

Stock Liquidity, Corporate Governance and Dividend Payout: Evidence From Tehran Stock Exchange

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Abstract: The main goal of this article is the impact of Corporate Governance and Stock Liquidity on the Dividend payout. In order to test the hypotheses, a sample of companies accepted in the Tehran Stock Exchange was selected between 2016 and 2021, which was analyzed using R software. The research method is multivariate regression using panel data. According to the research findings, there is not a meaningful relationship between Corporate Governance, Stock Liquidity and Dividend payout. Companies finance through debt regardless of the stock liquidity, therefore, stock liquidity does not have a decisive role in financing. Better corporate governance mechanisms apply more supervision, so that these mechanisms prevent the opportunistic behavior of managers and preventing them from hiding and manipulating information. By testing the mutual effect of stock liquidity and the quality of corporate governance, a significant relationship was found with the dividend payout of companies accepted in the Tehran Stock Exchange. The study tries to contribute to the current literature of corporate governance and stock liquidity by providing new evidence on the causal impacts of stock liquidity and corporate governance quality on dividend payout. Also, this study contributes to the literature on stock liquidity, corporate governance quality and dividend payout by exploring the mechanism of corporate governance quality and dividend payout from equity financing and internal financing.

Keywords: stock liquidity; corporate governance; dividend payout

1. Introduction

In recent years, following the financial scandals and crisis of a number of large companies like Enron and WorldCom, public trust in financial reporting has decreased and the need to implement mechanisms to improve financial reporting has become more tangible. These conditions have led to a greater demand for the transparency in financial disclosure and reporting of companies. In the meantime, the corporate management system has been given special attention as one of the efficient tools to respond to this demand [1]. The Organization for Economic Cooperation and Development defines the corporate governance system as the relationships between management, board members, shareholders and other stakeholders, and provides a structure through which the company's goals are set and the methods of achieving them to set goals and monitor performance. The basic concept of the corporate governance system is derived from the term of "GUBERNUR", which means to conduct, which is usually used to conduct a ship, and it implies that this concept focuses on conducting rather than controlling. Examining the theoretical discussions related to this concept indicates that there is no basic agreement regarding this issue and sometimes the definitions implemented by institutions or

individuals have differences with each other; In such a way that some from a limited perspective define corporate governance only in the relationship between the company and shareholders, and in a wider range, this concept is defined as a network of relationships that not only a company and its owners (shareholders), but also all stakeholders. It includes employees, customers, people, society, etc. [2].

Corporate governance is not only for the board members, but it affects all members of an organization. Corporate governance refers to those actions of companies that create a mechanism of control that ensure that decision-making power is not only abused, but is used with care and accountability to meet the expectations of shareholders. Proper management provides timely reporting and disclosure by companies. The purpose of corporate governance system is to ensure the opportunistic behavior non-occurrence, which is realized by lessening agency problems and potential asymmetric information between the stakeholders and agent. Reducing such problems will increase the willingness of shareholders to trade in these markets and increasing the stock liquidity in the market. The quantity, quality and timeliness of the information disclosed by company's managers is one of the most important decision-making tools for investors [3]. When the information is presented to the public through company's managers, this information is reviewed and analyzed by traders, investors, and analysts, and based on this, they make decisions regarding to the buying and selling of company stock. The way that investors deal with this information and their decisions shape the volume of demand and supply or, in a way, the depth of the market and the offered prices for buying and selling. In other words, a coherent and structured corporate governance system has an important role in conducting the decisions of investors and capital market actors through improving the quality level of information and transparency, and creates capital markets with high liquidity and depth. The lack of timely and correct disclosure leads to increasing in the cost of moral hazard and adverse selection as elements resulting from information asymmetry and, finally, increasing in the exchange expense. Increasing in the exchange expense leads to decreasing in stock prices, a market gap, and finally, the exit of some investors from the market cycle. The greater the information asymmetry in the market, the more decreasing volume of transactions. Recent studies show that reducing information asymmetry will lead to reducing the cost of moral hazard and adverse selection and increasing market liquidity. Based on these findings, it can be said that market liquidity has a positive relationship with the quality of corporate governance [4]. Liquidity is defined as the capability of the market in absorbing extensive volume of transactions without causing extreme price fluctuations. One of the main characteristics of liquid markets (with high liquidity) is the small gap between the proposed buying and selling prices; This means that buying and selling orders of capital market actors are executed in the shortest possible time and at the most suitable price.

