



## The Effect of Corporate Governance on Export Performance of Iranian Listed Companies

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### Abstract

This research aims to investigate the effect of corporate governance mechanisms on export performance. The statistical population includes 98 export companies listed on the Tehran Stock Exchange from 2010 to 2016. Data mining and statistical analysis are used to test the research hypotheses. This paper operationalizes the corporate governance mechanisms by the board of directors' independence, the concentration of ownership, and institutional investors. It further operationalizes export performance by export sales, export sales intensity, and the volume of export sales. The results show that ownership concentration has a significant effect on export sales. Furthermore, institutional investors have a significant effect on the volume of export sales. The current study may give great direction to companies exporting their products. In addition, the results also give researchers a path to focus on the current subject, especially in a developing country like Iran.

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**Keywords:** Corporate governance, Export performance, Export sales, Export sales intensity, Export sales volumes

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## 1. Introduction

Nowadays, there is no doubt about corporate governance's importance for companies' success because one of the main factors in improving economic efficiency is corporate governance mechanisms that include relationships between shareholders, companies, and stakeholders (Berle and Means, 1932). Good corporate governance should provide proper incentives for the board and management to pursue the company and shareholders (WTO, 2004). Companies believe that good corporate governance facilitates the management and control of the business entity's effectiveness and can provide optimal returns for all stakeholders (Elsayed and Wahba, 2013). Cadbury (1992), known as the father of corporate governance, introduces corporate governance as a system in which companies are conducted and controlled.

What has become more evident in recent decades is the internationalization of trade and companies' turning into the global market (Lin and Hinson, 1998). With exports, companies can offer their products in foreign markets with the least engagement in local activities (Morgan et al., 2004). However, despite numerous export benefits, many managers are reluctant to export due to failures and obstacles. Given the importance of the issue, solutions are needed to reduce these problems. Therefore, considering the role of corporate governance mechanisms in companies' success, it is necessary to use them. Therefore, in Iran, which seeks to reduce the economy's dependence on oil, it is necessary to expand export and effective foreign markets presence in its development plans. A way should also be found to apply for an executable export program with the most efficient method. Therefore, the purpose of this study is to clarify the extent to which corporate governance mechanisms affect the export performance of companies. So, the key to solving the mystery is to find mechanisms within the company to help managers improve their exports and stimulate economic growth.

Finally, reviewing the research literature revealed that no research had been carried out on the effect of corporate governance mechanisms on export performance inside Iran so far.

## 2. Theoretical Framework and Hypotheses Development

In the context of board composition, the question that gets the most attention is whether non-executive members' presence on the board improves the company (Hermalin and Weisbach, 2003). Several theories, such as agency theory and shareholders theory, confirm that the non-executive directors' ratio has an important effect on each company's performance (Ho and Williams, 2003). Proponents of shareholder theory argue that non-executive managers have a different perspective on shareholders than executive members. From the theoretical point of view, when the board has a high proportion of non-executive members, its performance improves (Muth and Donaldson, 1998).

According to some researchers (Zahra and Pearce, 1989; Hambrick and Jackson, 2000), non-executive members of the board will lead to improved performance. The larger the number of independent board members will lead to better company performance.

However, some studies have reported the lack of relationships between non-executive members and the company's performance (Forsberg, 1989; Hermalin and Weisbach, 2003; Bhagat and Black, 1999).

Non-executive members of the board have a negative effect on the company's performance (Wang et al., 2012). Companies with independence from the Board of Directors are less likely to suffer from a financial crisis than companies with a low percentage of non-executive directors (Chang, 2009).

Efforts have been made to establish an effective monitoring mechanism on

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companies' performance in Iran, which has led to establishing a corporate governance system in the Tehran Stock Exchange. One of the things that are emphasized in this regulation is the non-assignment of board members in companies. The research tries to focus on various aspects of corporate governance and develop mechanisms to improve its performance. Non-executive directors have the independence and oversight of managers' performance, and therefore they are expected to be a strong mechanism for achieving the company's future goals. On the other hand, many managers are reluctant to export despite the export benefits due to failures. Accordingly, there is a need for solutions to reduce this problem to some extent; therefore, with these concepts, the relevant hypotheses are formulated as follows:

H<sub>1</sub>: Independence of the board has a significant impact on export growth.

H<sub>2</sub>: Independence of the board has a significant impact on export intensity.

H<sub>3</sub>: Independence of the board has a significant impact on the volume of export sales.

