

# A Review of the Relationship between the Structure of Corporate Governance and Financial Distress (Financial Crisis) In Companies Listed In Tehran Stock Exchange.



Mehdi Mardani<sup>1</sup>, Reza Fallah<sup>2</sup>, Reza Golestani<sup>3</sup>

<sup>1</sup>Department of Accounting, Ayatollah Amoli Branch, Islamic Azad University, Amol, Iran

## ARTICLE INFO

## ABSTRACT

Many different theories exist considering the relationship between the structure of corporate governance and financial distress (crisis); several empirical articles have, also, been written investigating the factors affecting the relationship between the structure of corporate governance and financial distress. The current research intends to investigate the effect of the relationship between the structure of corporate governance and financial distress (crisis) in companies listed in Tehran Stock Exchange. This study is a descriptive-inferential research; descriptive statistics was used to describe the research sample population under study while inferential statistics was used to analyze the data associated with the research hypotheses. Out of 120 companies, 91 companies were selected as the research sample population based on Cochran's Sample Size Formula. Data collection was done through document analysis of the financial statements provided by the companies listed in Tehran Stock Exchange. The results of the present research indicates that there was a statistically significant positive relationship between the 'independence of the directing board', 'CEO Duality', and 'financial distress (crisis)' in the Investment Market of Iran; whereas, there was a statistically significant negative relationship between 'institutional investment', 'director ownership', 'the number of the Audit Committee members', and 'financial distress (crisis)'. Furthermore, the significance level of the effects of the control variables namely the 'size' and the 'financial leverage' of the company are indicative of a statistically significant relationship between these two variables and 'financial distress' in companies. However, there was not any statistically significant relationship between the 'age' of the company and 'financial distress'

corresponding Author:

**Mehdi Mardani<sup>1</sup>**

E-mail

:mehdimardani82@gmail.com

**KEYWORDS:** *Corporate Governance; Financial Distress (Crisis); Financial Leverage Ratio; Exchange.*

## INTRODUCTION

Corporate governance is one of the critical issues in Monetary and Financial firms. Lack of adequate attention to applying appropriate corporate governance in Banks has been identified

as the main reason of financial crisis during 2007-2008. One of the most important issues discussed in corporate governance is enhancing the efficiency of the directing board. The companies' directing board should maximize their efficiency

and profitability in the long run by monitoring the performance of executives and respecting the rights of all the beneficiaries (shareholders) of the company. In his study on the Listed Banks in Indonesia Stock Exchange, Rachman (2014) found that the mechanisms of corporate governance including the number of the meeting held by the directing board, Audit Committee and internal auditors had a statistically significant positive effect on the quality of financial reporting of banks.

Considering the spread of the scope of public ownership in companies and business institutions as beneficiaries (whether familiar or unfamiliar with the financial issues and its legal aspects), the managers of the companies, more than ever, commit themselves to accountability to protect the interests of the investors. Today, due to the calamitous financial crisis and distress of the companies in different countries worldwide, one of the major considerations and mechanisms in companies in the field of management, monitoring and supervision on the companies' affairs, in Micro and Macro levels, is the formation of Audit Committees.

The Audit Committee, as a monitoring tool for the directing board, provides more opportunities to address and assess the issues of financial reporting and internal auditing in companies. Research has shown that formation and application of audit committees is effective in preventing illegal actions, enhancing the process of financial reporting as well as providing reliable financial reports (Kashiri & Yazdani, 2013).

The constant relationship between the internal auditors and audit committee can potentially enhance corporate governance. The independence of the internal auditors gets stronger as the financial information is directly delivered to the audit committee. Due to the fact that internal auditors are the main inseparable part of the audit committee, their critical role should not be neglected i.e. employing internal auditors need to be regarded. The audit committee can enhance their efficiency through employing more internal auditors and resources to better access important

information in order to increase the quality of internal monitoring and accounting policies.

Is the structure of corporate governance different between the companies which have more constrained performance or expect the risk of financial constraints (distress/crisis) and the stronger companies? Is there any causal relationship between financial distress and corporate governance? The current study has got a different approach in comparison to the preceding studies; because the prior studies investigated the relationship between corporate governance and the risk of financial distress in an environment where formal codes of corporate governance already existed. This issue addressed the main shortcomings of the companies which have the right to apply corporate governance in their firms including non-mandatory conditions and complaints against the identification of voluntary corporate governance in response to particular critical conditions in companies (Yousefi Azar, 2011).

Several preceding research has studies the direct relationship between the ratios of diverse corporate governance and financial distress in companies. Some studies are done by Abdula (2006) in Malaysian Companies, Oloumi and Guile (2001) in Canadian Companies, and Lee and Yi (2004) in Taiwanese companies. Oloumi and Guile (2001) studied the relationship between several cases of various corporate governance including the presence of outdoor-directors in the composition of the directing board, Equity ownership of the outdoor-directors, CEO Duality, and Financial distress in Canadian companies. They found that the presence of the outdoor-directors and the equity of the outdoor-directors are reversely associated with financial distress. Therefore, the presence of the CEO and the Duality of non-executive ownership of the leaders as well as the presence of outdoor shareholders reduced the risk of financial distress in Malaysian companies. The results of their research indicated that there is not any significant relationship between the independent directing board, duality and the risk of financial distress. In Taiwanese companies (Lee & Yi, 2004), the higher rates of

Stock Pledge, more control on employing the greatest shareholders and directors, and more deviation from liquidity control increase the risk of financial distress (Rouzbehi et al, 2012). Regarding the aforementioned discussions, the need for conducting research on the relationship between the structure of corporate governance and financial distress (crisis) in companies listed in Tehran Stock Exchange is sought. The current research tends to investigate the relationship between the structure of corporate governance and financial distress (crisis) in companies listed in Tehran Stock Exchange.

