



Investigate the relationship between corporate governance mechanisms and abnormal stock returns of listed companies in Tehran stock exchange

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ABSTRACT

The present article examined the relationship between certain corporate governance variables include the percentage of outside directors and audit quality and abnormal stock returns. The main objective was to evaluate the effect of some forms of corporate governance on abnormal stock returns to see whether these variables make any devaluation and negative returns in the market or not. The methodology was based on the application of panel data and testing the hypotheses through the analysis of multiple regression. The results obtained from 71 companies listed on Tehran Securities Exchange from 2007 to 2013 represented a significant negative relationship between board outside directors and abnormal returns. It was also revealed that there is a significant relationship between audit quality and abnormal return.

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INTRODUCTION

Hoping to acquire more wealth, investors venture to invest. An important factor in investors' decision-making is the rate of stock return. Return on the investment process is a driving force that motivates and rewards investors. Indeed, every investor should first make sure that by the first stage the main investment will return and then the expected return will be obtained to be able to decide on investment. A strong, stable and entrepreneur leadership in a company has a major effect on stock prices. According to the hypothesis of a conflict of interest, sometimes managers can expropriate the assets out of a company's ownership for the benefit of related parties, and exercise earnings management as a cover. In such cases the regulatory mechanisms of corporate governance can convert these transactions to efficient ones.

Literature Review

Corporate Governance

The term Governance has a root in the Latin term Governare which refers to steering a ship. Corporate governance includes laws, regulations, structures, processes, cultures and systems that achieve the following goals:

- Accountability
- Transparency
- Justice
- Observing the rights of stakeholders

Internal Studies

Ahmadpour, et al (2001) examined the impact of outside directors and institutional investors as the regulatory

instruments of corporate governance on earnings management. They sought to determine whether or not these instruments can limit opportunistic behaviors of earnings management. The results showed that, when motivation for manipulation of earnings is high, major outside directors and institutional investors, have a poor role in the reducing the abnormality of abnormal accruals.

Mashayekh and Esmaili (2006) examined the relationship between earnings quality and two aspects of corporate governance (number of outside directors and board members ownership percentage). They concluded that the number of outside directors and board members ownership percentage does not have an important role in improving the earnings quality of companies listed on Tehran Stock Exchange.

Nourvash, et al.(2009) examined the relationship of corporate governance mechanisms and costs of representative of companies accepted to Tehran Securities Exchange. The results revealed that representative costs were defined as a function of the interaction between the company's growth opportunities and free cash flow. In addition, the index of Q Tobin was used as a measure of growth opportunities. The results revealed the significance and active influence of institutional investors on management decisions and the reduction of conflict of interests between managers and owners.

Alavi Tabari, Khalifeh Soltan and Shahbandian (2009) examined the quality of earnings forecast and audit quality. The results showed that, audit quality characterized by the size of audit firms and industrial specialization of auditor has a relationship with earnings forecast. The

evidence indicated that companies that are audited by auditors specialized in industry have higher earnings forecast accuracy and lower earnings forecasts bias. The auditing firm size was negatively related to the earnings forecast bias.

Mehrani and Safarzadeh (2011) indicated that corporate governance is negatively and significantly correlated with standards accruals quality, earnings persistence, earnings smoothing and conservatism and positively and significantly correlated with earnings forecast and timelines. However, no significant relationship was found between corporate governance and of value relevance of earnings.

Mehrani, Beik Boshrooyeh and Shahidi (2013) examined the relationship between some corporate governance mechanisms and financial reporting quality among 100 companies from 2001 to 2010. They concluded that a significant relationship exist between corporate governance and financial reporting quality. This means that an increase in corporate governance variables the earnings quality indicators improve and the quality of financial reporting increases.

Foreign Studies

In this Hunk Lewis (2005) found, larger audit firms usually offer better services than smaller institutions. But sometimes it was found that smaller audit firms offer better advice to their clients.

Kangaratan et al (2007) Effect of good corporate governance to address the symmetry of America stock market information using the independence of the board, activities, board of directors and the board of directors as indicators for corporate governance, said that all good corporate governance information asymmetry in the declaration reduce profits.

China Chang et al (2008) The relationship between the quality and reputation of the firm's auditors examined the financial decisions. Their model showed evidence that financial decisions affect the quality and reputation of auditors and the audit showed that the high quality of the effect of market conditions on the financial decisions of the companies concerned and also reduces their capital structure.

Research Questions

According to the theoretical foundations, the research questions are proposed as follows:

1. Is there any statistically significant relationship between percentage of outside directors and abnormal stock returns?
2. Is there any statistically significant relationship between audit quality and abnormal stock returns?

Research Hypotheses

To answer the research questions, the following hypotheses have been developed:

H1: There is a statistically significant relationship between the percentage of outside directors and abnormal stock returns.

H2: There is a statistically significant relationship between the company's audit quality and abnormal stock returns.

