receivable in this case because they tend to increase selling in the short term. However, they may cause high costs for the company and increase debts. In this field, it is important to investigate the focus of ownership on the management of accounts receivable in a company (Krishnankutty & Jadiyappa, 2020).

The value of accounts receivable can be divided into two parts financially: the cash cost of the company to supply the sold products, and the difference between cash costs and product selling.

Accounts receivable management can be one component of working capital management. In general, the main purpose of managers of companies is to increase their firm value. Management of accounts receivable can be achieved by the on-time collection of receivables and the not-burning of receivables (Shabahang, 1994).

Key principles for the management of accounts receivables shall be observed by the firm including accounts receivable duration, evaluating the ability of potential customers to pay using criteria including customer honesty, financial health, the collateral to be pledged, and the current economic conditions.

The philosophy of management of accounts receivable is using the flexibility of standard methods and accepted principles of accounting. However, various interpretations perceived from executive methods of an accounting standard can be another reason for the existence of accounts receivable management.

Over the years, detailed studies have been beginning in the field of ownership structure across the world. The studies have shown that non-concentrated stockholding has been less than expected. On the contrary, there is a high level of ownership concentration in the majority of countries (Badavar Nahandi and Zarei, 2010).

Investors can be an institution associated with big investors including banks, insurance companies, and investment companies. Managerial ownership can be defined as the percentage of stock held by internal managers of a company. Managerial stock is simply defined as some part of the firm stock, the voting right of which can put one or more board members. Managerial stock ownership is defined as the percentage of stock owned by company managers.

Literature review

Krishnankutty & Jadiyappa (2020) conducted a study under the title of "ownership structure and receivables management". They examined the impact of ownership structure on the receivables management of Indian corporate firms. The results obtained using a panel of 1,164 firms showed a negative relationship between the percentage of promoter holding and the receivables ratio. The results revealed that companies with concentrated and institutional ownership should have fewer receivables in terms of selling rates.

Kapopoulos & Lazaretou (2019) studied the effect of Corporate Ownership Structure on accounts receivable management using information from 175 Greek companies. They found that the concentrated ownership structure is in a positive correlation with the high profitability of the company. Also, less-scattered ownership is needed for high profitability.

Gill and Biger (2013) conducted a study under the title of "the impact of corporate governance on working capital management efficiency of American manufacturing firms". They investigated the impact of corporate governance on the working capital management efficiency in 180 American manufacturing companies for a period of 3 years (from 2009-2011). They measured corporate governance using indices including the board of directors size, the duality of the post of CEO, and CEO tenure. The evidence showed that some mechanisms of corporate governance play a key role in improving working capital management.

Shin-Ping & Tsung-Hsien (2009) studied the relationship between insider ownership (managerial) and institutional ownership in the accounts receivable management of companies listed on the Taiwan Stock Exchange from 1995 to 2003. The results showed an inverse “U-shaped” relationship between insider ownership and corporate performance. Government institutional ownership and incorporated companies' ownership are found to have a significant negative correlation with corporate performance.

Rahmani and Rezapoor (2010) conducted a study under the title of "The relationship between institutional ownership and stock accounts receivable management in Iran". The study investigated the relationship between institutional ownership level and concentration of institutional ownership with the management of stock accounts receivable. The study used two variables of level and ownership concentration to determine institutional ownership. This is because; the ownership level is an indicator for transactional unction or information efficiency. However, ownership concentration creates selective bias.

Eslami Bidgoli and Saranj (2008) conducted a study under the title of "Portfolio selection using three criteria: average return, the standard deviation of return, and accounts receivable management in Tehran Stock Exchange". The study integrated accounts receivable management in Markowitz's proposed model using two approaches filtering and limitation of accounts receivable management. The model tends to make investors make an optimized portfolio using three criteria of return, risk, and accounts receivable management. The population in this study consisted of 50 companies with the most transactions and listed on the stock exchange in the years 2002-2006.