1. Is there any statistically significant relationship between ‘independence of directing board’ and ‘financial distress’?
2. Is there any statistically significant relationship between ‘institutional investors’ and ‘financial distress’?
3. Is there any statistically significant relationship between ‘CEO Duality’ and ‘financial distress’?
4. Is there any statistically significant relationship between ‘director ownership’ and ‘financial distress’?
5. Is there any statistically significant relationship between the ‘size of the Audit committee’ and ‘financial distress’?

## **THEORITICAL ASSUMPTIONS AND THE REVIEW OF THE RELATED LITERATURE**

### **The Definitions of Corporate Governance**

The review of the related literature indicates that the first and the oldest concept of corporate governance originates from the Latin term ‘Gubernare’ meaning ‘to direct’ and ‘to govern’ which is usually used to refer to ‘ship navigation’ implying that the first definition of corporate governance focuses more on ‘directing and governing’ rather than ‘controlling’. There are many definitions for corporate governance. The review of the related literature shows that there does not exist any agreed-upon definition for corporate governance from the limited or narrower definitions focusing on the companies and their

shareholders to more comprehensive, inclusive and broader definitions on the companies’ accountability toward a large group of shareholders and stakeholders (beneficiary) individuals and groups.

The existing definitions on corporate governance are on either extremes of a continuum. The narrower approaches to corporate governance fall across one extreme while the broader ones fall across the other extreme of the continuum. This is an old model which is expressed in terms of Agency Theory. In its broader sense, the corporate governance is considered as a network of relationships which exist not only between the company and its owners (shareholders) but also between the company and its Stakeholders (beneficiaries) including staff, customers, sellers and bondholders etc. This approach is expressed in terms of Stakeholder Theory. The extremist advocates of these approaches classify the future generation and various plant and animal species amongst the stakeholders.

In this section, several definitions are provided on corporate governance from hundreds of available definition. The definitions start with a narrower sense describing the critical role of corporate governance, moves, in the middle, to an exclusive financial perspective stressing the relationship between shareholders and management, and ultimately ends with a broader sense concerning the accountability of companies and firms towards the stakeholders (beneficiaries) and the society.

In 2004, the International Federation of Accountants (IFAC) defined corporate governance as a number of responsibilities and strategies employed by the directing board and bound management to determine the strategic direction ensuring the achievements of goals, risk control and responsible use of resources.

According to the Cadbury Committee of England (1992) corporate governance is a system by means of which companies are governed (directed) and controlled.

Corporate governance was defined by Gaderon (1995) as a set of rules monitoring the companies’ guidance and control.

Parkinson (1994) assume corporate governance as the process of supervision and control to ensure the performance of the management of the company according to the shareholders' interests.

The International Monetary Fund and the Organization of Economic Cooperation and Development (2001) define corporate governance as the structure of the relationships and responsibilities among a major group including shareholders, the members of the directing board and CEO in order to promote a better competitive performance necessary for the achievement of the primary objectives of participation.

Hap et al (1998) in their studies in Oxford University propose that corporate governance describes the internal organization and power relations (structures) of the company, duties of the board, company's ownership structure, the interaction between the shareholders and other stakeholders (beneficiaries) especially the company's labor resources and its creditors.

According to Kaiz and Wright (1993) corporate governance is the structures, processes, cultures and systems which provides successful operations in companies.

Maginson (1994) assumes that the system of corporate governance consists of a set of rules, regulations, institutions and procedures which determine how and to the interest of whom the companies are governed.

Robert Manges and Nell Mino (1995) are two theoreticians who carried out several studies on corporate governance. To them, corporate governance is a tool by means of which each community determines the direction of companies. In other words, corporate governance is the relationship between different groups determining the direction and performance of the companies. The major groups consists of shareholders, CEO and the directing board. The other groups include staff, customers, sellers, creditors and finally the community.

Wolfensohn (2000) the former president of the World Bank states that corporate governance

promotes justice, transparency and accountability in companies.

In 1999, Financial Times defined corporate governance as the relationship between the company and its shareholders in the narrower sense as well as the relationship between the company and society in the broader sense.

Terry Gary (1984) is another theoretician who believe that corporate governance is not only associated with directing the companies' operations but also is related to the directing, monitoring and controlling the performances of the executives and their accountability to all the stakeholders (beneficiaries) of the company (community).

Tia Kref defines corporate governance as the system including a set of procedures which establishes an appropriate balance between the rights of the shareholders and the needs of the directing board and management in order to govern and direct the company' affairs.

In the narrower sense, the definitions of corporate governance concentrate on the capabilities of the legal system of a country to protect the rights of the small-block shareholders (IFAC 2004; Parkinson, 1994). These definitions are mainly apt for inter-country comparisons and that the laws of each country play a crucial role in the system of corporate governance.

In the broader sense, the definitions of corporate governance focuses on a more comprehensive degree of companies' accountability to shareholders and other stakeholders. The definitions provide by Terry Gary (1984), Maginson (1994) and Robert Manges and Nell Mino (1995), which emphasize on more groups of stakeholders, are more accepted among the theoreticians. The broader definitions indicate that companies are responsible for the whole society, future generations and natural resources (environment).

In this approach, the system of the corporate governance is the intra-organizational and inter-organizational obstacles and balance leverages in the companies ensuring that the companies are



conscientiously responsible for all the fields of business activities. Nevertheless, the logic behind this view is that the interests of the shareholders can only be given on the basis of the interests of the stakeholders.

