

# The effect of the characteristics of the board of directors on the accounting financial criteria

Mahsa Saremi nia<sup>a</sup>, Habibollah Nakhaei<sup>a,\*</sup>, Zohre Hajiha<sup>b</sup>

<sup>a</sup>Department of Accounting, Birjand Branch, Islamic Azad University, Birjand, Iran

<sup>b</sup>Department of Accounting, East Tehran Branch, Islamic Azad University, Tehran, Iran

(Communicated by Asadollah Aghajani)

---

## Abstract

The purpose of this study is to the effect of the characteristics of the board of directors on the accounting financial criteria in the companies admitted on the Tehran Stock Exchange. In this research, the criteria of board ownership, board independence and board size were used to measure the characteristics of the board of directors. In terms of classification, the research is of an applied type and the research method is of a quantitative type. In order to examine the hypotheses of the research, the audited financial statements of the companies and the change reports of 148 companies admitted to the Tehran Stock Exchange during the period from 2013 to 2020 were used, and the required data were extracted and used the method of multivariate regression analysis and the use of the F-test of Limer, Hausman, Brosch-Godfrey and Brosch-Pagan was investigated with the help of R software. The results of the hypothesis test showed that there is a relationship between the characteristics of the board of directors, which were evaluated using the criteria of ownership of the board of directors, the independence of the board of directors, and the size of the board of directors, and the financial performance of companies, which was evaluated using accounting criteria. There is a positive and meaningful. As a result, despite the significant effect of the characteristics of the board of directors on the performance of companies, the need to pay attention to the characteristics of the board of directors is of great importance. Therefore, according to the findings of the research, the importance of more effective supervision of the board of directors on the activities of managers is confirmed, and as a result, the criteria of ownership of the board of directors, the independence of the board of directors and the size of the board of directors, which can improve the performance of companies and cause He paid attention to increasing the efficiency and effectiveness of the decisions of the board of directors in the company and increasing the value and reputation of the company.

Keywords: financial performance, ownership, board independence, the board size  
2020 MSC: 91G15, 68V30, 90B50

---

## 1 Introduction

One of the most important predictors of organizational commitment is to pay attention to individual characteristics and differences. All members of society have their own individual differences, talents, motivations, desires and inclinations. They have different interests and abilities and have different attitudes, knowledge and value systems. They

---

\*Corresponding author

Email addresses: [Mha.saremi@gmail.com](mailto:Mha.saremi@gmail.com) (Mahsa Saremi nia), [h.nakhaei48@yahoo.com](mailto:h.nakhaei48@yahoo.com) (Habibollah Nakhaei), [drzhajiha@gmail.com](mailto:drzhajiha@gmail.com) (Zohre Hajiha)

differ in terms of individual differences and personality traits. Obviously, such different personality traits will affect the way they act and behave, and this influence of personality will ultimately affect their decisions and organizational behavior. Personality traits are the behavioral characteristics of human beings that play an important role in their life so that they are the direct criterion of action in the judgments and decisions of the individual [1].

On the other hand, profit is one of the important pieces of information in economic decisions. Studies and research on earnings constitute one of the largest and most extensive research efforts in the history of accounting. Profit has always been used by investors, managers and financial analysts as a guide for paying dividends, a tool to measure the effectiveness of management and a tool for predicting and evaluating decisions [19].

Accordingly, many researchers have tried to identify the factors that affect the profitability of companies. "Every success and failure depends on leadership," said John Maxwell. The characteristics and traits of managers as the leader of the company, in exerting power on the board, the executive team and the performance of the company, therefore, is determined as an effective role at the highest point of an organization, which is evaluated and evaluated in the results. The company is decisive. The prerequisite for the success of the organization is its proper performance. Indicators such as: profitability, survival, growth in the achievement of goals and competitive capabilities can be considered as the result of good performance.

The performance of any company is the result of purposeful activities that are carried out in order to make an economic profit. Companies with high financial performance usually know the channels of profit well and invest in those channels. Although the main goal of organizations is to increase efficiency and profit, but in the age of information and globalization to achieve success, they must respond appropriately to social expectations and ethical norms, and in the best way such expectations with the economic goals of the organization To combine to achieve higher and higher goals [3].