There are different opinions about the type of relationship and how ownership of major shareholders affects managers' performance. One of the hypotheses is the hypothesis of effective supervision. According to this hypothesis, in contrast to minority shareholders, major shareholders can monitor managers' performance at a lower cost due to the availability of facilities, expertise, and high experience. On the other hand, according to the strategic alignment hypothesis, sometimes the expectations of major stakeholders may be tied to managers' interests. Thus, the interests of minority shareholders are ignored. In this situation, the expected beneficial effects of effective oversight by major stakeholders on managers are reduced. In this case, there is a kind of conflict of interest between major shareholders and other owners. Because of the power of the influence of the major shareholders, other shareholders will suffer losses. In fact, these shareholders have both positive and negative effects because they strengthen the incentive to monitor the performance of management and, on the other hand, align the interests of major shareholders with minority shareholders.

Some researches show better performance in companies that focus on ownership (Leung and Horwitz, 2009; Gedajlovic and Shapiro, 2002; Claessens and Simeon, 1999; Xu and Wang, 1999). On the other hand, some studies result in the lack of a relationship between the focus of ownership and the company's performance (Coenen, 2015; Omran et al., 2008).

Kapopoulos and Lazaretou (2007) suggested that a more focused ownership structure has a positive and significant relationship with its profitability. Also, focusing on ownership can increase a company's value by reducing agency costs (Shleifer and Vishny, 1997).

According to Cadbury, corporate governance is a system in which corporations are controlled and directed. And determines how and by whom the company should be managed to function more appropriately in all areas. Accordingly, the hypotheses are presented as follows to be tested in the Iranian environment:

H<sub>4</sub>: Ownership concentration has a significant impact on export growth.

H<sub>5</sub>: The concentration of ownership has a significant impact on export intensity.

H<sub>6</sub>: Ownership concentration has a significant impact on the volume of export sales.

Before the emergence of very large companies, in the late eighteenth century, the owners were managers and managers were the owner; however, with the separation of ownership from management, the emergence of securities markets and groups of professional executives, a new approach called a joint corporation was introduced to a social phenomenon. This led to a conflict of interests between the manager and the owner. Therefore, this group can have a significant impact on corporate governance. Therefore, it is expected that there will be a logical relationship between the owner of this group and future performance (Velury and Jenkins, 2006).

Per the corporate governance literature, institutional investors include banks, insurance companies, pension funds, investment companies, and other companies and government agencies that deal with the purchase and sale of securities (Koh, 2003). It is generally thought that the presence of institutional investors may lead to changes in corporate behavior. This comes from regulatory activities that these investors are doing (Bushee, 1998). Jensen (1986) states that institutional investors can help reduce agency costs, monitor the company's performance, change managers, and ultimately protect shareholders' interests when they do control. In fact, major owners are able to reduce these problems. Due to the high investment volume, they have a better incentive to oversee management and more power to impose effective decisions on minority shareholders and dispersed owners (Baltagi, 2013).

Kaplan and Minton (1994) find that large shareholders' presence is associated with more management changes, representing these shareholders' supervisory duties. Institutional investors have the opportunity and ability to discipline and influence managers. Supervising a company through such investors can make executives' pay more attention to corporate performance and less attention to their interests (Ramsay and Blair, 1993). Allan Chang Aik Leng's research (2004) refers to the direct relationship between the percentage of ownership of institutional investors in the company and its income. Tsai and Gu (2007) found that institutional investors may reduce agency problems resulting from the separation of management and ownership. Many researchers (McConnell and Servaes, 1990; Smith, 1996; Del Guercio and Hawkins, 1999; Davis, 2002; Clay, 2001; Chaganti and Damanpour, 1991; Maug, 1998) found that institutional investors' supervision would result in more focused management and positive impact on long-term performance. However, Loderer and Martin (1997) did not find a meaningful relationship between institutional ownership and the company's performance. Corporate governance involves processes for managing corporate efforts to create value for shareholders and as a mechanism for protecting interests (Butt and Hasan, 2009). Because institutional shareholders have a controlling role, those forces executives to act in a way that does not harm the company in the long run (Bushee, 1998). The study seeks to ensure that this group of shareholders may improve export performance because of their controlling role. Therefore, according to the stated points, the hypotheses are as follows:

H<sub>7</sub>: The institutional investor has a significant impact on export growth.

H<sub>8</sub>: Institutional Investor has a significant impact on export sales intensity.

H<sub>9</sub>: The institutional investor has a significant impact on the volume of export sales.

### 3. Methodology and Research Design

In terms of data collection method, this research is correlation research, and its main purpose is to determine the existence, extent, and type of relationship between variables. In this research, data collection will be done in a library and archival way. The data used are classified into two parts: The first part is data related to the theoretical framework and research literature, which is compiled from books, valid articles, scientific journals, student theses, and valid sites. The second part of this study uses data collected from the post-event approach. In fact, the data is based on the actual figures and actual information about the stock market and corporate financial statements. These data are collected through the company's basic financial statements from 2010 to 2016, published on the Tehran Stock Exchange websites at [www.codal.ir](http://www.codal.ir) and [www.rdis.ir](http://www.rdis.ir) and also is available in Rahavard Novin software.