The review of the definitions and the concepts of corporate governance as well as the approaches provided by the theoreticians point out that corporate governance is a multidisciplinary concept. The ultimate objective of corporate governance is the achievement of the following four criteria in the companies:

1. Accountability
2. Transparency
3. Justice (Equity)
4. Respecting the rights of all the stakeholders (Hassas Yeganeh, 2008)

According to the Stakeholders Theory, the companies are responsible for the influencing many groups of stakeholders; thus, the voluntary disclosure of the issues which are not included in or related to financial statements is desirable for which the rate of corporate governance can be considered as an appropriate index. As a consequence, likewise the Agency Theory, the Transaction Cost Theory emphasizes the different views of the individuals in organizations from a different perspective and is sought to answer the question of how to persuade the managers and directors to prefer the company's profit to their personal interests. This is how the mechanisms of corporate governance should be enhanced (Hassas Yeganeh, 2008).

### **The Significance of Corporate Governance**

There is no doubt about the significance of corporate governance on the success of the companies and the establishment of social welfare. This issue has received many attention due to the current events. The collapse of Enron and WorldCom etc. (which led to the loss of many shareholders and stakeholders due to the poor corporate governance systems) emphasized, more than ever, the need for improving and reforming corporate governance at international level.

Holding regular and consecutive financial and insurance service commission meetings on corporate governance in France, China, Turkey and England shows the utmost significance of corporate governance to this international organizations. Discussing the role of corporate governance in governing the companies and organizations and publishing a book with the same concept by this organization indicate that corporate governances would in near future be developed as regulations and foundational conventions which companies and organizations are obliged to implement them. The reasons contributing to the establishment of an appropriate corporate governance are briefly discussed hereunder (Hassas Yeganeh & Pouria Nasab, 2005).

- ✓ First, it can be stated that the process of privatization and market-oriented investments is one of the important economic issues of the day. Privatization increases the degree of corporate governance in the sectors which was formerly owned by the government; thus, the companies have to rely on the market for funding and financing. To this end, they make attempt to be accepted and listed in stock Exchange.
- ✓ Second, due to the technological advances, liberalization of financial markets, liberalization of transactions, trades and other structural reforms especially in the area of deregulation of pricing and elimination of ownership restrictions, the process of capital allocation amongst national and international companies has got its own subtleties and complexity.
- ✓ Third, the movement of capitals from personal ownership toward corporate ownership has been increased. Thus, the role of financial intermediaries has been increased as well. In other words, the role of institutional investors has been highlighted in many countries.
- ✓ Fourth, reform programs in the area of financial problems have led to reformation

of this section of domestic and foreign economy in the country. Although the current laws and regulations of corporate governance have been replaced with the former legislations, it does not yet have the necessary mechanisms and thus has created some conflicts.

- ✓ Fifth, the increase of financial coherence at international level as well as the flow of the investment and trading have made problems at international level.

With regard to the aforementioned items, the directions by means of which corporate governance can affect economic development include the followings (Mollahoseini & Qorban Nejad, 2008):

1. Corporate governance reduced the capital costs and thus increases the value of the companies. This leads to attract more investment and employment.
2. Corporate governance enhances the operational performance of the companies and in addition to appropriate management, it efficiently allocate resources which ultimately increases the wealth of shareholders.
3. The existence of corporate governance is associated with the reduction of the risk of financial distress or crisis. This issue is important when such risks may lead to higher costs.
4. Implementing an appropriate corporate governance establishes a better relationship with stakeholders in the occupational and social interactions of the company.

Corporate governance has been one the significant issues discussed in the world of business and financial markets within the last decade so that the development of the mechanisms of corporate governance has been considered as a priority to establish appropriate corporate governance procedures for economic and financial poly makers. Rational investors would definitely address whether a proper corporate governance

enhances the performance of capital markets. In other words, to what extent the mechanisms of corporate governance create an influential balance between rights and responsibilities of the actors of the companies and management.

The main problem in implementing the mechanisms of corporate governance occurs when the shareholders disagree with the activities carried out by the company's managers. That is the shareholders cannot reach to a mutual and collective agreement about how to rule or govern the company. What is nowadays the area of concern as the backstage activities of companies in academic and professional communities is a new attention to the monitoring mechanisms in companies expressed in the literature of corporate governance (Zamani, 2010).

In response to the question of 'why' the mechanisms of corporate governance is significant, Own et al (2004) state that corporate governance is a set of monitoring mechanisms to protect and support stakeholders especially shareholders who have to solely claim the remaining value of the companies at the time of bankruptcy. Competitive markets motivate the managers and directors to efficiently use the capital and resources available at their proposal. This is only achieve through the appropriate mechanisms of corporate governance which in turn enhance the efficient performance of the companies.

Poor corporate governance prevents the normal flow of investment and the wellbeing of the investors and thus increases the investment risk. Solomon (2007) presented the following analysis about the need for harmonization of the standards of corporate governance. International order and harmony are seen in all trade issues. For instance, significant movement towards global order in the field of accounting and financial reporting has been seen in recent years. However, the board of international accounting standards move towards a complete set of approved international standards for accounting. As the result of the increase in international trade and international commercial/

business relations, it is necessary to provide a series of trading standards and activities which is internationally analogous (Solomon, 2007).

### **The Independence of the Directing Board**

The degree of the independence of the directing board is usually measure through one of the following ways. One is the tenure or non-tenure of the of two organizational positions held by the CEO at the same time that is to know whether (or not) the positions as ‘the head of the directing board’ and the highest executive position ‘CEO’ are both occupied by the same person simultaneously; the other is the number of members of the directing board (Pourzamani, 2006).

The size of the directing board and the percentage of the non-bound members of to the total members of the directing board indicate the independence of the directing board. This variable, i.e. the independence of the directing board, is measured, as the same was done by Demitropolos and Asterio (2010), and Qaemi and Shahriary (2009), calculating the ratio of the number of non-bound managers to the total members of the directing board (Saeidi et al, 2013).