Existing studies survey the liquidity - leverage relationship and the corporate governance quality-leverage relationship independently. Good corporate governance is understood to promote stock liquidity by promoting a firm's information transparency [5]. Besides that, increased stock liquidity leads to using small debt and large stock in the capital structure for reducing the cost of equity. These literatures suggest that good corporate governance promotes stock liquidity so that promoted stock liquidity lessens leverage ultimately. For companies with more stock liquidity, the effect of corporate governance on leverage can be more inverse. These ideas show the necessity of investigating how the liquidity of stocks in the market and corporate governance quality in the internal governance system affect leverage.

There has been a significant increase in the study of stock liquidity in recent years. Liquidity has an important role in the price discovery process and is a measure of market efficiency, especially in terms of information. Liquidity is an important issue in financial markets. A specified level of liquidity is necessary for securities trading in a timely manner without any reduction in price in the desired volume. The impress of the liquidity factor in stock pricing is important, because investors pay attention to whether there is a suitable market for investing. On the other hand, corporate governance has become very famous in the world in the last three. Corporate governance includes mechanisms by which managers' performance is monitored; because shareholders leave the authority to make decisions about their capital to managers, so they need mechanisms to ensure that managers will meet their rights [6]. Although companies are trying to increase the wealth and welfare of societies, there should be a supervision of their governance so that these companies do not abuse their position. The final goal of the management system is not only to lessen the agency problem and line up the

interests of the employer with the agent, but also to provide the interests of all interested groups in companies. Also, the influence of dividend payout on the investment intentions of companies is one of the basic subjects in finance. Companies with high leverage may face liquidity problems in financing projects with positive net present value, and this affects the company's ability to finance growth opportunities. Under such circumstances, high leverage can create the challenge of underinvestment [7]. The main issue in this article, is to examine the influence of stock liquidity and corporate governance on the dividend payout of companies listed on the Tehran Stock Exchange.

This article helps to current studies in the following ways. First, it contributes to the literature of corporate governance and dividend payout by providing new evidence on the causal influences of corporate governance on dividend payout. Second, this study contributes to the literature on corporate governance quality and stock liquidity by searching the corporate governance mechanism quality and dividend payout from equity financing and internal financing. Third, this article not only search the effect of dividend payout on improved corporate governance quality but also corporate financial performance. This article also estimates values of corporate governance needs to access in order to corporate leverage to be useful for financial performance.

2. Literature Review and Hypothesis Development

The quality of corporate governance is taken into consideration of the whole world due to the crisis in the market [8]. Basically, corporate governance is a set of institutional and market-based mechanisms that guide the self-interested controller of a firm to make decisions that maximize the company's shareholder value [9].

Stock liquidity and leverage are two various types of decision making. Stock liquidity—a major concern for shareholders who trade stocks and those who build, manage, or regulate trading infrastructure—is created by market participants. The leverage decision - one of the most important decisions in corporate finance - is made by companies. These two types of decisions have different determinants and therefore have different theoretical bases. Pecking order and static trade off theories have been used to illustrate the leverage decision and forecast a similar relation between leverage and stock liquidity [10].

Agency theory analyzes the stockholders (i.e. owners) and managers' relationship and claims that agency problems arise from conflicting interests between them [11]. To control such agency conflicts, internal and external mechanisms are necessary within the framework of a company. Leverage (external mechanism) and corporate governance (internal mechanism) can replace each other in reducing agency problems. Regarding the disciplinary role of leverage, mechanisms of corporate governance provide oversight of managers to protect stockholders [12]. Good governance tools mean that the interests of stockholders and the interests of managers are better aligned, resulting in increased stock value and reduced agency costs [13]. However, companies with weak corporate governance suffer from more intense agency conflicts, leading to higher agency costs [14].