As you know, the board of directors is the main management and representation committee of a company; it determines its goals, policies and strategies and monitors the senior management. It is obvious that the characteristics of the company's board members, such as education, background, age, gender, etc., can be important and affect the company's performance. According to the stated contents, in this research, we intend to investigate the impact of the board of directors' characteristics by using a set of characteristics of the board of directors with an emphasis on accounting criteria and to identify the criteria that are more important and effective. So companies can use key indicators to determine the board of directors because paying attention to the company's board of directors can improve the company's performance, increase efficiency, increase wealth and attract new investors.

In the next parts of the article, the theoretical foundations and background of the research, hypotheses, research methodology, variables and research model, findings, conclusions and suggestions are explained.

## 2 Literature Review and Research Background

In this section, we review some important and related works.

### 2.1 Literature Review

Considering the characteristics of the board that are important from a strategic point of view, in this study the ownership of the board, the independence of the board and the size of the board were used.

The board of directors is the main management and representation committee of a company, defines its goals, policies and strategies, and oversees senior management. Obviously, the characteristics of the company's board members such as education, background, age, gender, etc. can affect its performance. The board of directors is considered the most important factor in controlling and supervising the management of the company and protecting the resources of shareholders [6]. The results of studies and surveys show that the board plays an important role in promoting the performance and value of the company. In the following, the effect of board characteristics on the financial performance of companies is examined.

**Board Ownership:** Board ownership, according to the representation theory of the presence of independent non-executive directors, i.e. managers who do not have an executive position in the company and their supervisory function as independent persons, reduces the conflict of interests between shareholders and company directors. The results of Van Rooyen et al. [21] research show that companies with more non-executive managers, due to more effective monitoring of the activities of their managers, are less inclined to finance. Therefore, manager's with less risk try to improve reporting and disclosure of financial information.

**Board Independence:** Board independence is a significant feature to increase the effectiveness of the board. Representation theory proposed a separation between ownership and management to improve managers to maximize their interest [12]. In order to reduce the agency problem, non-executive managers are able to monitor and control managerial activities, thus helping to increase the company's performance. Findings and arguments that independent managers have an important role in the company have been expressed in studies. Kachenchart et al. [13] suggest that independent managers play an important role in increasing management oversight performance. In addition, independent managers play a key role in decision-making, especially strategic decisions. In addition, previous evidence recommended the employment of more independent managers to prevent management opportunistic behaviour [16]. Independent directors seek to verify that financial decisions have been made to increase shareholders and should not lead to cash or revenue flows being controlled over minority shareholders, shareholders and directors. Independent members control the agency issue, reducing information asymmetries between the manager and shareholders by providing better and higher quality disclosure [5]. Fama (1983) also claims that the efficiency of the board improves with the entry of non-executive members [5].

**Board size:** Board size is an important feature for achieving an optimal corporate governance structure. It depends on the level of alignment of goals between owners and managers [12]. There are mutual opinions about the effect of board size on company performance. Theoretically, according to agency theory, when shareholders cannot effectively control the directors, the board should be relatively large in size, which primarily play a supervisory role. In this regard, the relationship between board size and company performance is expected to be positive. According to resource dependency theory, this relationship is also expected to be positive. By integrating the role of the board as a resource provider, a manager brings more human and social capital to a company and increases board information and business-specific knowledge, thus, it improves the quality of strategic decisions, which ultimately affects the company's performance [12].

Theoretical literature has presented two opposing views on the role of board size in company performance. The first view states that a smaller board improves the performance of the company. When the board is made up of a large number of members, the problems of representation increase, because a number of board members may act as non-profits [10]. Also, when the number of board members is too large, the control and supervision of the CEO are not done effectively [10].

The size of the board is an important element in its characteristics of the board. The optimal number of board members should be determined in such a way as to ensure that there are enough members to meet the duties of the board and perform various duties of the board [9]. Empirical evidence suggests that there is no consensus on the optimal size of the board. Green [8] believes that the number of board members should be limited to allow for discussion and exchange of company issues and problems. Larger boards have less power. In such boards, agreement and consensus on a particular issue are very difficult.

Goodstein et al. [15] also found that smaller boards (between 4 and 6 members) could be more effective; because they are small, they are able to make strategic decisions in a timelier manner. On the other hand, others, such as Lippmann and Lippmann (2006), argue that board size should be large enough to accommodate a range of different people's skills and experiences. Also indicates that more board members (larger board) will increase the ability to monitor the activities of senior managers. But what is clear is that the board must be reasonably sized [7].