### **The Institutional Investor**

There are several theories about the influential governance structures on the manipulation of profits by shareholders’ leveraging. The large-block shareholders increase the validity of the financial statements provided that they take into account, with scrutiny, the activities of the management in terms of mismanagement. In other words, the effective supervision by the large-block shareholders decrease the requirements for management rewards in order to increase efficiency and performance. If the rate of management rewards and remuneration be not subject to the rate of profit, managers are less inclined to manipulate the profit for personal benefits. The presence of large-block shareholders decreases the agency costs (Saeidi et al, 2013). Therefore, managers and directors have more incentives to take steps towards the interests of the shareholders; accordingly, the fraud in financial

reporting aroused from manipulation of accounting profit will considerably decrease.

Institutional investors have an entirely different perspective towards corporate governance from general shareholders since the institutions have predominantly more valuable criteria than general shareholders and necessary incentives for the development and supervision of investments from a professional view. Thus, institutional investors should play a more active role towards corporate governance than small-block shareholders. Furthermore, their access to the enterprise information along with their power of participation in critical decision-makings of the company should empower them to actively monitor the company’s performance so that they can reform or restructure the composition of the directing board whenever they feel the company’s performance is diminishing.

In practice, the institutional investors increasingly dominated the American markets in early 1990s. They had a more active role in corporate governance in comparison to the preceding periods. On the contrary, in other markets, as some research has shown, even the most active institutional investors did not make any attempt to implement the mechanisms of corporate governance. According to financial economists’ statements about institutional investors and corporate governance, the more the number of institutional investors in a business firm, the more they can monitor the company’s performance since they seek to create economic reputation for their own sake. Ownership per se lead to greater incentives for institutional investors so that they can more than ever influence the management through employing various decision-making procedures (Chen & Chang, 2007).

### **The Institutional Investors and Financial Distress**

Corporate governance specifically focuses on different subjects including the role of the shareholders, their relationship and their appropriate supervision over company, the accountability of the directing board, the performance and efficiency of the directing board,

the role of the specialized Committees such as Audit Committee, risk, adaptation, remuneration committee, the role of the auditors, accounting system and internal control, the autonomy or independence of the directing board, the favorable balance of power in the directing board, employment of non-bound members and protecting the interests of all the stakeholders.

Using the aforementioned components establishes stability and security in banks and other financial intermediary institutions including insurance enterprises and thus the economy in the society. The structure and composition of the directing board affect the risk management policies and objective. The more the number of the non-bound directors of the directing board, the more probable the retaliation activities against risk in companies will be. As a result, it is preferred that the audit committee discuss, examine and evaluate the risk in companies. The size of the audit committee and the autonomy (independence) of its members (who are not allowed to buy the company's stocks) has some advantages and interests for the shareholders. Considering the role of institutional investors in improving the performance of the companies and banks due to the knowledge, expertise and experience of the directors of such investors, the institutional investors are recommended to play a more active role and participation in the management and control of banks. In order to motivate these shareholders (investors) the Central Bank of Islamic Republic of Iran should offer incentive packages to the banks. Likewise, in order to use the mechanisms of corporate governance in banking system, the Central Bank of Islamic Republic of Iran should offer incentive packages for the development and implementation of corporate governance in the banking system of the country.

The incentive packages should be oriented to such a way that it grants more concessions to the banks which implement the mechanisms and components of corporate governance (such as institutional investors, audit committee, risk committee, non-bound members and transparency rank in exchange etc.) compared to other banks, after necessary inspections are done by the

auditors of the Central Bank of Islamic Republic of Iran about the performance of these committees.

With regard to the evident differences between the public and private sectors in their view of the performances of the companies and banks which aroused from the differences in the duties, responsibilities, functions and expectations in each sector, it is recommended that the percentage of the public (state) shareholding be reduced in privatized banks in order to improve the performance of the banks so that banks are directed and governed by private sector shareholders aiming at increasing the rights and the equity of the shareholders as well as cost-benefit views. Apparently if adequate supervision is imposed by the Central Bank of the Islamic Republic of Iran and appropriate incentive packages are provide for promoting and complying with the components of corporate governance as well as the development and the application of the enforcements in case of the violation of the banks, the interests of all the stakeholders including staff, managers and directors, depositors, shareholders, state, society and rivals (competitors) will be provided (Beheshti Langaroudi, 2012).

### **The Importance of the Role of Institutional Investors in Corporate Governance**

Over the last two decades, the institutional investors have been classified as the large-block shareholders. As a result, they affected the influential factors on corporate governance. According to an estimation, almost half of the common stocks of the US companies are at the disposal of the institutional investors. Institutional investors have two motives to determine their investment portfolio. The first one is 'charitable responsibilities' and the second one is 'return on higher investment'. The remuneration policies provide opportunities for the directors who seek private information to improve their performance. Finding private information and data by institutional investors is an important issue since there are many potential benefits to this in business institutions. Nevertheless, the managers of the companies with institutional investors have



to disclose more private data for the sake of the owners' consent.

Pond (1988) assumes multiple roles for institutional investors; he raised a conflicting hypothesis about the relationship between institutional investment and the company's value. Pond studied the effect of the role of institutional investors, large-block investors and their economic motivations on efficient monitoring. Efficient Monitoring Hypothesis states that with the investment of the institutional investors, more efficient monitoring and supervision can be applied and agency disputes and opinion conflicts would likely be resolved. This hypothesis predicts a positive relationship between the institutional investors and the value of the company. On the contrary, the convergence-of-interests hypothesis states that the large-block institutional investors have strategic alliances and unity with the management. This hypothesis predicts a negative relationship between the institutional investors and the value of the company. It can be concluded that institutional investors have motives to improve performances. Besides, institutional investors should be able to punish the managers who do not follow the interests of the company.

Ruikenburge (2006) believes that the most effective way to ensure the proper management of a company in the new emerging markets is probably the ownership concentration because the large-block shareholders who cautiously monitor the company's management can negotiate with the managers about how to manage the company. Is this issue important for the investor in a context where the implementation of corporate governance guidelines is voluntarily done in new emerging markets? In other words, does proper governance lead to efficient performance in capital markets? (Khodabakhshi, 2006).