Research Population

The population of the study included all companies listed in Tehran Securities Exchange that maintained their membership on the Securities Exchange since April 2007 to March 2013.

Sample and sampling

In this study an appropriate representative sample of the target population was first selected through the screening test. For this purpose, the following inclusion criteria were considered.

- The company should be adopted before April 2007 at Tehran Stock Exchange and be active by the end of March 2013.
- The company should not have any fiscal year change during the mentioned period. The fiscal year should end in March. The reason is provide the ability to compare data at different times.
- Data should be available for the research.
- The company should not be listed as investment companies or financial intermediary including insurances and banks, since the nature and classification of financial statement items of this group of companies is different from other companies.

In the present study due to the limitations listed, 71 companies were selected as the sample to be investigated.

Research Variables

variable	Symbol variable nature of the measure	Type	Measurement Method
Culmative abnormal returns	CAR	Dependent	This variable is calculated by the difference between the monthly returns of the company stock and the average market return
Free Cash Flow	FCF	Independent	The company's free cash flow is calculated as follows: FCF represents free cash flows, CFO represents operating cash flows and represents and FCInv represents capital expenditure (net investments in fixed assets) (Moradzadeh Fard et al., 210).
Audit quality	Big1	Independent	It is a dummy variable, and if the audit organization is the company's auditor, it equals 1; otherwise it equals zero.
Percentage of Outside director	OUTD	Independent	This variable is shown as a percentage and represents non-executive members of the total number of board members.
Firm size	SIZE	Control	This variable is calculated by the natural logarithm of the total of the company's assets value.
leverage	LEV	Control	This variable is calculated by the ratio of total debt book value to total assets book value.
Book value to Market value	BTM	Control	This variable is calculated by the ratio of equity book value to market value.
Turn over ratio	Turn over	Control	This variable is calculated by the ratio of transaction lots to total company's shares in a certain period.
Return on assets	ROA	Control	This variable is calculated by the ratio of net profit divided by total assets book value.

Findings*Descriptive Statistics*

Descriptive statistics for the variables are provided in Table 1. The results presented in Table 1 provide an overview of the status of research data.

Table (1): descriptive statistics research

	CAR	AUDITQUALITY	FCF	BTM	LEV	OUT_DIR	ROA	SIZE	TURNOVER
Mean	-0.234245	0.285714	0.044588	0.776499	0.651053	0.636318	0.098491	13.81586	0.088227
Median	-0.220000	0.000000	0.038000	0.620000	0.660000	0.600000	0.090000	13.53000	0.049000
Maximum	1.250000	1.000000	0.692000	4.350000	0.980000	1.000000	0.610000	18.44000	0.759000
Minimum	-1.370000	0.000000	-0.615000	0.050000	0.030000	0.200000	-0.290000	11.72000	0.000000
Std. Dev.	0.486516	0.452209	0.139684	0.569542	0.171954	0.161192	0.106003	1.315253	0.110358
Skewness	0.294635	0.948683	0.059048	1.769173	-0.466226	-0.386230	0.677253	1.163801	2.387956
Kurtosis	3.247350	1.900000	5.601776	8.288276	3.754829	3.046782	5.976956	4.289458	10.21759
Jarque-Bera	8.457700	99.60708	139.9032	838.3923	29.62421	12.40190	221.5161	146.6240	1551.116
Probability	0.014569	0.000000	0.000000	0.000000	0.000000	0.002028	0.000000	0.000000	0.000000
Sum	-116.4200	142.0000	22.07100	385.9200	321.6200	316.2500	48.95000	6866.480	43.84900
Sum Sq. Dev.	117.4021	101.4286	9.638794	160.8917	14.57705	12.88756	5.573368	858.0251	6.040765
Observations	497	497	495	497	494	497	497	497	497

Correlation Coefficients

To detect the presence and direction of a linear relationship between variables, Pearson Correlation Coefficients was performed. The results are provided in Table (2).

Balanced sample (listwise missing value deletion)

Included observations: 492

Sample: 2007 2013

Date: Time:

variance Analysis: Ordinary

According to the above values indicating the descriptive statistics of the variables it could be argued that there is an average distribution in all variables which could be deduced from the standard deviation. In addition, based on the mean and median values, it is concluded that all variables have relative symmetry.