The statistical population of this research includes all export companies listed on the Tehran Stock Exchange, which has the following conditions:

1- Companies have been listed on the Stock Exchange by the end of March 2010;

2- During the years 2010 to 2016, there will be no change in the fiscal year and operations cessation.

3. The financial statements and accompanying notes of the companies are available on the stock exchange,

4. Companies have the export.

5. The companies do not type of investment and insurance companies, banks, and financial and credit institutions and holding companies.

According to the collected data, a final sample was obtained, according to the table below.

**Table 1.** Number of statistical population and conditions

Description	Deleted companies in total courses	Total Companies
All listed companies in Tehran Stock Exchange during 2010-2016		520
Due to change the fiscal year or stop the operation	(82)	
Due to lack of access to information	(48)	
Due to the type of company (Financial intermediation, insurance, and investment and financing)	(108)	
Companies that have entered the Tehran Stock Exchange during the research period	(99)	
No export sales	(85)	
Available statistical population		98

### 3.1. Data analysis and testing hypotheses

In this research, the effect of corporate governance mechanisms on export performance was investigated. To test the hypotheses, the following models will be used based on the theoretical framework:

(1)

$$export\ growth_{it} = \beta_0 + \beta_1 perc\ indept\ dir_{it} + \beta_2 o.con_{it} + \beta_3 in\ stitown_{it} + \beta_4 b.size_{it} + \beta_5 R\&D_{it} + \beta_6 log\ w_{it} + \beta_7 Age_{it} + \beta_8 size_{it} + \beta_9 leverage_{it} + \beta_{10} MTB_{it} + \beta_{11} ROI_{it} + \beta_{12} year_{it} + \beta_{13} industry_{it} + \varepsilon_{it}$$

(2)

$$export\ intensity_{it} = \beta_0 + \beta_1 perc\ indept\ dir_{it} + \beta_2 o.con_{it} + \beta_3 in\ stitown_{it} + \beta_4 b.size_{it} + \beta_5 R\&D_{it} + \beta_6 log\ w_{it} + \beta_7 Age_{it} + \beta_8 size_{it} + \beta_9 leverage_{it} + \beta_{10} MTB_{it} + \beta_{11} ROI_{it} + \beta_{12} year_{it} + \beta_{13} industry_{it} + \varepsilon_{it}$$

(3)

$$volume\ of\ export\ sales_{it} = \beta_0 + \beta_1 perc\ indept\ dir_{it} + \beta_2 o.con_{it} + \beta_3 in\ stitown_{it} + \beta_4 b.size_{it} + \beta_5 R\&D_{it} + \beta_6 log\ w_{it} + \beta_7 Age_{it} + \beta_8 size_{it} + \beta_9 leverage_{it} + \beta_{10} MTB_{it} + \beta_{11} ROI_{it} + \beta_{12} year_{it} + \beta_{13} industry_{it} + \varepsilon_{it}$$

In order to test the research models, the Chow test was first used to examine the use of the ordinary least square (OLS) or panel method. In the first model, the ordinary least square (OLS) method was confirmed. Durbin-Watson, Breusch-Pagan, frequency distribution, box, and quartile-quartile plots were used to test the underlying ANOVA assumptions. Because of the absence of one of the assumptions, the generalized least squares estimator was used. But in the second and third models, the data was a panel. After the Hausman test, the panel with random effects in the second model, and in the third model, the panel method with fixed effects were used to estimate the model's coefficients. The ability to integrate temporal and spatial effects in the second model demonstrates the model's ability to integrate effects. Consequently, it was necessary to examine the underlying ANOVA assumptions. The Breusch-Godfrey test indicated a serial correlation between model errors so that the generalized integration panel model

was used to estimate the coefficients of the model. In the third model, Godfrey's test showed a serial correlation between model errors and coefficients' estimation; a generalized fixed effects panel model was used.