**Company financial performance:** Financial performance is the level of performance of a business in a particular period of time that appears in profit and loss in the relevant period. Therefore, it can be concluded that financial performance is a measure of a company's good use of its assets in running a business and earning revenue. Financial performance is also a term used to compare several companies in a similar industry or activity [20]. Financial performance is a picture of a company's success in the form of results obtained thanks to various activities performed and is an analysis to evaluate the performance of a company according to financial laws [4].

Finding the highest benchmark for evaluating a company's performance is one of the most important topics in recent financial research. The performance of a company alone is an important variable that can affect different groups of stakeholders, including shareholders, managers, employees and creditors, and is one of the basic and key tasks of managers to identify strengths and weaknesses. The activities carried out to improve and improve it, and economic enterprises need to know the criteria and indicators that are classified into two sets of financial and non-financial indicators. In general, there are two models of performance evaluation in relation to determining the value of the company and the performance of managers, which are: the accounting model and the economic model.

Accounting criteria for evaluating company performance are earnings, earnings growth, cash flows, earnings per share, dividends per share, market value to the book, residual earnings, return on investment, return on assets, stock returns, price-to-earnings ratio and Q Tobin Economic criteria for evaluating the company's performance include:

economic value added, market value added and adjusted economic value added, cash value-added, shareholder value added.

Due to the multiplicity of accounting and economic criteria, in this research, accounting model criteria will be used to evaluate performance.

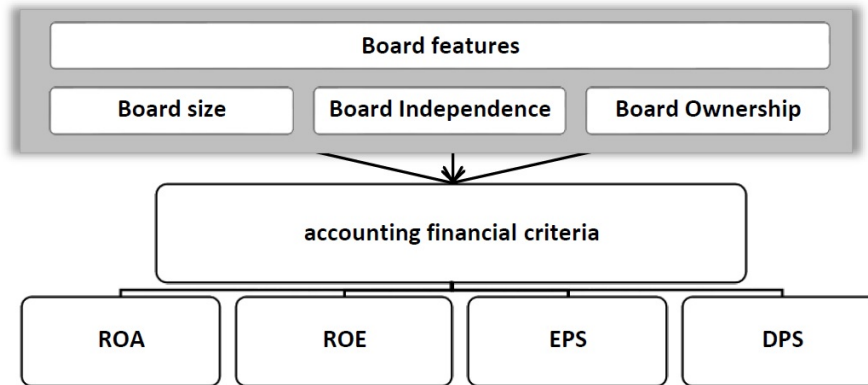


Figure 1: Conceptual model

## 2.2 Research Background

Delshad and Tehrani in [3] studied the effect of management characteristics on the value and volume of stock transactions, emphasizing data mining methods. Findings showed that management characteristics had a significant effect on the value of stock transactions of the surveyed companies, but the effect of these characteristics on trading volume in most cases was observed insignificantly. Only the accuracy of management forecasting has a significant effect on the value of transactions and management optimism and short-sightedness will have a significant effect on stock trading volume. The greatest impact on the value of transactions is related to the variables of company size and the ratio of market value to book value, and the greatest impact on the volume of transactions is related to the variables of price-to-profit ratio and rate of return on company assets. The results of their research showed that a small number of management characteristics have a significant effect on the value and volume of stock transactions and the capital market has shown a significant response to various management characteristics through the value of stock transactions. Also, only management short-sightedness has a significant effect on transaction value and short-sightedness, optimism and board independence have a significant effect on transaction volume and other management characteristics are not part of the variables affecting transaction value and volume.

Moradi, Saeedi and Rezaei in [17] examined the effect of board size and independence on agency costs. The main purpose of this study is to investigate the relationship between some of the characteristics of the board of directors and the costs of representation in companies listed on the Tehran Stock Exchange. A sample of 77 companies during the years 2005 to 2010 has been studied at the general level and at the industry level. The variable is dependent on agency costs and efficiency ratios have been used to measure it. These ratios are 1- The ratio of operating expenses to annual sales, which is a measure of management extremism in performing optional expenses, and 2- The ratio of asset turnover, which is a measure of the quality of corporate asset management. The independent variables of the research are the size of the board members and the percentage of non-executive members in relation to the total number of board members, which indicates the independence of the board. The results showed that there was a significant positive relationship between board size and agency costs, but no significant relationship was found between board independence and agency costs.