Hypotheses

- Hypothesis 1: There is a significant correlation between institutional ownership and accounts receivable management.
- Hypothesis 2: there is a significant correlation between managerial ownership and accounts receivable management.
- Hypothesis 3: there is a significant correlation between major stockholders' ownership and accounts receivable management.

Methodology

This is applied research in terms of purpose, and a descriptive study in terms of procedure. The study has investigated the capability of each ownership structure including institutional, corporate, managerial, and foreign ownership on accounts receivable management of Iraq exchange listed companies.

The main objective of this study is to investigate the effect of ownership structure on the accounts receivable of companies listed on the Iraq stock exchange. Therefore, this is applied research in terms of purpose. Also, this is a correlative study in terms of method. This study tends to provide objective, real, and regular descriptions of the characteristics of a situation or subject.

Statistical population

The population in this study consisted of all companies listed in Iraq Stock Exchange in the years 2015-2019. After the systematic elimination of some of them, 35 companies were selected as a sample as Table 1 shows.

Table 1: *The limitations applied to the companies*

Description	Number
number of companies listed in the Iraq Stock Exchange by the end of 2019	129
(-) financial, investment, and intermediation companies	(58)
residual	71
(-) number of companies without information available	(36)
number of studied companies	35

Model and research variables

Dependent variable

Receivable Ratio: refers to the management of accounts receivable of the company, which has used accounts receivable/book value of the company's assets ratio in this study.

Independent variables

Independent variables in this study include institutional ownership, managerial ownership, and ownership concentration. Here, the symbols and measurement methods of the variables are presented.

INS- Refers to the percentage of shares held by institutional stockholders (institutional stockholders including investment companies, banks, insurance companies, and finance companies)

MGO- Refers to the total percentage of shares held by company managers (CEO and board members)

CNO- Refers to the total percentage of shares held by major stockholders (shareholders above 5%)

Control variables

SIZE

Refers to the size of the company measured based on the natural logarithm of the sum of assets.

Leverage

Refers to the debt-to-total asset ratio.

Growth

The growth of the net sale of the company, which is equal to sales in the year t on year t-1 divided by sales in year t-2.

Profitability

Refers to the ratio of net profit after tax to assets' book value.

Cash ratio

Refers to the ratio of cash plus short-term investment to assets' book value.

Board Independence

Refers to the ratio of independent board members number (irresponsible) to the whole board.

Market share

Refers to the market share of each company from divide net sales by total annual sales in the same industry.

Industry

Type of the industry in studied stock companies.

Results

The first step after facing statistical data can be classification, description, and analysis of the data for rapid purification of hidden information in the data. The descriptive results obtained from this study (mean, median, standard deviation, maximum, and minimum values) are presented in Table 2. The mean value of financial leverage is equal to 0.313, which shows the ability to pay the debt by the companies.

The insignificant difference between the mean value and median and the lack of dispersion of the variables shows that they have an almost normal distribution. It should be noted that in case of having more than 30 observations, the data have normal distribution based on the Central Limit Theorem (CLT). As there are more than 30 observations in this study, it could be found that the variables have a normal distribution. It should be mentioned that outlier observations have been arranged properly before data processing using Barker's approach (2014). Instead of eliminating the outlier data, the data are edited in this approach, and percentile values of 1 and 99 are replaced.

Table 2.

Variable type	Variable	Mean	Median	SD	Min	Max
Dependent	accounts receivable management	0.300	0.225	0.267	0.005	0.919
Independent	institutional shareholders	0.463	0.491	0.148	0.166	0.689
	managerial shareholders	0.698	0.726	0.221	0.288	0.979
	major shareholders	0.508	0.566	0.336	0.096	0.974
	firm size	22.544	22.562	1.214	20.624	25.578
	leverage	0.313	0.274	0.251	0.018	0.852
	sales growth	0.181	0.057	0.683	-0.704	2.288
	net profit	0.006	0.017	0.173	-0.460	0.267
	cash	0.548	0.585	0.213	0.105	0.887
	board independence	0.918	1	0.100	0.714	1
	market share	0.112	0.012	0.215	0.000	0.870
Total observations		210 year-company				

The results obtained from F-Limer, Hausman, heterogeneity of variance, and autocorrelation test have been presented in Table 3.