Corporate governance provides supervisory mechanisms over managers. Better-governed companies provide more and better quality information to the market in a timely manner, which promotes operational and financial transparency of companies. For example, Beeks et al. show that better-off firms are priced more efficiently (i.e., news is earlier priced) than poorer ones, and can signal their quality by being more conservative about reporting good news [15]. Ali et al. reported that better corporate governance can prevent the concealment and distortion of information by opportunistic managers. More and better information disclosure to the market has the effect of reducing information asymmetry among insiders (i.e. managers) and outside investors, as well as between outside investors. This reduction in information asymmetry increases the liquidity of companies' stocks and reduces the company's cost of capital, resulting in lower leverage [16].

Bouqalieh conducted a study with the aim of showing the effect of corporate governance principles on financial performance in Jordanian family companies. The studied population were industrial companies admitted to the Amman Stock Exchange in the period (2014–2018). Corporate governance was measured based on: (the size of the company's board of directors, the separation of the positions of the chairman of the board and the CHIEF EXECUTIVE OFFICER, the independence of the board members and the percentage of ownership of major shareholders), while financial performance was measured. Leverage, company size and financial ratios (profitability and liquidity) were used as adjusting variables. The studied sample included 34family industrial

companies accepted in Amman Stock Exchange out of 51 companies with a percentage (66.6%) of all industrial companies. The multiple regression analysis method was used to determine the effect of independent variables on the dependent variable, in addition to measuring the interpretation of the independent variables on the change in the dependent variable. The results of the research illustrated that the implementation of family-business governance (size of the board of directors, separation of the positions of the chairman of the board of directors and the CHIEF EXECUTIVE OFFICER, the independence of the board members is statistically significant. Directors and the percentage of ownership of major shareholders) on the profitability ratio and liquidity ratio of among the dimensions of financial performance. The variables of corporate governance in this study indicated that 81.4% of family businesses in Jordan use the principles of corporate governance and there is a statistically significant effect of moderating variables (firm size and leverage) on the ratio of profitability and liquidity in family businesses.

Sarwar et al. studied the effect of CG on the financial performance of 7 Thai banks for the period 2009 to 2018 and also focused on the relationship between corporate governance, leverage, financial performance and CSR as a mediating variable. Financial performance was measured through three ratios. The relationship between independent variables and dependent variables was confirmed through CSR as a mediating variable. Two-stage least square and ordinary least square were used to determine the relationship between variables. Few of their independent variables had endogeneity, so in order to have stable results, they used the two-stage least squares method instead of ordinary least squares. This study also indicates the hidden importance of many relationships.

Using a sample of non-financial listed companies in China from 2000 to 2018, Zhou & Chen investigated the ways in which the quality of corporate governance influence companies' financial leverage. Empirical results show that improving the quality of corporate governance has a strong and negative effect on financial leverage for the subsample and full sample based on scale, industry, ownership, etc. This negative influence is mediated by equity and internal financing of company. Also, in accordance with the corporate performance, they indicate that dividend payout significantly lessens financial performance, especially during downturns of economic, and can be compensated by improving the quality of corporate governance.

Ho et al. in an article investigate the influence of liquidity on the SOA of corporate leverage. Using data of 35 countries during 1996 to 2016, they found that firms with high liquidity had significantly faster Speed Of Adjustment than firms with less liquidity. Also, they found that the positive impact of liquidity on Speed Of Adjustment exists only for overleveraged companies and that this effect is moderated in bankruptcy countries. They also find that the positive liquidity- Speed Of Adjustment relationship is less (more) pronounced for firms in strong (weak) institutional environments.