Namazi and Ebrahimi in [18] examined the effect of board composition on performance with emphasis on the value-added efficiency of company resources. The purpose of this study was to investigate the effect of board composition on the performance of companies listed on the Tehran Stock Exchange with an emphasis on the value-added efficiency of all company resources and also the value-added efficiency of resources related to physical and intellectual capital separately. For this purpose, a sample consisting of 46 companies from 2001 to 2010 was used. The results of testing the hypotheses using the ordinary least squares regression model showed that a positive and significant relationship between the variable of the presence of a non-executive member on the board of directors and the value-added efficiency of all company resources and also the value-added efficiency of physical assets and There is value-added efficiency of intellectual capital. While there was no significant relationship between the variables of the percentage of non-executive

board members and the presence of at least three non-executive members in the composition of the board with the value-added efficiency of all company resources and value-added efficiency of physical capital and value-added efficiency of intellectual capital.

Ben Amar, Boujenoui, and Francoeur in [2] surveyed the characteristics of a CEO, board composition, and value creation in a Canadian study. They examined the characteristics of the CEO, the composition of the board of directors, and the ownership structure in order to relate them to the performance of the buyer company's share around the procurement notice. Based on 273 Canadian corporate ownerships from 1998 to 2002, they showed that the level of CEO and the ownership of the director, as well as the degree of board independence, were related to the buyer's short-term financial performance. Board size was negatively related to value creation.

ZainalAbidin et al. in [23] used a sample of 95 listed companies on the Malaysian Stock Exchange to examine the relationship between board characteristics and firm performance. The index used to measure performance was the value-added efficiency of physical and intellectual resources. They concluded that there is a positive and significant relationship between the composition and size of the board and the performance of the company.

Ho and Williams in [11] conducted a comparative study of the relationship between board characteristics and value-added performance of physical capital, intellectual capital, and total corporate capital among a sample of companies in South Africa, Sweden, and the United Kingdom. The results showed the existence of non-uniformity in a significant relationship between the characteristics of the board and performance indicators among the countries under study.

### 3 Methodology of research

This research is applied in terms of purpose-based classification and the research method is quantitative. The data analysis method is descriptive-correlational. In order to test the research hypotheses, information was extracted from the audited financial statements of the companies, company change report, CODAL website and new delivery software. The regression model was used to measure the research variables. The statistical population of the study was all companies listed on the Tehran Stock Exchange in the period 2013 to 2020 after applying the conditions. The above conditions are as follows:

1. The date of their acceptance in the Stock Exchange Organization is before 2013 and they should be on the list of listed companies until the end of 2020.
2. The end of the company's fiscal year is March 20, and they have not changed their activity or changed their fiscal year during the desired period.
3. The necessary financial information is available in order to extract the required data.
4. They are not part of investment and financial intermediation companies.

After applying the above restrictions, the statistical sample includes 148 companies. According to the theoretical foundations and research background, research hypotheses are formulated as follows:

**Main hypothesis:** The characteristics of the board of directors are effective on the company's financial performance using accounting criteria.

**Sub-hypotheses:**

1. Ownership of the manager is effective on the company's financial performance using accounting criteria.
2. The independence of the board of directors is effective on the company's financial performance using accounting criteria.
3. The size of the board of directors is effective on the financial performance of the company using accounting criteria.

#### 3.1 Research Models

In this research, board characteristics are used as independent variables. Accounting financial criteria are as dependent variables and company size, financial leverage and cash ratio of research control variables. The following regression model was developed and will be used to examine the characteristics of the board with an emphasis on value-based metrics for investors:

$$AC_{i,t} = \alpha + \beta_1 DIRECTOWN_{i,t} + \beta_2 BOARDINDEP_{i,t} + \beta_3 BOARDSIZE_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 LEV_{i,t} + \beta_6 CASH_{i,t} + \varepsilon$$

where,  $AC_{i,t}$ 's are the accounting criterias that are calculated as follows:

$$AC_{i,t} = ROA_{it} + ROE_{it} + EPS_{it} + DPS_{it},$$

and ROA is the return on assets, ROE is the return on equity, EPS is earnings per share and DPS is the dividend per share. Each of the dependent variables in the above model will be calculated as follows:

Return on assets (ROA): It is the ratio of profit before tax to total assets.

$$ROA = \frac{\text{Profits before taxes}}{\text{Total assets}}.$$

Return on Equity (ROE): Net profit after tax is divided by total equity.

$$ROE = \frac{\text{Net Profit after tax}}{\text{Total equity}}.$$

Earnings per share (EPS): It is equal to the ratio of the company's actual earnings per share obtained by the ratio of net profit after tax to the weighted average of common stock. Dividend per share (DPS): The dividend that is paid to each common shareholder during a certain period of time for each of his shares is called a dividend per share. The dividend per share is obtained from the dividend approved by the assembly to be paid to the shareholders on the number of ordinary shares of the company.

$$DPS = \frac{D-SD}{S}$$

D: Total dividends over a period of time (usually 1 Year).