Each of the variables used in these models is calculated as follows:

**Table 2.** Variables calculation

Variable name	Explanation
<i>export growth</i>	The difference between sales for the current year and the previous year divided by sales related to the previous year
<i>export intensity</i>	Export sales divided by total sales
<i>the volume of export sales</i>	Export sale divided by total assets to be homogeneous.
<i>perc indept dir</i>	The percentage of independent board members is calculated by dividing the number of non-executive members by the total number of board members.
<i>o.con</i>	The concentration of ownership is the accumulation of the second-power percentage of the ownership of institutional shareholders
<i>in stitown</i>	An institutional investor is calculated through the aggregate shareholding of institutional investors divided by the company's total shares.
<i>b.size</i>	Board size is equal to the number of its members.
<i>R</i>	The virtual variable of research and development holds 1 in institutions with research and development units and zero in other institutions.
<i>log w</i>	The labor cost logarithm is the same as the ratio of wages paid to the number of employees.
<i>Age</i>	The company's age is equal to the natural logarithm of the company's life since its inception.
<i>size</i>	In this research, annual sales' natural logarithm is considered an indicator of the company's size.
<i>leverage</i>	The financial leverage is calculated by dividing the total debt into total assets.
<i>MTB</i>	Expectations of future profitability growth are equal to the ratio of the market value of equity to its book value.
<i>Roi</i>	Return on investment is calculated by the net profits ratio (losses) to the assets' book value.

## 4. Research findings

### 4.1. Descriptive statistics of research variables

Descriptive statistics have been reviewed to summarize the collected data and recognize more population research. By comparing the standard deviations of variables, it is concluded that the institutional investor variable has the most dispersion and the least stability, and the variable of return on investment with the least standard deviation has the highest stability and sustainability during the research period. It should also be noted that 75% of companies have decentralized ownership, 18% have non-executive companies, and 12% do not have institutional investors. In this table, the first independent variable is the board of directors, with an average of 76% in the range of 0 to 1. The next independent variable is the concentration of ownership, with an average of 26% in the range of 0 to 9% ownership. The third independent variable is an institutional investor with an average of 44% and a range of 0 to 99%. Table 2 shows the descriptive statistics of the independent, dependent, and control variables of the research.

**Table 3.** Descriptive statistics

Variable name	Mean	Median	Standard deviation	Minimum	Maximum
<i>export.growth</i>	2.252	0.159	19.067	-0.998	400.721
<i>export.intensity</i>	0.212	0.102	0.262	0.00003	1.165
<i>Volume export sales</i>	0.173	0.079	0.238	0.00003	2.061
<i>perc.indept.dir</i>	0.762	0.800	0.206	0	1.000
<i>o.con</i>	0.268	0.130	0.303	0	0.979
<i>in.stitown</i>	44.309	39.945	34.277	0	98.98
<i>b.size</i>	5.032	5.000	0.251	5.000	7.000
<i>ln log.w</i>	5.021	4.984	0.882	1.495	15.078
<i>ln Age</i>	3.500	4.000	0.523	2.000	4.000
<i>Size</i>	13.882	13.703	1.381	10.958	18.936
<i>Leverage</i>	0.597	0.614	0.194	0.057	1.896
<i>MTB</i>	2.439	2.087	4.233	-27.387	87.069
<i>RoI</i>	0.147	0.131	0.140	-0.789	0.626

Below is a table of frequency of qualitative variable (R):

**Table 4.** Frequency of qualitative variables

Year	Total	Type of data	0	1
2009	98	Frequency	88	10
		Percentage	0.89	0.1
2010	98	Frequency	88	10
		Percentage	0.89	0.1
2011	98	Frequency	88	10
		Percentage	0.89	0.1
2012	98	Frequency	89	9
		Percentage	0.9	0.09
2013	98	Frequency	86	12
		Percentage	0.87	0.12
2014	98	Frequency	86	12
		Percentage	0.87	0.12
2015	98	Frequency	88	10
		Percentage	0.89	0.1

The scale of measuring some of the variables includes the nominal and ordinal scale used for qualitative variables. These variables are two-dimensional or multi-dimensional, and using mean, standard deviation, skewness, and elongation indices is not appropriate for their description. Therefore, to describe these variables, mod and frequency percentages should be used. In this research, the variable of research and development expenditures is considered as a two-dimensional variable. The percentage for a two-dimensional variable expresses how many percent of a variable's data has a code of 1 and how many percent has a code of 0.

## 5. Test Results of Research Models

### 5.1. The first model of research

In the first model, the impact of the board of directors' independence, the focus of ownership, and institutional investors on export growth are examined. It is necessary to state how these criteria will affect the export growth of the company. In this model, the F-Limer test was used to detect the method of panel data or OLS.

**Table 5.** Diagnostic tests performed to select the best regression model

Test	F	Df 1	Df 2	P-value
Chow	0.963	91	574	0.579

As it is seen, the p-value of this test is more than the significance level of 0.05, which means that the panel data cannot be used, and the ordinary least squares method must be used for fitting the model to the data. After reviewing ANOVA Assumptions, if at least one of these assumptions is not available, then the generalized regression model should be used. Then the Durbin-Watson test was used to determine the first-order autocorrelation.