### **Institutional Investors and the Composition of the Investors**

The composition of investors has got to be different from company to company. If we divide the investors of a company into two groups, one would be the small-block shareholders and general individuals who mainly rely on the information

accessible to the public people such as issued financial statements while the other group consists of the institutional investor who are provided with more valuable internal information about the company's future visions, business governance and long-term investments, by the management of the company. Tendency to concentrated ownership and its transfer from general individuals to legal institutions has influenced the mechanisms of the corporate governance in the US and the UK. In this regard, institutional investors are considered as an influential factor to homogenize the interests and preferences of the company's management and other shareholders. Nowadays, institutional investors are accounted as an inseparable part of the mechanisms of corporate governance more than ever.

Solomon (2007) believes that the agency problems caused by fragmented ownership has been decreased by the presence of the institutional investors who could concentrate the ownership since they monitor and supervise the management of the company. The institutional investors are professional shareholders who give their most attention to long-term objectives. Since investing on other companies is one of the specialized profession of these organizations, they have got enough expertise in this area. This can lead to maximizing the company's value in the long run instead of focusing on short-term profitability objectives. The existence of institutional investors makes the structure of the ownership complicated; this complexity reduces the mutual trust between the managers and shareholders. Thus, it is the duty of the institutional investors to fill the gap between the stakeholders. Due to the fact that investors play a critical role in the mechanisms of corporate governance, the various composition of investors in companies yields different effects on the performance of the companies as well as the reflection of the company's information in the market (Forouqi et al, 2009).

### **CEO Duality**

If the CEO is the president (the head) or the vice president of the directing board at the same time, he has potentially more authority at the company. Furthermore, the dual structure of the CEO role

enables him to effectively control the information accessible to the other members of the directing board. Therefore, it may prevent the effective supervision. The role of the president of the directing board is supervising the CEO. The president of the directing board has the power to control the agenda and conduct the board meetings.

In case the interests of the CEO is different from the interests of the shareholders, his (CEO's) influence and power cause problems. Based on the preceding research findings, the power and influence of the CEO does not necessarily abate the company's performance; rather, it may influence the market's perception of the degree of imposed control on the performance of the management as well as the process of the financial reporting about the independence of the CEO. Both the vice president of the directing board and the CEO are the stimulators who decrease the problems of Agency due to their autonomy in decision-makings. Most of the governance recommendation are often concerning the autonomy or independence of the president of the directing board. Separating the duties of the CEO from those of the directing board highlights the accountability and removes the ambiguities of the mandates of these two entities. In addition, the autonomous CEO plays a crucial role in applying corporate governance and in considering the interests of the all the shareholders and stakeholders (Abbasi et al, 2014).

### **CEO Duality and Financial Distress**

The main responsibility of the directing board is establishing an efficient corporate governance on company's affairs and performances in line with the interests of the shareholders and balancing the interests of different stakeholders including customers, staff, investors and local communities. In all the actions taken by the directing board, managers are expected to make their own business decisions in such a way that they believe they can logically suit the interests of the company. Financial distress (crisis) is indeed the failure of the risk management in business relations. By separating the duties of the CEO from those of the Head of the directing board, the changes in the

financial crisis and subsequently the financial risk will be reduced (Nasirzadeh et al, 2011).

### **Research Background**

Shahsavari et al (2014) studied the power influence of the managers of the companies listed in Tehran Stock Exchange in three phases that is distress with low probability, financial distress and distress with high probability. They selected 855 companies listed in Tehran Stock Exchange during a 5-year period from 2007 to 2011; the companies were classified into three categories based on Altman Model of predicting financial distress. The manipulation of accruals (as the profit management index) was calculated according to Kasznik's model (1999). The results of the hypothesis testing using panel data model indicated the use of efficient profit management in companies. In other words, in order to show a better financial status at the three phases of the distress, the managers of the companies listed in Tehran Stock Exchange prepared reduction manipulation of the accounting profit through discretionary accruals. Also, the findings indicated that as the risk of financial distress increased, the manipulation of the accounting profit by the managers increased as well.

Afshari et al (2013) found that the rapid environmental changes and increasing competition requires the rapid and timely reaction of the business companies to the complexity of the markets. Investors, creditors, analysts, managers etc. are interested in understanding and evaluating the performance of the business institutions. The unfavorable financial status of these institutions causes damages to different groups particularly to investors. Meanwhile, the analysis of the financial ratios is a method for evaluating the performance of the business companies to predict the unforeseen occurrence of the events.

A majority of the articles of Iran Commerce codes is dedicated to bankruptcy. According to the Article 412, the bankruptcy of the trader or trading company is the result of a moratorium on the payment of the funds they are responsible for. This moratorium on the payments of the funds for which the company is responsible, indicates

Volume 1 Issue 4 2016

DOI: [10.1234.67/afmj.1017](https://doi.org/10.1234.67/afmj.1017)

AFMJ 2016, 1, 208-226

financial distress and ultimately leads to bankruptcy. This concerns the owners of wasting their resources and reminds the need for cautious attention to the prediction of company's continuation of activity or bankruptcy. There are many different models to predict the financial distress as well as bankruptcy in companies. Zmijewski's model was used to analyze the results of the financial ratios in the companies listed in Tehran Stock Exchange during 2001-2007 (7 years). The results displayed that there is a statistically significant relationship between the results obtained from the predictions of the model and the reality at %99 confidence level. This significance level especially in studies conducted within the year prior to the starting year of the current study indicates the reliability of the prediction model.