SD: total preferred shareholders' dividends

S: number of common shares over a period of time (usually 1 Year).

The independent variables in the above model will be calculated as follows:

DIRECTOWN: Obtained from the ratio of stocks by institutional investors.

BOARDINDEP: The ratio of external (non-executive) directors on the board to the total number of board members.

BOARDSIZE: It is obtained from the ratio of the reports of the board of directors to the assembly.

According to research conducted by Karasamani [14] and Yu [22], the following variables were considered as control variables:

SIZE: The natural value of a company's total assets is obtained through the natural logarithm.

LEV: Total liabilities are divided by the total assets of the company.

Cash Ratio: Total cash and cash equivalents are divided by the total current liabilities of the company.

$$\text{Cash Ratio} = \frac{\text{Total cash and cash equivalents}}{\text{Total current liabilities}}$$

## 4 Research Analyses and Finding

### 4.1 Descriptive Statistics

In order to make the information contained in the data concise and tangible to some extent and to obtain general information about the characteristics of the studied samples, descriptive statistics are prepared and adjusted. This information includes: central indicators and dispersion such as mean, median, standard deviation, minimum and maximum. The table of descriptive statistics for the research variables is as follows.

The results indicate that the financial performance index (AC) was on average 0.000, which is not far from expected considering that this index is the sum of several normalized variables. On the other hand, for AC, the dispersion index (standard deviation) was 2.27, which indicates a relatively low dispersion of the variable. The results show that SIZE, LEV, and CASH variables have averages of 14.47, 0.581, and 0.116, respectively, and on the other hand, the results related to the characteristics of the board of directors show that on average Ownership of the manager and independence of the board of directors were 0.658 and 0.281, respectively, and the size of the board of directors has an average of 5.07.

Table 1: Descriptive statistics corresponding to research variables

Variable	Average	Median	Sta. D	Min	Max	Skewness coefficient	coefficient of kurtosis
AC	0.000	-0.509	2.27	-15.99	40.69	7.97	112.38
SIZE	14.47	14.27	1.51	11.04	20.18	0.872	1.32
LEV	0.581	0.57	0.25	0.036	3.975	3.77	39.64
CASH	0.116	0.058	0.198	0.0005	3.526	6.585	85.35
DIRECTOWN	0.685	0.773	0.258	0.000	1.000	-1.29	0.76
BOARDINDEP	0.281	0.2	0.208	0	1	0.484	-0.001
BOARDSIZE	5.07	5	0.363	4	7	5.09	24.45

## 4.2 Test hypotheses and analysis of research findings

The characteristics of the board of directors are effective on the company's financial performance using accounting criteria.

To test this hypothesis, the following regression model is fitted:

$$AC_{i,t} = \beta_0 + \beta_1 DIRECTOWN_{it} + \beta_2 BOARDINDEP_{it} + \beta_3 BOARDSIZE_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \beta_6 CASH_{it} + \varepsilon_{it}.$$

In fact, if the significance level for each of the regression coefficients in the predictor variables (independent and control) is less than 0.05, the corresponding variable will have a significant impact on the financial performance of the companies. The first test is the F-Limer test. If the P-value is less than 0.05, the panel regression method is selected, otherwise OLS regression is selected.

Table 2: The results of the tests used for the research hypothesis

Type of test	Test statistics	Degrees of freedom
F Limier	2.89	0.000
Haussmann	2.33	0.89
Bruce-Godfrey	282.5	0.000
Bruch-Pagan	64.95	0.000