Juliana & Thayogo in a paper studied the relationship between leverage, corporate governance and stock liquidity in Indonesia. A sample of 165 Indonesian companies listed in 2006-2016 is used. The results of the study confirm that increasing corporate governance and stock liquidity reduce the applying of leverage. This suggests that stock liquidity and corporate governance can reduce the agency cost and use of debt. The relationship between corporate governance and stock liquidity indicates that corporate governance significantly impacts on the leverage only when the liquidated firm is liquid. However, there are different results between different indicators of corporate governance quality.

Nadarajah et al. examines the impact of corporate governance and stock liquidity on the firm's leverage decision in the order-based stock trading system and Australia's less stringent governance environment. They found a negative liquidity- leverage relationship, confirming previous research findings that companies with more liquid equity. They have significantly less leverage. They also found a significant and negative relationship between leverage and CGQ and, indicating that companies with high corporate governance quality significantly reduce leverage. In a more detailed analysis, they found a significant negative corporate governance quality - leverage relationship exists only for companies with upper stock liquidity and not for low stock liquidity firms.

Striwe in a paper examines an important issue of corporate governance: how advisor structure affects the REITs leverage. Advisors are hoped to follow personal goals such as increasing their rewards and personal assets. If these advisors' personal goals are not related with maximization of stockholder wealth, agency

problems may occur. Considering how the capital structure changes in relation to the consultant structure may define such an agency problem.

Ali et al. provide the first strong document of the determinants of stock liquidity in Australia by using the CGQ Index. They hypothesize that Corporate Governance Quality affects stock liquidity since effective governance reduces information asymmetry between outsiders and insiders like as between outsiders by improving a firm's information transparency. In accordance with the agency theory, this article finds a positive relationship between stock liquidity and Corporate Governance Quality, indicating that good-governed companies have higher levels of stock liquidity.

Boorboor Hossein Beki and Eskandari Chichklou, in a research entitled the study of the relationship between Financial Leverage and Corporate Governance in companies of the stock exchange, investigated corporate governance and the ratio of Financial Leverage in companies accepted to the stock exchange. The statistical population of this study included 20 companies admitted to the stock exchange between the years 2017 to 2018. In the analysis of information and data using the Pearson correlation coefficient method and the research software, the corporate governance index as an independent variable with five elements (including the percentage of ownership by institutional investors, the percentage of ownership by major stockholders, the percentage of ownership by controlling stockholders, the separation of the role of the CHIEF EXECUTIVE OFFICER from the chairman of the board and the percentage of non-executive members of the board of directors) were measured and Financial Leverage was considered as a dependent variable. In the obtained results, it was found that there is no significant relationship between any of the five independent variables that make up the corporate governance members and the dividend payout ratio.

Yaseen & Al-Amarnah in a study, examine the relationship between the use of debt financing and corporate governance. Institutional funds have a significant negative effect on leverage, which indicates that the degree of financial leverage decreases with the increase in the monitoring power of institutional funds and shares. While the assets of large owners have a positive and significant relationship with the leverage. They offer several explanations by indicating that entrenched managers have better access to debt markets and consequently more debt financing, perhaps as a result of their conservative investment method.

Lipson & Mortal investigate the relationship between capital structure and stock market liquidity. They show that companies with more liquidity are less leveraged and prefer financing through equity when increasing capital. For instance, after sorting companies into liquidity and then into size, the average ratio of debt-to-asset in liquid companies is about 38%, but the average ratio of low liquidity is 55%.

Guney et al. in a research entitled "International Evidence on the Non-Linear Effect of Leverage on Company Cash Deposits" they examined the impact of Financial Leverage on the cash retention level. This article examines the cash retention behavior of companies in Germany, France, Japan, the United Kingdom, and the United States. Using data for 4069 companies during the period 1996 to 2000. The research results indicated that there is a positive relationship between cash balance and high Financial Leverage levels.

According to the above explanations, the following hypotheses were formulated:

Hypothesis 1- There is a significant relationship between the stock liquidity and the dividend payout of companies listed on the Tehran Stock Exchange.

Hypothesis 2- There is a significant relationship between the quality of corporate governance and the dividend payout of companies listed on the Tehran Stock Exchange.