Kordestani et al (2011) found that with the increasing development of the corporates and the advent of severe financial crises at micro and macro-economic levels, the business owners and stakeholders of various institutions are finding a way to protect themselves against such risks. This issue made them aware of using appropriate predictive models to evaluate the financial power and capabilities of the companies. The researchers analyzed the liquidity ratios obtained from cash flow statements as well as financial ratios based on balance sheet and the profit and loss derived from other financial statements in order to predict financial distress in companies. To this end, 27 bankrupt and 27 non-bankrupt corporates were studied during 2001-2007 using Logit Regression Model and Discriminant analysis model. The findings showed that the financial ratios based on the balance sheet and profit and loss are more efficient than the financial ratios derived from cash flow statements.

Rostmai et al (2011) found that the evaluation of companies' financial distress is of supreme importance because the failure of the companies is associated with many direct and indirect costs for the stakeholders. As a consequence, using financial ratios to evaluate companies' financial distress has always attracted the attention of creditors, shareholders and financial analysts.

Accurate and timely evaluation and prediction of can help the decision makers find an optimal solution to prevent financial distress. Various models have been used to evaluate financial distress. The models used in this area have many applications in the decisions of the financial markets' activists. It has always been attempted to enhance the accuracy of the prediction and evaluation of these models through using advanced methods. Rostami et al mainly tended to study the efficiency of using Data Envelopment Analysis (DEA) and Logistic Regression (LR) on evaluating financial distress. Furthermore, the results of the DEA and LR were compared. It was concluded that LR model significantly outperformed the DEA model in evaluating financial distress.

According to Saeidi et al (2009), financial distress and company's bankruptcy leads to the waste of the resources and loss of investment opportunities. Prediction of financial distress and provision of necessary solutions awaken the companies about the risk of financial distress and bankruptcy so that they can take appropriate actions to prevent them. This study intended to model the prediction of financial distress of the companies listed in Tehran stock exchange using Biz Networks. To this end, two models from Biz networks and one model from Logistic Regression were presented for the selected samples of companies listed in Tehran Stock Exchange. The first model of Biz networks which is based on a simple conditional correlation can accurately predict the bankrupt and non-bankrupt companies with %90 accuracy. The second model of Biz Network which is based on conditional probability can predict the bankrupt and non-bankrupt companies with %93 accuracy. Finally, Logistic regression model which is a linear model can predict the bankrupt and non-bankrupt companies with %90 accuracy.

Jahanshad et al (2009) studied the efficiency of financial variables and economic variables on the prediction of financial distress of the companies listed in Tehran Stock Exchange. They found that Aspirin Gate and Wallace models with cash flow ratios and macro-economic variable have effective factors to predict financial distress.

Jabbarzadeh et al (2009) studied the relationship between smoothing the profit at three levels, i.e. gross profit, operational profit and net profit, and companies' financial distress at three phases i.e. incubation, deficit fund flow (cash shortage), insolvency and total insolvency (total financial distress). They found that in order to present a favorable financial status and optimal performance in different phases of the financial distress and in order to protect themselves in capital markets, the managers of the business institutions take different actions which lead to profit smoothing.

Soleimani et al (2010) investigated the efficiency of the financial distress prediction models for 60 sample Iranian companies. They used Logit Data Analysis and the test of the significance of the difference between the correlation coefficient were used to test the research hypotheses. The results showed that these models are significantly different in predating the continuation of companies' activities.

Fitch and Sezlic (2010) studied the ability of the mechanisms of corporate governance on preventing the company's financial distress. The results indicated that having independent directing board with a higher percentage of non-bound members as well as granting a large proportion of the company's shares to internal managers had the most effects on preventing financial distress.

Chang (2011) studied the relationship between the components of corporate governance in financially distressed companies in Taiwan. He found that the companies which with independent directing board (the companies with a higher percentage of non-bound directing board members) were less prone to financial crisis and distress in comparison to the companies with a lower percentage of non-bound members.

Yun and Gou (2012) found that the ration of profit coverage was the most important warning sign of business failure for hotel industry in Korea. It should be mentioned that the researchers used Logistic Regression and Artificial Neural Network to predict business failure in Korean companies.

Lajili and Zegal (2013) found that the companies which incur financial crisis and distress not only had lower indices of commercial wellbeing and financial health but also had more directing board circulation and less tenure period for the non-bound members of the directing board.

Boting (2014) studied the effect of the financial distress on the immoral decisions of the managers for profit smoothing. The results showed that moral values and the personal status of the individuals influence their decisions at the time of financial distress.

Tian and Toity (2015) studied the effect of inter-organizational corporate governance on the total returns of the company's members. It was concluded that there was an alternate effect between the competitive market of the goods and corporate governance.

## RESEATCH HYPOTHESES

For the purpose of this study, the research hypotheses were developed based on the addressed research questions:

**H1:** There is a statistically significant relationship between the 'independence of the directing board' and 'financial distress'.

**H2:** There is a statistically significant relationship between 'institutional investors' and 'financial distress'.

**H3:** There is a statistically significant relationship between 'CEO duality' and 'financial distress'.

**H4:** There is a statistically significant relationship between 'director ownership' and 'financial distress'.

**H5:** There is a statistically significant relationship between the 'size of the Audit Committee' and 'financial distress'.

## RESEARCH METHODOLOGY

The sample population of the current research is the companies listed in Tehran Stock Exchange. The real required data for the purpose of this study was collected from the real information of the companies listed in Tehran Stock Exchange. Thus, out of 120 companies, 91 companies were selected



as the research sample population based on Cochran's Sample Size Formula based on the following criteria:

- ✓ Due to the different nature of the activities of the investment companies such as insurance, leasing companies and banks, the selected companies participated in this research are production and/or manufacturing companies.
- ✓ To select homogenous samples, the companies should be listed in Tehran Stock Exchange before 2009 and their shares should be traded in stock exchange since early 2009.
- ✓ In order to select active companies, the trade and transaction of these companies should not be interrupted in stock exchange over 2009; in other words, the shares of such companies should be active in stock exchange during these years and the period of interruption should not exceed three months.
- ✓ In order to compare the companies and avoid heterogeneity, their fiscal year should end on March 29.
- ✓ The access to the companies' data should be provided.