Correlation Probability	CAR	AUDITQUALITY	FCF	BTM	LEV	OUT_DIR	ROA	SIZE	TURNOVER
CAR	1.000000								
AUDITQUALITY	0.023134 0.6087	1.000000							
FCF	0.319691 0.0000	-0.070949 0.1160	1.000000						
BTM	-0.070074 0.1206	0.046495 0.3034	-0.205836 0.0000	1.000000					
LEV	-0.217211 0.0000	0.081707 0.0702	-0.464132 0.0000	-0.062942 0.1633	1.000000				
OUT_DIR	-0.060148 0.1829	-0.203975 0.0000	0.076820 0.0887	-0.065336 0.1479	-0.009114 0.8402	1.000000			
ROA	0.330630 0.0000	-0.058736 0.1934	0.590038 0.0000	-0.187057 0.0000	-0.572369 0.0000	0.066421 0.1412	1.000000		
SIZE	-0.073224 0.1048	0.465480 0.0000	-0.041850 0.3543	0.078469 0.0821	0.168490 0.0002	0.013725 0.7614	-0.025620 0.5708	1.000000	
TURNOVER	0.026586 0.5563	0.112015 0.0129	-0.002607 0.9540	-0.003186 0.9438	0.056319 0.2124	0.090485 0.0448	0.000149 0.9974	0.111866 0.0130	1.000000

As seen in Table (2), the correlation coefficient between the independent variables in the model indicates the lack of high multicollinearity.

Results of the first hypothesis:

Case	Description
Hypothesis reviews	first hypothesis
Question assumptions	Is there any statistically significant relationship between percentage of outside directors and abnormal stock returns?
Target hypothesis	Investigating whether there is any statistically significant relationship between percentage of outside directors and abnormal stock returns.
Models used to test the first hypothesis	$CAR = \alpha_1 + \alpha_2 FCF + \alpha_3 OUTSIDE\ DIRECTOR + \alpha_4 AUDIT\ QUALITY + \alpha_5 SIZE + \alpha_6 LEV + \alpha_7 BTM + \alpha_8 TURNOVER + \alpha_9 ROA + \epsilon$
Variables	<p><i>Independent variables:</i></p> <p>percentage of outside directors</p> <p><i>Dependent variable :</i></p> <p>Culmative abnormal return</p>
Test	<p><i>Durbin-Watson statistic (the assumption of autocorrelation between the sentences of the remaining models)</i></p> <p>F statistic Fisher assumption of significant adoption of the model (there was a significant linear relationship between independent and dependent variables)]</p>
The results of the estimation model	<p><i>Variable percentage of outside directors: -0.292</i></p> <p><i>Significant level of percentage of outside directors: 0.016</i></p>
The results of research	There is a significant negative correlation between percentage of outside directors and abnormal stock returns.

The results of the first hypothesis indicated a significant negative correlation between outside directors and abnormal stock returns.

Results of the second hypothesis:

Case	Description
Hypothesis reviews	second hypothesis
Question assumptions	Is there any statistically significant relationship between audit quality and abnormal stock returns?
Target hypothesis	Investigating whether there is any statistically significant relationship between audit quality and abnormal stock returns.
Models used to test the first hypothesis	$CAR = \alpha_1 + \alpha_2 FCF + \alpha_3 OUTSIDE\ DIRECTOR + \alpha_4 AUDIT\ QUALITY + \alpha_5 SIZE + \alpha_6 LEV + \alpha_7 BTM + \alpha_8 TURNOVER + \alpha_9 ROA + \epsilon$
Variables	<p><i>Independent variables:</i></p> <p>audit quality</p> <p><i>Dependent variable :</i></p> <p>Culmative abnormal return</p>
Test	<p><i>Durbin-Watson statistic (the assumption of autocorrelation between the sentences of the remaining models)</i></p> <p>F statistic Fisher assumption of significant adoption of the model (there was a significant linear relationship between independent and dependent variables)]</p>
The results of the estimation model	<p><i>Variable audit quality: 0.077</i></p> <p><i>Significant level of audit quality: 0.168</i></p>
The results of research	There is no significant relationship between audit quality and abnormal stock returns.

The results of the second hypothesis indicated no significant relationship between audit quality and abnormal stock returns.

Practical suggestions

A. Training managers and stakeholders can help the implementation of proper corporate governance. Shareholders should be aware of the benefit of the existence of independent outside directors on the board, the audit committee, institutional investors etc. which are among the standards of corporate governance.

B. Since the quality of national legal systems facilitates related standards of corporate governance by strong laws protecting investors who are in normally contact with broader and deeper capital markets, more dispersed shareholders and more efficient allocation of financial resources, it is suggested that more attention be paid to this issue.

C. Obliging the listed companies to develop a comprehensive and unified form for annual reporting, which includes all financial, non-financial, governance and future predictions information etc. needed for of market decisions, leads to transparency of information and the quality of research.

D. Separating the roles of chief director and CEO is one of the ways for reducing the problems of representation.

E. It is suggested that the Securities and Exchange Organization applies a coherent system to assess the quality of corporate governance of listed companies.

F. It is suggested that more corporate governance information disclosure is conducted through notes or other instruments, so as to ensure the users of financial statements and quality of information.

Suggestions for Future Research

A. Because the corporate governance political theory asserts that without recognizing the central role of government the developments in corporate governance could not be understood, it would be better to induct research studies on the corporate governance political theory and the value associated with corporate governance.

B. Future research are suggested to study other variables such as the size of the board, the number of board meetings, the board of directors' sex, age, holding or not-holdings shares research costs etc. as independent variables and the their relationships with abnormal stock returns.

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