Hypothesis 3- There is a significant relationship between the mutual effect of stock liquidity and the quality of corporate governance with the dividend payout of companies listed on the Tehran Stock Exchange.

3. Research methodology

In terms of nature and content, the method of this research is of the correlation type, which analyzes the correlation relationship by using data extracted from the financial statements of companies listed on the Tehran Stock Exchange, and it will be done in the framework of inductive-inductive reasoning. The reason for using the correlation method is to discover correlation relationships between variables. Correlation research is one of the types of descriptive research. In data analysis, researcher will first test the correlation between research variables

and if there is correlation between research variables, he estimates multiple regression models. On the other hand, the current research is retrospective (semi-experimental) that is, based on the analysis of past and historical information (financial statements of companies). Also, this research is a library-analytical study and is based on panel data analysis. In short, the present research is considered to be correlational in terms of practical purpose and descriptive method and in terms of nature and content.

3.1. Hypothesis Testing Model

To test the first hypothesis, the following statistical model is applied:

$$\text{Div}_{i,t} = \beta_0 + \beta_1 \text{Sliq}_{i,t} + \beta_2 \text{Size}_{i,t} + \beta_3 \text{MTB}_{i,t} + \beta_4 \text{ROA}_{i,t} + \varepsilon_{i,t}$$

To test the second hypothesis, the following statistical model is applied:

$$\text{Div}_{i,t} = \beta_0 + \beta_1 \text{CGQ}_{i,t} + \beta_2 \text{Size}_{i,t} + \beta_3 \text{MTB}_{i,t} + \beta_4 \text{ROA}_{i,t} + \varepsilon_{i,t}$$

To test the third hypothesis, the following statistical model is applied:

$$\text{Div}_{i,t} = \beta_0 + \beta_1 \text{CGQ}_{i,t} + \beta_2 \text{Sliq}_{i,t} + \beta_3 \text{CGQ}_{i,t} * \text{Sliq}_{i,t} + \beta_4 \text{Size}_{i,t} + \beta_5 \text{MTB}_{i,t} + \beta_6 \text{ROA}_{i,t} + \varepsilon_{i,t}$$

Where:

$\text{Div}_{i,t}$ = dividend payout of company i at time t

$\text{Sliq}_{i,t}$ = stock liquidity of company i at time t

$\text{CGQ}_{i,t}$ = quality of corporate governance of company i at time t

$\text{SIZE}_{i,t}$ = size of company i at time t

$\text{MTB}_{i,t}$ = market value to book value of shares of company i at time t

$\text{ROA}_{i,t}$ = return on assets of company i at time t

3.2. Study Variables

Liquidity of shares: based on the research of Nadarajah et al., Amihud's liquidity ratio is used to calculate this variable.

$$\text{Amihud}_{i,t} = \frac{1}{D_{i,t}} \left(\sum \frac{|R_{i,d,t}|}{\text{VOLD}_{i,d,t}} \right)$$

$\text{Amihud}_{i,t}$ is the liquidity ratio of shares, D is the number of trading days of company i's shares in year t, R is the return of company i in year t, and VOLD is the volume of company i's transactions in year t.

3.2.1. Quality of Corporate Governance

Regarding the full disclosure of corporate governance indicators by companies listed on the Tehran Stock Exchange, in this research, first, in accordance with the research of Durnev & Kim, Brown & Caylor, Ariff et al. and Waweru, a checklist consisting of 10 components related to corporate governance that is compatible with Iran's reporting environment was prepared. Then, in order to operationalize the quality index of corporate governance, the method of coding and scoring was used. Based on this method, a score of zero or one (according to their operational definition) is assigned to each of the components of corporate governance, and by summing these scores, the score of corporate governance is calculated for each company in each year. So that a higher score for this index indicates a more efficient corporate governance and a lower score for this index indicates a weaker corporate governance. The components of corporate governance and their operational definition are as described in Table 1. Based on the quality components of corporate governance, if all the options are present in the company and each component is allocated 1 point, the total score will be equal to 10, which indicates that the corporate governance is at a high level in terms of quality and efficiency, and the higher this score (meaning closer to 10), the closer to zero for quality of corporate governance, the worse situation for the quality of corporate governance [17].