**Table 6.** Durbin-Watson test

( $H_0$ )	DW	Test statistic	Test results
first-order autocorrelation	1.956	0.262	$H_0$ is not rejected first-order autocorrelation

According to the Durbin-Watson test result shown in Table 6, since the calculated p-value is greater than the error level of 5%, there is no error between the first-order autocorrelation model. The Breusch-Pagan test is then followed up to verify that the variance of the errors is constant.

**Table 7.** Breusch-Pagan test

( $H_0$ )	Test statistic	Df	P-value	Test results
homogeneity of variance	21.164	18	0.271	$H_0$ is not rejected (Heteroscedastic)

According to the Breusch-Pagan test, because the calculated p-value is larger than the error rate of 5%, the  $H_0$  hypothesis is not rejected, so the model error variance is constant. The frequency distribution, box, and quartile-quartile plots were also used to check the errors' normality. The results show that the errors do not follow the normal distribution. Therefore, the regression model should be fitted, and the generalized least squares method should be used to estimate the parameters. Also, the chi-square test was used to examine the significance of the model so that the p-value of this statistic in the model is less than 0.05, and we can confirm the significance of Model No. 1 with 95% confidence.

**Table 8.** Significance test of the regression model

Model	Test statistic	Df	P-value
1	6886	18	<0.001

Thus, in Model No. 1, among the relevant hypotheses, only the fourth hypothesis of the impact of ownership concentration on export growth was approved, and none of the first and seventh hypotheses were approved.

## 5.2. The second model of research

The second model examines the second, fifth, and eighth hypotheses, which respectively relate to the impact of the board's independence, the concentration of ownership, and institutional investor on the export sales intensity. In this model, the p-value of the f-Limer test is less than 5%, so the panel data method was approved.

The Hausman test is used to test the suitability of a model with fixed or random effects.



According to the Hausman test results, and the p-value is greater than the error level of 0.05, the H0 hypothesis is not rejected at the 0.05 error level. Consequently, it is necessary to estimate the panel model with random effects. The results of the test of the integration of temporal and spatial effects are shown in table 11.

**Table 9.** The results of estimating coefficients of the regression model (1) using the GLS method

	Estimate	Std. Error	t-statistic	P-value
(Intercept)	-13.034	18.841	-0.692	0.489
<i>perc.indept.dir</i>	3.643	3.744	0.973	0.331
<i>o.con</i>	14.841	6.594	2.251	0.025
<i>in.stitown</i>	-0.078	0.058	-1.337	0.182
<i>b.size</i>	1.180	2.999	0.393	0.694
<i>factor11</i>	-1.242	2.940	-0.422	0.673
<i>log.w</i>	-0.383	0.906	-0.423	0.672
<i>Age</i>	0.356	1.462	0.243	0.808
<i>size</i>	0.357	0.676	0.528	0.598
<i>leverage</i>	4.103	5.823	0.705	0.481
<i>MTB</i>	-0.052	0.176	-0.296	0.767
<i>Rol</i>	4.307	8.387	0.514	0.608
Year Fixed Effect	Yes			
Industry Fixed Effect	Yes			

**Table 10.** The results of the F-Limer test

Test	Fisher statistic	Df 1	2Df	p-value
F-Limer	10.728	91	575	<0.001

**Table 11.** The results of the Hausman test

Test	Test statistic	Df	P-value
Hausman	11.726	12	0.468

**Table 12.** The results of the test of the integration of Simple effects

Zero hypotheses ( $H_0$ )	Fisher statistic	p-value
There is the ability to integrate temporal effects.	0.794	0.427
There is the ability to merge spatial effects.	24.712	<0.001
There is the ability to integrate temporal and spatial effects.	24.712	<0.001

Since the p-value of the temporal effects test (0.427) is greater than the error rate of 5%, there is the possibility of integrating the model's effects; therefore, the generalized integration panel model should be applied for fitting the regression model. In the panel model, the lack of serial correlation between model errors is one of the underlying assumptions; therefore, the Breusch-Godfrey test was used.

**Table 13.** Breusch-Godfrey / Wooldridge Test

Zero hypotheses ( $H_0$ )	Test statistic	Df	P-value
The lack of serial correlation between errors	234.042	6	<0.001

The chi-square test's significance was also confirmed and concerning the p-value of less than 5%.

**Table 14.** Test of the significance of the regression model

Model	Test statistic	Df	P-value
second model	-371.472	21	<0.001

In the second research model, none of the hypotheses were approved.