The statistical method used in this research is multiple variable regression. The research hypotheses are either confirmed or rejected Using regression test based on inferential statistics. More, Co-linear test was used to determine the possibility or impossibility of using multiple linear regression or the presence or absence of the correlation between the research independent variable. Multiple linear regression was, also, used to assess the effect of each of the independent variable on dependent variables.

## RESEARCH MODEL AND MEASUREMENT METHODS

### Regression Model

The Regression Model of the current study is presented below:

Financial Distress<sub>it</sub>

$$= a_0 + a_1 \text{Independence of Board}_{it} + a_2 \text{Institutional investors}_{it} + a_3 \text{CEO Duality}_{it} + a_4 \text{Director Ownership}_{it} + a_5 \text{Audit Committee}_{it} + a_6 \text{Size}_{it} + a_7 \text{Leverage}_{it} + a_8 \text{Age}_{it} + \epsilon_{it}$$

### Research Variables

The research variables are divided into three categories.

#### Dependent Variables

**Financial Distress:** the lack of immediate and urgent reaction to the dynamic and ever-changing business environment creates a negative trend in profit after tax which leads to financial distress. If a company incur at least one loss in its current fiscal year or within the last three years, it cannot improve its status in the following year; therefore, it suffers from financial distress for which number 1 otherwise number 0 would be considered (Fallah, 2013).

#### Independent Variables

**Independence of the Directing Board:** the ratio of the non-bound members of the directing board to the total number of directing board members (Rouzbehi et al, 2012).

**Institutional Investors:** the percentage of the shares held by the institutional investors (Rouzbehi et al, 2012).

**CEO Duality:** if the CEO is, also, the president (head) of the directing board number 0 otherwise 1 would be awarded to him (Fallah, 2013).

**Director Ownership:** the percentage of the shares held by the director-shareholders.

**The Size of the Audit Committee:** the number of the present members in the audit committee of the company over the fiscal year (Rouzbehi et al, 2012).

#### Control Variables

**The Size of the Company:** the normal logarithm of the book value of the total assets of a company (Hassas Yeganeh et al, 2008).

**Financial Leverage:** the ratio of the total liabilities to the total assets of a company (Hassas Yeganeh et al, 2008).

The Age of the Company: the number of years a company is accepted and listed in Tehran Stock Exchange (Najafi, 2012).

## RESEARCH RESULTS

**Table 6.1:** The Results of Fitness of Regression Equation

Variables	Dickey-Fuller Test	Sig. Level
Independence of the Directing Board	336.379	Sig. < 0.0001
Institutional Investors	297.586	Sig. < 0.0001
Director Ownership	281.649	Sig. < 0.0001
Audit Committee	243.142	Sig. < 0.0004
The Size of the Company	288.932	Sig. < 0.0001
Financial Leverage	314.099	Sig. < 0.0001

According to the Table 6.1. above the significance level of all the aforementioned tests is smaller than the Type I error 0.05. Therefore the statistical null hypothesis of the test that there is a unit root is rejected. It is, thus, approved that the series under study at this error level are stationary. As a result, the values of the variables will not have significant procedural changes overtime.

**Table 6.2:** The Results of the Logistic Regression Model Estimation.

Independent Variable	Coefficient	Z-test	P-value	VIF
The Independence of the Directing Board	14.542	6.731	0.0001	1.069
Institutional Investors	-13.873	-4.487	0.0001	1.006
CEO Duality	1.754	5.369	0.0001	1.054
Director	-	-	0.0061	2.032

Ownership	12.013	2.741		
Audit Committee	-1.959	-7.702	0.0001	1.044
The Size of the Company	0.386	7.617	0.0001	1.107
Financial Leverage	13.386	7.693	0.0001	3.341
The Age of the Company	0.022	0.882	0.3775	2.286
Stable Value	-2.790	-1.084	0.2783	-
Likelihood Ratio Test: 346.259	The Sig. Level of Likelihood Ratio: 0.0001			
McFadden's Coefficient of Determination: 0.551	Dunn's Index: 281.492			
The Sig. Probability of Dunn: 0.99	The Sig. of Hosmer Lemeshow Test: 0.1818			

Considering the results of the significance level of each of the research independent variable, it is illustrated that:

The independence of the directing board with the Sig. level smaller than 0.05 and the coefficient 14.542 had a statistically significant positive effect on the companies' risk of financial distress. Therefore, there is a statistically significant positive relationship between the independence of the directing board and company's financial distress.

The shares of the institutional investors with the Sig. level smaller than 0.05 and the coefficient -13.873 had a statistically significant negative effect on the companies' risk of financial distress. As a consequence, there is a statistically significant negative relationship between the institutional investors and company's financial distress.

CEO Duality with the Sig. level smaller than 0.05 and the coefficient 1.754 had a statistically significant positive effect on the companies' risk of financial distress. Consequently, there is a statistically significant positive relationship between the CEO Duality and the company's financial distress.

Director ownership with the Sig. level smaller than 0.05 and the coefficient -12.013 had a statistically significant negative effect on the companies' risk of financial distress. Therefore, there is a statistically significant negative relationship between the director ownership and company's financial distress.

The number of the Audit Committee members with the Sig. level smaller than 0.05 and the coefficient -1.959 had a statistically significant negative effect on the companies' risk of financial distress. Therefore, there is a statistically significant negative relationship between the number of audit committee members and company's financial distress.