Table 3.

Test	year-company No	Description	Coefficient	Sig	Result
F test	210	H0: pooling H1: fixed-effect	4.08	(0.00)	fixed-effect
Hausman	210	H0: random-effect H1: fixed-effect	19.31	(0.04)	fixed-effect
Breusch–Pagan test	210	H0: pooling H1: random-effect	32.98	(0.00)	random-effect
heterogeneity of variance	210	H0: no heterogeneity of variance H1: no heterogeneity of variance	13.00	(0.00)	heterogeneity of variance
autocorrelation test	210	H0: no autocorrelation H1: autocorrelation	32.50	(0.00)	autocorrelation

The results obtained from the regression model are presented in Table 4.

Table 4.

Variable Title	Variable Symbol	Coefficients	Std. E	t value	p-value
institutional ownership	INS	0.205	0.064	3.20	0.001
managerial ownership	MGO	-0.531	0.064	-8.34	0.000
Major (concentrated) ownership	CNO	0.08	0.017	0.50	0.619
firm size	SIZE	0.050	0.008	6.06	0.000
leverage	LEV	0.083	0.049	1.72	0.085
sale growth	GROWTH	-0.000	0.000	-0.61	0.544
net profit	profitability	-0.017	0.036	-0.49	0.622
cash	cash ratio	0.105	0.032	3.30	0.001
board independence	board independence	-0.120	0.094	-1.28	0.201
market share	market share	-0.279	0.044	-6.34	0.000
industry	IND	-0.017	0.011	-1.56	0.118
intercept	-con	-0.467	0.209	-2.23	0.025
F value (prob)	(0.000)1056.39		adj. determination coefficient		0.391
			Number of observations		175

According to the results, it could be found that the p-value of institutional ownership is equal to 0.001, and its coefficient is equal to 0.205. Hence, it could be revealed that there was a significant and positive correlation between institutional ownership and accounts receivable management. In other words, a high ratio of institutional ownership has increased the ratio of accounts receivable to total assets. Therefore, hypothesis 1 has been accepted at the level of 95%. The adjusted determination coefficient showed that 39% of variances in accounts receivable management were determined by independent and control variables.

Also, a p-value of managerial ownership was obtained at 0.000, and the coefficient was obtained as -0.531. Hence, it could be found that there is a significant and negative correlation between managerial; ownership and accounts receivable management. In other words, an increase in managerial ownership accounts has decreased the accounts receivable to total asset ratio. Therefore, hypothesis 2 has been accepted at the level of 95%.

The p-value of major ownership was obtained at 0.619. Hence, it could be found that there is no significant correlation between major ownership and accounts receivable management. Therefore, hypothesis 3 has been rejected at the level of 95%.

Conclusion and suggestions

Before the advent of large companies and in the late 18th century, owners have been the managers of companies. However, the separation of ownership from management, the advent of the stock exchange, and professional managers' groups resulted in the creation of a new approach under the title of the stock company as a social phenomenon. This issue resulted in a conflict of interest between managers and owners.

Investigating the effect of stability of shareholders and owners as one of the relevant issues of corporate governance on the performance of management, and also the effect of that on the financial performance of companies have been the subjects studied in recent works. The findings of the studies have revealed the positive effect on efficient management performance control, and finally enhancement of the financial performance of companies.

The results obtained from this study showed that institutional ownership is in a positive and significant correlation with accounts receivable management; although managerial ownership is in a negative and significant correlation with it. Also, major ownership showed no significant effect on accounts receivable management.

It would be better for further studies to investigate the relationship of other types of ownership structures including family ownership, government ownership, legal and real ownership with accounts receivable ratio.

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