The F-Limier test indicates that at the 5% error level between the OLS method and the panel method, the panel method should be used. After the panel model was selected, the Haussmann test was used to correctly identify the model used and whether the fixed effects model is the subject of the estimation method or the random effects model, and if the P-value of the test is less than 0.05, the method With fixed effects and otherwise the method with random effects will be selected. As can be seen, the random effects method is selected. To test whether the errors of the model used have a serial correlation, we used the Bruch-Godfrey test, and if the P-value is less than 0.05, we can say that the data under study have a serial correlation. As can be seen, the P-value is less than 5%, so the model error autocorrelation is accepted. Bruch-Pagan test was used to test whether the error of the model used had variance heterogeneity. If the P-value is less than 0.05, it can be said that the studied data have heterogeneity of variance. As can be seen, the P-value is less than 5%, so the model error variance homogeneity is rejected. In this regard, by summarizing the regression assumptions, we came to the conclusion that we should use the generalized method to fit the model. After performing this regression, the model results are as follows:

As can be seen, the maximum VIF values are less than 10, so they will not distort the existence of all variables in the model. The P-value (0.000) of the model significance test also confirms the suitability of the model. In the first sub-hypothesis, according to the results, t-statistic (12.62) shows that the independent variable DIRECTOWN in this model at the level of 95% confidence is statistically significant because first, the absolute value of this statistic is more than 1.96 Secondly, the P-value (0.000) is less than 5%. Therefore, the ownership of managers affects the financial performance of the company. According to the results obtained for the second sub-hypothesis, t-statistic (10.015) shows that the independent variable BOARDINDEP in this model is statistically significant at the 95% confidence level because first, the absolute values of this statistic are greater than 1.96 Secondly, the P-value (0.000) is less than 5%. Therefore, the independence of the board of directors affects the financial performance of the company.

Also, according to the results in the third sub-hypothesis, t-statistic (10.22) shows that the independent variable BOARDSIZE in this model is statistically significant at 95% confidence level because firstly, the absolute values of

Table 3: Results of fitting the regression model corresponding to the regression model

Coefficients	VIF	Variable coefficients in the model	Standard error deviation	t-statistics	P-value	Result
Width of origin	–	–7.225	1.14	–6.32	0.000	Meaningfulness in the model
DIRECTOWN	1.93	0.320	0.025	12.62	0.000	Meaningfulness in the model
BOARDINDEP	1.96	0.304	0.030	10.015	0.000	Meaningfulness in the model
BOARDSIZE	1.18	–0.017	0.0018	10.22	0.000	Meaningfulness in the model
SIZE	1.25	0.558	0.043	13.048	0.000	Meaningfulness in the model
LEV	1.17	–0.154	0.261	–4.42	0.000	Meaningfulness in the model
CASH	1.79	0.422	0.329	1.28	0.199	Lack of meaning in the model
Determination coefficient					0.346	
Determination coefficient					F	33.78
					P-value	0.000
Camera-Watson test					Camera-Watson Statistics	1.65
					P-value	0.000

this statistic were greater than 1.96. Second, the P-value (0.000) is less than 5%. Therefore, the size of the board affects the financial performance of the company.

## 5 Discussions and Conclusion

The board of directors is the main management and representation committee of a company, defines its goals, policies and strategies, and oversees senior management. Obviously, the characteristics of the company's board members can affect its performance. As stated by Fama and Jensen [6], the board of directors is the most important factor in controlling and overseeing the management of the company and protecting the resources of shareholders.

Considering that the supervision of the board of directors is important in improving the performance of the company and attracting the trust of investors in order to invest in the company, and the board of directors plays an important role in improving the performance and value of the company, the purpose of this study is to identify The effect of the characteristics of the board of directors on the financial performance of companies admitted to the Tehran Stock Exchange was using accounting criteria.

Therefore, in this research, the criteria of manager's ownership, independence of the board of directors and size of the board of directors were used to evaluate and measure the characteristics of the board of directors. Also, four accounting criteria which included: return on assets, return on equity, profit per share and dividend per share were estimated as financial performance measures.

Based on the results of statistical analysis of the collected information, the research hypotheses are confirmed and the results indicated that the characteristics of the board using the criteria of manager ownership, board independence and size of the board size had a significant effect on the financial performance of companies and the research hypotheses were confirmed.

The results of the present study with the results of the study of Ben Amar, Boujenoui and Francoeur [2] who performed the characteristics of the CEO, composition of the board and creating purchase value in Canada and showed the ownership of the manager and the degree of independence of the board with short financial performance The buyer's duration is relevant but consistent with the board size variable, which was found to be negatively related to financial, and this result is inconsistent with the findings of the present study.

ZainalAbidin et al. in [23] examined the relationship between board characteristics and firm performance in companies listed on the Malaysian Stock Exchange. Their results showed that there is a positive and significant



relationship between the composition and size of the board of directors and the performance of the company, which is the same as the results of the present study.