Table 1. Components of corporate governance.

No.	Name of the component	Operational definition
1	Use of non-executive members in the board of directors	If the ratio of non-employee members to total members is greater than the average ratio calculated for all companies, the number is one and otherwise the number is zero.
2	Separation of the role of the CHIEF EXECUTIVE OFFICER from the chairman of the board of directors	Non-separation of the role of the managing director from the chairman of the board of directors, the number is zero and otherwise the number is one.
3	CHIEF EXECUTIVE OFFICER stability	Change of the CHIEF EXECUTIVE OFFICER of the company in the last two years, the number is zero and otherwise the number is one.
4	Use of accounting and financial experts	Non-use of accounting and financial expert in the board of directors, number zero and otherwise number one.
5	Irresponsibility of the chairman of the board of directors	The responsibility of the chairman of the board of directors is zero, otherwise it is one.
6	Audit Committee	Absence of an audit committee consisting of non-executive members of the board of directors in the company, the number is zero and otherwise the number is one.
7	The number of board meetings	Failure to mention the number of board meetings in the company's annual report, the number is zero and otherwise the number is one.
8	The existence of shareholders with the right to control	The absence of shareholders with the right to control, the number is zero, otherwise the number is one.
9	Concentration of ownership	If the percentage of free floating shares of the company is greater than the average free floating shares of all companies, the number is zero and otherwise the number is one.
10	Ownership structure	Failure to mention the ownership structure in the company's annual report, the number is zero and otherwise the number is one.

3.2.2. Dividend Payout

The ratio of dividends to earnings per share

3.2.3. Control variables

Size: The size of the company is calculated through the natural logarithm of the total assets of the company.

MTB: is the ratio of the market value to the book value of the shares. This variable is obtained by dividing the market value of equity by the book value of the company's equity. (The market value of equity is the product of the share price at the end of the period and the number of shares at the end of the period). It is expected that with the increase of this control variable, the cost of common stock capital will also increase.

ROA: The rate of return on assets is calculated by dividing the operating profit by the total assets of the company.

3.3. Society and Statistical Sample

The statistical population of this research is the manufacturing companies listed on the Tehran Stock Exchange during the period from 2016 to 2021, in which 2016 is considered as the base year, and the number of members of this population is 523 companies, and the sampling method is the screening and elimination method. 111 companies in Tehran Stock Exchange were selected as sample companies. Due to the large size of

the statistical population and some inconsistencies between the members of the population, the companies that have the following characteristics in the period from 2016 to 2021 have been considered as available samples:

(1) During the studied years of the research, 2016 to 2021, their trading symbol has not been removed from the stock market board (continuous and stable activity in the capital market).

(2) They have not changed the financial year during the years studied by the research.

(3) Do not have a trading gap during the years studied by the research.

(4) The required financial information, especially the footnotes of the financial statements, should be available.

(5) It should not be part of financial companies, investment, banks, insurance and funds.

The information needed for the research has been collected from different sources according to their type. In this research, data collection will be done in two stages. In the first stage, to compile the theoretical foundations of the research using the library method, and in the second stage, to collect the desired data to test the hypotheses and fulfilling the goals, and finally to answer the questions and advance this research according to the developed models, the stock market's monthly newsletters as well as the audited financial statements of the companies' accepted in the Tehran Stock Exchange and Rahavard Novin software was used.

4. Results

4.1. Descriptive Statistics

The following Table 2 indicates the results of the descriptive statistics of the research.

Table 2. Descriptive statistics of research variables.

	mean	median	standard deviation	min	max
Size	13.999	15.775	2.373	10.320	19.965
MTB	2.246	1.977	3.038	-27.387	19.729
ROA	0.128	0.110	0.130	-0.353	0.636
Div	0.352	0.415	0.216	0.123	0.751
CGQ	4.638	5	1.519	0	9
Sliq	0.000	0.002	0.044	<0.001	0.0317

4.2. Inferential Statistics

Due to the existence of heterogeneity of variance, in order to estimate the coefficients of the model related to the first hypothesis of the research, the generalized panel model with integrated effects should be used. The results are presented in Table 3.