**Table 15.** Results of estimating coefficients of the regression model (2) using the generalized panel method

	Estimate	Std. Error	t-statistic	P-value
(Intercept)	-0.495	0.298	-1.661	0.097
<i>perc.indept.dir</i>	-0.061	0.037	-1.627	0.104
<i>o.con</i>	-0.021	0.097	-0.22	0.826
<i>in.stitown</i>	-0.0001	0.0001	-0.228	0.82
<i>b.size</i>	0.051	0.045	1.129	0.259
<i>factorII</i>	-0.005	0.042	-0.108	0.914
<i>log.w</i>	0.014	0.009	1.617	0.106
<i>Age</i>	0.065	0.031	2.082	0.037
<i>Size</i>	0.007	0.012	0.583	0.56
<i>Leverage</i>	-0.062	0.07	-0.89	0.373
<i>MTB</i>	-0.003	0.002	-2.001	0.045
<i>RoI</i>	0.062	0.091	0.686	0.492
Year Fixed Effect	Yes			
Industry Fixed Effect	Yes			

### 5.3. The third model of research

In the third model, it was still necessary to consider whether the board of directors' independence, ownership concentration, and institutional investors could significantly affect export sales volume. The F-Limer test was used to select a panel or OLS data method. Given that the p-value of this test is less than 5%, the use of the panel data method was approved.

**Table 16.** The results of the F-Limer test

Test	Fisher statistic	Df 1	2Df	p-value
F-Limer	8.478	91	575	<0.001

The Hausman test was used to select the appropriate model between the panel model with fixed and random effects.

**Table 17.** The results of the Hausman test

Test	Test statistic	Df	P-value
Hausman	27.958	12	0.006

The Hausman test results show that the p-value is less than the error level of 0.05, so the H0 hypothesis is not accepted at the 5% error level and is necessary to estimate the panel model with constant effects. One of the panel model's underlying assumptions is that there should be no serial correlation model errors. The Breusch-Godfrey test has been used to examine the serial correlation, and the results are shown in Table 18.

**Table 18.** Breusch-Godfrey Test

Zero hypotheses ( $H_0$ )	Test statistic	Df	P-value
The lack of serial correlation between errors	108.524	6	0.001>

In this test, a p-value of less than 5% error level indicates serial correlation. Therefore, the generalized fixed effects panel model should be used to estimate the coefficients of the model. It is necessary to examine the whole model's significance before examining the variables and checking the hypotheses' confirmation or disapproval. This is done by calculating the chi-square and p-value statistics of this statistic.

**Table 19.** Test of the significance of the regression model

Model	Test statistic	Df	P-value
third model	-410.830	21	<0.001

Considering the p-value calculated for this statistic, we can confirm the significance of model number 3 with 95% confidence. Only the ninth hypothesis was confirmed in the third research model, and none of the third and sixth hypotheses were approved.

**Table 20.** Results of estimating coefficients of the regression model (3) using the generalized panel method

	Estimate	Std. Error	t-statistic	P-value
(Intercept)	-0.506	0.286	-1.769	0.077
<i>perc.indept.dir</i>	-0.055	0.037	-1.504	0.133
<i>o.con</i>	0.088	0.093	0.947	0.344
<i>in.stitown</i>	-0.001	0.001	-1.789	0.074
<i>b.size</i>	-0.012	0.043	-0.289	0.772
<i>factorI1</i>	-0.015	0.040	-0.374	0.709
<i>log.w</i>	0.012	0.009	1.345	0.179
<i>Age</i>	0.056	0.029	1.970	0.049
<i>Size</i>	0.020	0.012	1.658	0.097
<i>Leverage</i>	0.130	0.068	1.931	0.053
<i>MTB</i>	-0.002	0.002	-1.294	0.196
<i>RoI</i>	0.430	0.089	4.847	<0.001
Year Fixed Effect	Yes			
Industry Fixed Effect	Yes			

## 6. Discussion and Conclusion

Considering that in theoretical foundations, the emphasis is placed on the impact of corporate governance mechanisms on company performance, in this research, it was expected that these mechanisms could improve company performance and export performance, so that the export level of Iran; But only in two hypotheses, the effectiveness of these mechanisms was accepted.

In the fourth hypothesis, the impact of ownership concentration on export growth was confirmed. According to the effective monitoring hypothesis, major shareholders' existence, in comparison with minority shareholders, impacts managers' performance due to their expertise and experience. The company's sales are improving in global markets when the company's concentration of ownership increases, managers in such powerful owners prefer to avoid the company's abuse to their satisfaction.