Ho and Williams [11] in their study compared the relationship between board characteristics and value-added performance of physical capital, intellectual capital and total corporate capital in a sample of companies in South Africa, Sweden and the United Kingdom. The results of their research indicate the existence of non-uniformity in the significant relationship between the characteristics of the board and performance indicators among the countries under study, which is contrary to the results of testing the third hypothesis.

In the study of Delshad and Tehrani [3], they investigated the effect of management characteristics on the value and volume of stock transactions, with an emphasis on data mining methods. Their research findings showed that the independence of the board of directors has a significant effect on the volume of transactions, which the above results are consistent with the present study and confirm the effect of the relationship between the independence of the board and the status of the company.

On the other hand, in Moradi, Saeedi and Rezaei [17] research, the effect of board size and independence on agency costs were investigated and the results showed that there is a positive relationship between board size and agency costs with the findings. The present study was consistent but did not find a significant relationship between board independence and agency costs, which is not consistent with the findings of the above hypothesis.

Namazi and Ebrahimi [18] examined the effect of board composition on performance with an emphasis on value-added resource efficiency in companies listed on the Tehran Stock Exchange. The results of testing the hypotheses showed a positive and significant relationship between the variable of the presence of a non-executive member on the board of directors and the value-added efficiency of all company resources as well as the value-added efficiency of physical assets and value-added efficiency of assets. There is an intellectual relationship, while there is a significant relationship between the variables of the percentage of non-executive board members and the presence of at least three non-executive members in the composition of the board with value-added efficiency of total company resources and value-added efficiency of physical assets and value-added efficiency of intellectual capital. They did not find that the results of the above research are contrary to the results of the present hypothesis.

The financial leverage variable had an inverse and significant relationship with the company's performance with the t-statistic (-42.42), which means that no matter how high the amount of financial leverage in the company is, managers will tend to use financial resources to improve the company's financial performance.

Cash ratio control variable (CASH) in accounting models has t-statistics (1.28) with P-values (0.199), respectively. Given that the P-value is greater than 0.05, the cash ratio will not be related to the company's financial performance.

The results showed that all the variables of board characteristics that were examined in this study have a positive effect on financial performance. To improve financial performance, the results show that more attention should be paid to the structure of the board in order to improve the company's performance. Identifying and evaluating the characteristics of the board of directors is valuable and can be effective in how and why to reduce investment inefficiencies, especially in certain periods when the company is facing shortages of economic resources. For example, managerial credibility may be related to the ability to facilitate access to finance. For this reason, identifying the characteristics of boards associated with financial institutions can be politically more favorable to creditors. In general, the findings showed that the characteristics of the board in the company lead to a high level of financial performance of the company. The results of the study also show that there is a strong relationship between the characteristics of the board and the financial performance of companies and it seems that companies need to have an independent and experienced board which was proposed in this study and the case it was studied to be more focused. Due to the importance of more effective supervision of the board of directors on the activities of managers for better performance of the company, it is recommended to shareholders and legislators in companies, taking into account the characteristics and conditions of board members such as non-executive most board members that lead It will be more effective to monitor the activities of managers, the independence of the board of directors, which according to agency represents the separation between ownership and management to improve managers to maximize their effectiveness and help increase company performance and make the board more efficient. The size of the board, according to studies conducted by Hasas Yeganeh et al. [9], the members of the board should be appointed in such a way as to ensure that there are enough members to meet the duties of the board and perform the various duties of the board. Considering the importance of the characteristics of the board of directors, it is suggested that the above items be considered in their selection and appointment in order to witness the better performance of the company, attract more investors, retain existing shareholders, increase wealth and their investment satisfaction. What they have done in the company and thus improve the financial performance of the company and the efficiency of the board. Because with a strong board that has the independence and the right size, it is expected to be aware of the benefits of investment and increase

the value of shareholders and be able to use the capital and financial conditions ahead for the company and improve the company's financial performance. Forgive and expect a board of directors of appropriate size, independence and experience to act in the interests of shareholders and will try to minimize the company's costs by using more revenue sources. For future research, it is suggested that all segments of the capital market and demographic variables such as gender and experience of board members be examined and its impact on the relationship between board characteristics and corporate financial performance using metrics be based on creating test values. It is also suggested that in future studies, other characteristics of the board and their impact on the financial performance of companies be examined.