Table 3. Results of the generalized panel model with pooled effects.

Variable	Coefficient	The standard error	t statistic	p-value
(Intercept)	1.128	0.421	3.69	<0.001
Sliq	0.015	0.0122	0.28	0.662
Size	-0.161	0.0135	-1.24	0.068
MTB	-0.031	0.0141	-0.23	0.542
ROA	-0.451	0.0514	-8.32	<0.001

According to p_ value of the stock liquidity (Sliq) variable is more than the error level of 5%, so it is not significant, that is, there is no relationship between stock liquidity and dividend payout of companies listed on the Tehran Stock Exchange. As a result, the first hypothesis is rejected.

The results of Breusch–Pagan test indicated that homogeneity of variance is not established. Due to the lack of establishment of the underlying hypotheses, in order to estimate the coefficients of the model related to the second hypothesis, a generalized panel model with integrated effects should be used, and the results are as follows.

Table 4. Results of the generalized panel model with pooled effects.

Variable	Coefficient	The standard error	t statistic	p-value
(Intercept)	1.138	0.224	5.21	<0.001
CGQ	-0.025	0.028	-1.11	0.522
Size	-0.012	0.087	-1.62	0.164
MTB	-0.025	0.021	-1.38	0.894
ROA	-0.482	0.0531	-8.59	<0.001

According to Table 4, p_value of the variable of corporate governance quality (CGQ) is greater than the error level of 5%, so it is not significant, that is, there is no significant relationship between the quality of corporate governance and the dividend payout of companies listed on the Tehran Stock Exchange. As a result, the second hypothesis is rejected.

The results of Breusch–Pagan test indicated that homogeneity of variance is not established. Due to the lack of establishment of the underlying hypotheses, in order to estimate the coefficients of the model related to the third hypothesis, a generalized panel model with integrated effects should be used, and the results are as follows.

Table 5. Results of the generalized panel model with pooled effects.

Variable	Coefficient	The standard error	t statistic	p-value
(Intercept)	1.135	0.215	4.79	<0.001
Sliq	0.082	0.032	0.26	0.421
CGQ	-0.093	0.039	-0.59	0.716
Size	-0.061	0.018	-1.78	0.162
MTB	-0.043	0.016	-2.11	0.006
ROA	-0.451	0.059	-7.87	<0.001
Sliq*CGQ	-0.052	0.091	-0.09	0.694

According to Table 5, p_value of the variable X the mutual effect of stock liquidity and corporate governance quality (Sliq*CGQ) is less than the error level of 5%, so it is significant. Therefore, there is a significant relationship between the mutual effect of stock liquidity and the quality of corporate governance with the dividend payout of companies listed on the Tehran Stock Exchange. As a result, the third hypothesis is accepted.

5. Conclusions and suggestions

In the first hypothesis of the research, the relationship between stock liquidity and dividend payout was investigated. According to the results of the F-Limer and Hausman test, this hypothesis has a panel method and fixed effects. Due to the non-establishment of some classical assumptions of regression, the generalized panel model with integrated effects was used. The significance level of the t statistic of the regression model of this hypothesis is more than 5%, which indicates that there is no significant relationship between the independent variable (stock liquidity) and the dependent variable (dividend payout). These results are contrary to the research of Guney et al., Lipson and Mortal, and Nadarajah et al. Leverage can be a mechanism to overcome

overinvestment, based on agency theory, managers tend to increase the firm's index, even if they decrease the shareholders' wealth. If the freed cash flows are not available, the managers will have to accept weak projects in order to reach this goal, and this limitation will be intensified by financing from debts. Following the use of debt, the manager must pay the principal and interest of these debts with cash that could be used in weak investment projects. According to the relationship between stock liquidity and financing decisions, and based on theoretical principles, it was expected that there would be a significant relationship between stock liquidity and dividend payout, however, in this research, according to the information available in Tehran Stock Exchange, It was significantly violated. In other words, companies finance through debt regardless of the liquidity of the shares, and the liquidity of the shares is not an element that has a decisive role in the way of financing.