In the ninth hypothesis, the institutional investor's influence on the volume of export sales was accepted. Given that there is a conflict of interest in the firm between the manager and the owner, this group of investors can control the firm's management due to adequate control over the assets and reduce the agency's cost. Therefore, their presence will lead to a change in managers' behavior and, consequently, affect the company's performance and particularly affect export performance. Therefore, based on this study's findings, only two corporate governance mechanisms can affect two aspects of the company's export performance.

## References

- Baltagi, Badi Hani. (2013). *Econometric Analysis of Panel Data*. John Wiley & Sons Inc., 5th Edition, New York, USA.
- Berle, A. and Means, G. (1932). The modern corporation and private property. ." University of Pennsylvania Law Review and American Law Register
- Bhagat, S. and Black, B. (1999). The Uncertain Relationship Between Board Composition and Firm Performance. *The Business Lawyer*, 54(3), 921-963. <https://www.jstor.org/stable/40687871>
- Bushee, B.J. (1998). The influence of institutional investors on myopic R&D investment behavior. *The Accounting Review*, 73(3), 305-333.

- <https://www.jstor.org/stable/248542>  
Chaganti, R. Damanpour, F. (1991). Institutional ownership, capital structure, and firm performance. *Strategic Management Journal*, 12 (7), 479–491  
<https://www.jstor.org/stable/2486521>.
- Chang, C. (2009). The Corporate Governance Characteristics of Financially Distressed Firms: Evidence from Taiwan. *The Journal of American Academy of Business*, 15(1), 125-132.
- Claessens, S. and Simeon, D. (1999). Ownership concentration and Corporate Performance in the Czech Republic. *Journal of Comparative Economics*, 27(3), 498-513. <https://doi.org/10.1006/jcec.1999.1598>
- Clay, D.G. (2001). Institutional Ownership, CEO incentives, and firm value. Ph.D. Dissertation, University of Chicago
- Coenen, M.H.J. (2015). Ownership Structure and Firm Performance: An Analysis of Publicly Listed Firms in The Netherlands, University of Twente Student Theses, <http://purl.utwente.nl/essays/67377>
- Davis , E.P. (2002). Institutional investors, corporate governance and the Performance of the corporate sector. *Economic Systems*, 26(3), 203–229. [https://doi.org/10.1016/S0939-3625\(02\)00044-4](https://doi.org/10.1016/S0939-3625(02)00044-4)
- Del Guercio, D. Hawkins, J. (1999). The motivation and impact of pension fund activism. *Journal of Financial Economics*, 52(3), 293–340. [https://doi.org/10.1016/S0304-405X\(99\)00011-2](https://doi.org/10.1016/S0304-405X(99)00011-2)
- Elsayed, Kh. and Wahba, H. (2013). Reinvestigating the relationship between ownership structure and inventory management: A corporate governance perspective. *Int. J. Production Economics*, 143(1), 207-218. <http://www.elsevier.com/locate/ijpe>
- Forsberg, R. (1989). Outside Directors and Managerial Monitoring. *Akron Business and Economic Review*, 20, 24-32.
- Gedajlovic, E. and Shapiro, D.M. (2002). Ownership Structure and firm Profitability in Japan. *The Academy of Management Journal*, 45(3), 565-575. <https://doi.org/10.2307/3069381>
- Hambrick, D.C. and Jackson, E.M. (2000). Ownership Structure, Boards and Directors. *Paper presented at the August meeting of the Academy of Management*, Toront
- Butt, S.A. and Hasan, A. (2009). Impact of ownership structure and corporate governance on capital structure of Pakistani listed companies. *International Journal of Business and Management*, 4(2), 50-57. <https://ssrn.com/abstract=1732511>
- Ho, C. and Williams, S.M. (2003). International comparative analysis of the association between board structure and the efficiency of value added by affirm from its physical capital and in intellectual capital resources, *The International Journal of Accounting*, 38(4), 465-491. [http://www.sciencedirect.com/science/article/pii/S0020-7063\(03\)00069-4](http://www.sciencedirect.com/science/article/pii/S0020-7063(03)00069-4)
- Jensen, M.C. (1986). agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323-329. <https://www.jstor.org/stable/1818789>
- Kaplan, S.N. and Minton, B.A. (1994). Appointments of outsiders to Japanese boards: Determinants and implications for managers. *Journal of Financial Economics*, 36(2), 225-258. [https://doi.org/10.1016/0304-405X\(94\)90025-6](https://doi.org/10.1016/0304-405X(94)90025-6)
- Kapopoulos, P. and Lazaretou, S. (2007). Corporate Ownership Structure and Firm Performance: Evidence from Greek Firms. *Corporate Governance: an International Review*, 15(2), 144-158. <https://doi.org/10.1111/j.1467->

[8683.2007.00551.x](https://doi.org/10.1016/S0890-8389(03)00014-3)