## References

- [1] F. Amer and M. Gerkaz, *A study of the role of self-conscious emotions (pride and shame) in ethical accounting decisions: A case study of PhD and Master of accounting students in Gorgan universities*, Value Behav. Account. Quart. **6** (2018), 165–177.
- [2] W. Ben Amar, A. Boujenoui and C. Francoeur, *CEO attributes, board composition, and acquirer value creation: A Canadian study*, Canad. J. Administr. Sci. **28** (2011), no. 4, 480–492.
- [3] A. Delshad and R. Tehrani, *Investigating the effect of management characteristics on the value and volume of stock transactions with emphasis on data mining methods*, J. Financ. Account. Knowledge **2** (2020), 29–60.
- [4] I. Fahmi, *Analysis of financial statements*, Alfabeta, Bandung, 2012.
- [5] E.F. Fama, *Separation of ownership and control*, J. Low Econ. **9** (1983), 301–325.
- [6] E.F. Fama and M.C. Jensen, *Agency problems and residual claims*, J. Law Econ. **26** (1983), 327–349.
- [7] J. Goodstein, K. Gautam and W. Boeker, *The effect of board size and diversity on strategic change*, Strategic Manag. J. **15** (1994), 241–250.
- [8] S. Green, *Sarbanes Oxley and the board of directors*, John Wiley & Sons, Inc. Hoboken, 2005.
- [9] Y. Hasas Yeganeh, S. Sheiry and S.H. Khosrownejad, *The relationship between corporate governance mechanisms, debt ratio and company size with profit management*, Account. Stud. **24** (2008), 79–115.
- [10] B.E. Hermalin and M.S. Weisback, *Board of directors as an endogenously determined institution: A survey of the economic literature*, Center for Responsible Business, 2003.
- [11] C.A. Ho and S.M. Williams, *International comparative analysis of the association between board structure and the efficiency of value added by a firm from its physical capital and intellectual capital resources*, Int. J. Account. **38** (2003), 465–491.
- [12] M.C. Jensen and W.H. Meckling, *Theory of the firm, managerial behavior, agency costs and owner ship structure*, J. Financ. Econ. **4** (1976), 5–30.
- [13] B. Kachenchart, D.L. Jones, N. Gajaseni, G.E. Jones and A. Limsakul, *Seasonal nitrous oxide emissions from different land uses and their controlling factors in a tropical riparian ecosystem*, Agricul. Ecosyst. Envir. **158** (2012), 15–30.
- [14] I. Karasamani, *The impact of managerial traits on corporate investment*, Durham Ph.d Thesis, Durham University, 2018.
- [15] F. Lippmann and L. Lippmann, *Corporate governance best practices: Strategies for public, private and not-for-profit organizations*, John Wiley & Sons, Inc. Hoboken, 2006.
- [16] T.W. Loe, L. Ferrell and P. Mansfield, *A review of empirical studies assessing ethical decision making in business*, J. Bus. Ethics **25** (2010), 185–204.
- [17] M. Moradi, M. Saeedi and H.R. Rezaei, *Investigating the effect of board size and independence on agency costs*, Empir. Account. Res. **7** (2013), 54–35.
- [18] M. Namazi and S. Ebrahimi, *Investigating the impact of ownership structure and board composition on the technical efficiency of the listed companies on the Tehran Stock Exchange*, J. Account. Knowledge **4** (2013), no. 12.
- [19] A. Saghafi and M.A. Aghaei, *Accounting profit behavior*, Account. Audit. Rev. **9** (1994), 5–21.

- 
- [20] I.M. Silitonga and A. Simanjuntak, *The influence of corporate governance on disclosure of corporate social responsibility and corporate financial performance as intervening variable*, Econ. Bus. Int. Conf. Econ. Bus. Ind. Revol. **4** (2019), 331–337.
- [21] C.J. Van Rooyen, F. Mavhandu and W. Answeeuw, *The business of informal trading in the food and flower sectors*, C.J. Van Rooyen, O.T. Doyer and L. D’Haese (Eds.), Readings in agribusiness, a source book for agribusiness training, University of Pretoria, Institutional University Cooperation, 2002.
- [22] J. Yau, *CEO personal attributes and corporate decisions*, Ph.d Thesis, Durham University, 2017.
- [23] Z. ZainalAbidin, N. Mustaffa Kamal and K. Jusoff, *Board structure and corporate performance in Malaysia*, Int. J. Econ. Finance **1** (2009), 150–164.