The analysis of the causes of the difference in the results of this hypothesis can be due to the following reasons:

(1) It is possible that since Iran's stock market is in the category of emerging markets, the liquidity of stocks has no effect on dividend payout. While this has not happened in developed markets.

(2) It is possible that the efficiency rating of Iran's capital market has caused such a thing to happen.

(3) The presence of other variables that could not be controlled by the researcher or were unknown to the researcher and affected the results of the research.

(4) The use of different criteria for liquidity as well as different analysis methods may give different results with existing theories in the field of liquidity.

In the second hypothesis of the research, the effect of the quality of corporate governance on the dividend payout of the company was investigated. According to the results of the Limer and Hausman test, this hypothesis is a type of panel method and fixed effects. Due to the non-establishment of some classical assumptions of regression, the generalized panel model with integrated effects was used. The significance level of the t statistic of the regression model of this hypothesis is more than 5%, which indicates that there is no significant relationship between the independent variable (the quality of corporate governance) and the dependent variable (dividend payout). These results are in accordance with the research of Boorboor Hossein Beki & Eskandari Chichklou and against with the research of Yassin and Al-Amaraneh, Striwe, Nadarajah et al. Better governance reduces the need and dependence of companies on debt financing during the time when they want to improve the level of stock liquidity with qualitative information disclosure in the market. More disclosure reduces information asymmetry between management and traders. Since better governance mechanisms apply more supervision, they prevent the opportunistic behavior of managers and prevent managers from hiding and distorting information [18, 19]. This will improve the company's financial and operational transparency and reduce asymmetric information inside and outside the company. Milgram argues that companies with better governance mechanisms have more financial and operational disclosure and transparency, which increases the liquidity of these companies' stocks. This increase in the company's stock liquidity reduces the cost of shares and leads to a reduction in the use of debt in the capital structure [20–27]. In this study, ten components were used to measure the quality of corporate governance, which may lead to the rejection of the second hypothesis of the research. Also, in this research, some companies, including investment companies, banks, holding companies, etc., were removed from the list of sample companies. Which may cause the second hypothesis of the research to be rejected. Regarding the control variables of the rate of return on assets, its significance level is less than 5% and its coefficient has a negative value, it can be said that with an increase of one unit in the variables of the rate of return on assets, the dividend payout of the company is about 0/4999 decreases.

In the third hypothesis of the research, the mutual effect of stock liquidity and the quality of corporate governance on the dividend payout of the company was discussed. According to the result of Limer and Hausman test, this hypothesis is a type of panel method and fixed effects. Due to the rejection of some classical assumptions of regression, the generalized panel model with integrated effects was used. The significance level of the t statistic of the regression model of this hypothesis is less than 5%, which indicates that there is a significant relationship between the mutual effect of stock liquidity and the quality of corporate governance with the dependent variable (dividend payout). These results are consistent with the research of Nadarajah et al.

(2018).

Here are some examples of practical suggestions based on the research results:

(1) Due to the importance of the rate of return on assets, it is suggested to managers to pay more attention and sensitivity to the relationship between this variable and dividend payout.

(2) It is suggested to the Tehran Stock Exchange Organization to oblige all companies to report the components of corporate governance.

Also, some examples suggested for future researches:

(1) It is suggested that the type of industry is considered as an influencing factor on the relationship between stock liquidity, corporate governance and dividend payout.

(2) It is suggested to investigate the mutual effect of stock liquidity and the quality of corporate governance on the dividend payout of companies by different stages of the life cycle (emergence, growth, maturity and decline).

(3) It is suggested to investigate the simultaneous causality of research variables.

(4) It is suggested that this research investigated in the top fifty companies in the stock exchange.

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