- Koh, P.S. (2003). On the association between institutional ownership and aggressive corporate earnings management in Australia. *The British Accounting Review*, 35(2), 105-128. [https://doi.org/10.1016/S0890-8389\(03\)00014-3](https://doi.org/10.1016/S0890-8389(03)00014-3)
- Leng, A.Ch.A. (2004). The Impact of Corporate Governance practices on Firms' Financial Performance: Evidence from Malaysian Companies. *ASEAN Economic Bulletin*, 21(3), 308-318. <https://www.jstor.org/stable/25773828>
- Leung, S. and Horwitz, B. (2009). Corporate governance and firm value during a financial crisis. *Review of Quantitative Finance and Accounting*, 34(4), 459-481. <https://ssrn.com/abstract=1415944>
- Lin, B. and Hinson, W. (1998). Exporting assistance and guidelines for exporters: a regional survey. *Management Decision*, 36(7), 433-440. <https://doi.org/10.1108/00251749810227011>
- Loderer, C. and Martin, K. (1997). Executive stock ownership and performance Tracking faint traces. *Journal of Financial Economics*. 45(2), 223-255. [https://doi.org/10.1016/S0304-405X\(97\)00017-2](https://doi.org/10.1016/S0304-405X(97)00017-2)
- Maug, E. (1998). Large shareholders as Monitors: Is There A Trade-Off between Liquidity and control?. *The Journal of Finance*, 53(1), 65-98. <https://doi.org/10.1111/0022-1082.35053>
- McConnell, J.J. and Servaes, H. (1990). Additional Evidence on Equity Ownership and Corporate Value. *Journal of Financial Economics*, 27(2), 595-612. [https://doi.org/10.1016/0304-405X\(90\)90069-C](https://doi.org/10.1016/0304-405X(90)90069-C)
- Morgan, N.A. Kaleka, A. and Katsikeas, C.S. (2004). Antecedents of export venture performance: A theoretical model and empirical assessment. *Journal of Marketing*, 68(1), 90-108. <https://www.jstor.org/stable/30161977>
- Muth, M. and Donaldson, L. (1998). Stewardship theory and board structure: a contingency approach. *Corporate Governance*, 6(1), 5-28. <https://doi.org/10.1111/1467-8683.00076>
- Omran, M.M. Bolbol, A. and Fatheldin, A. (2008). Corporate Governance and Firm performance in Arab Equity markets: Does ownership concentration matter? . *International Review of law and Economics*, 28(1), 32-45. <https://doi.org/10.1016/j.irle.2007.12.001>
- Ramsay, I. and Blair, M. (1993). Ownership concentration, institutional investment and corporate governance: An empirical investigation of 100 Australian Companies. *Melbourne University Law Review*, 19 (1), 153-194. <https://ssrn.com/abstract=922246>
- Shleifer, A. and Vishny, R.W. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737-783. <https://doi.org/10.1111/j.1540-6261.1997.tb04820.x>
- Smith, M.P. (1996). Shareholder activism by institutional investors: Evidence From CalPERS. *The Journal of Finance*, 51(1), 227-252. <https://doi.org/10.2307/2329308>
- Tsai, H. and Gu, Zh. (2007). The Relationship Between Institutional Ownership and Casino Firm Performance. *International Journal of Hospitality Management*, 26(3), 517-530. <https://doi.org/10.1016/j.ijhm.2006.02.003>
- Velury, U. and Jenkins, D.S. (2006). Institutional Ownership and the Quality of Earnings. *Journal of Business Research*, 59(9), 1043-1051. <https://doi.org/10.1016/j.jbusres.2006.05.001>
- Wang, W.K. Lu, W.M. and Lin, Y.L. (2012). Does corporate governance play an

- 
- important role in BHC performance? Evidence from the U.S. *Economic Modeling*, 29(3), 751-760. <https://doi.org/10.1016/j.econmod.2012.01.021>
- Hermalin, B.E. Weisbach, M.S. and (2003). Board of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature. *Center for Responsible Business*, 9(1), 1-20. <https://escholarship.org/uc/item/7tm3j0hp>
- Xu, X. and Wang, Y. (1999). Ownership Structure and corporate governance In Chinese Stock companies. *China Economic Review*, 10(1), 75-98. [http://www.sciencedirect.com/science/article/pii/S1043-951X\(99\)00006-1](http://www.sciencedirect.com/science/article/pii/S1043-951X(99)00006-1)
- Zahra, Sh.A. and Pearce, J.A. (1989). Boards of Directors and Corporate Financial Performance: A Review and Integrative Model. *Journal of Management*, 15 (2), 291-334. <https://doi.org/10.1177/014920638901500208>