Furthermore, the significance level of the effects of the control variables i.e. the size of the company and the financial leverage is smaller than 0.05 indicating that there is a statistically significant relationship between these two indices and company's financial distress. Whereas, the age of the company did not have any statistically significant relationship with financial distress. It is concluded that all the research hypotheses which are at Type I error level i.e. 0.05 are confirmed.

The indices of the goodness-of-fit model indicated that based on the indices of McFadden's coefficient of determination  $((R_{MF}^2 = 1 - (\ln(\beta^*_m)) / (\ln(\beta^*_0)))$  which is calculated through the logarithm of the likelihood function for the model without predictor variable  $(\ln(\beta^*_0))$  and the model with predictor variable  $(\ln(\beta^*_m))$ , the application of predictor variables in the research model could improve the likelihood function to %55.1. since the estimation of the model's parameters is done based on the maximization of likelihood function, it can be concluded that the model's predictor variables can accurately predict the company's financial distress to %55.1. as a result, the overall relationship between the predictor variable and financial distress was significantly considerable.

The significance value of the Hosmer Lemeshow test, which was used to test the fitness of research regression model and was larger than the Type I error 0.05, indicates that the research Logistic

Regression Model is fit. Furthermore, the Dunn's index  $((D^2 = 2(\ln(\beta^*_s)) / (\ln(\beta^*_m)))$ , which was used to test the fitness of the research regression model and was used as an alternative to the index of the coefficient of determination in the research regression model, estimated as 281.492; however, the smaller values for this index indicate that the model is more accurate and fit because this index is an indicator of the ratio of the accuracy of a complete and fit model to the accuracy of an estimated model; accordingly, the smaller values of this index show that the estimated model is closer to the fit model in predicting the dependent variables. The Dunn's index has Chi-square distribution with an 'h' degree of freedom in which 'h' is the differences between the number of the research model's parameters and the fit model which equals 8 in the present research. It can be confirmed at %99 probability that this value for the Dunn's index in the research model is a smaller value; therefore, the goodness-of-fit of the research model is confirmed at 0.05 error level. Finally, the significance level of the likelihood ratio test is smaller than 0.05 displaying the goodness-of-fit of the research Logistic Regression Model.

In order for the model to be able to predict the company's financial distress, the percentage values of the accurate predictions of the model are presented in Table 6.3 below.

**Table 6.3:** The Percentage of the Accurate Predictions of the Model

Prediction Group	Accurate Prediction	Inaccurate Prediction
Distressed Companies	%86.18	%13.82
Non-distressed Companies	%85.17	%14.83
Total Companies	%85.71	%14.29

According to the results of the above table, the research model could accurately predict the financially distressed companies by %86.18. Likewise, %85.17 of the financially non-

distressed companies were predicted accurately by this model. The results, also, show that the research model could accurately predict the 'status' of companies' financial distress amongst %85.71 of the evidences. To conclude, the ability of the model to accurately predict the companies' financial distress or non-distress is indicative of the goodness-of-fit of the research model and that the results are documentable.

## CONCLUSION

### The First Hypothesis

There is a statistically significant relationship between the independence of the directing board and financial distress in companies listed in Tehran Stock Exchange. The independence of the directing board with the Sig. level smaller than 0.05 and the coefficient 14.542 had a statistically significant positive effect on the companies' risk of financial distress. Therefore, there is a statistically significant positive relationship between the independence of the directing board and company's financial distress.

### The Second Hypothesis

There is a statistically significant relationship between the institutional investors and financial distress in companies listed in Tehran Stock Exchange. The shares of the institutional investors with the Sig. level smaller than 0.05 and the coefficient -13.873 had a statistically significant negative effect on the companies' risk of financial distress. As a consequence, there is a statistically significant negative relationship between the institutional investors and company's financial distress.

### The Third Hypothesis

There is a statistically significant relationship between the CEO Duality and financial distress in companies listed in Tehran Stock Exchange. CEO Duality with the Sig. level smaller than 0.05 and the coefficient 1.754 had a statistically significant positive effect on the companies' risk of financial distress. Consequently, there is a statistically significant positive relationship between the CEO Duality and the company's financial distress.

### The Fourth Hypothesis

There is a statistically significant relationship between the director ownership and financial distress in companies listed in Tehran Stock Exchange. Director ownership with the Sig. level smaller than 0.05 and the coefficient -12.013 had a statistically significant negative effect on the companies' risk of financial distress. Therefore, there is a statistically significant negative relationship between the director ownership and company's financial distress.

### The Fifth Hypothesis

There is a statistically significant relationship between the size of the audit committee and financial distress in companies listed in Tehran Stock Exchange. The number of the Audit Committee members with the Sig. level smaller than 0.05 and the coefficient -1.959 had a statistically significant negative effect on the companies' risk of financial distress. Therefore, there is a statistically significant negative relationship between the number of audit committee members and company's financial distress.

Furthermore, the significance level of the effects of the control variables i.e. the size of the company and the financial leverage is smaller than 0.05 indicating that there is a statistically significant relationship between these two indices and company's financial distress. Whereas, the age of the company did not have any statistically significant relationship with financial distress. It is concluded that all the research hypotheses which are at Type I error level i.e. 0.05 are confirmed.

## RESEARCH SUGGESTIONS

The research suggestions include suggestions based on the present research results as well as further future research suggestions.

### Research Suggestions Based on the Present Research Results

With regard to the results of the present research, the researchers offers the following recommendations to use these results:

Considering the role of institutional investors in enhancing the performances of the companies and



banks due to their knowledge, expertise and experiences; institutional investors are recommended to have more active participations in directing and controlling the banks.

Both the vice president of the directing board and the CEO are the stimulators who decrease the problems of Agency due to their autonomy in decision-makings. Most of the governance recommendations are often concerning the autonomy or independence of the president of the directing board. Separating the duties of the CEO from those of the directing board highlights the accountability and removes the ambiguities of the mandates of these two entities. In addition, the autonomous CEO plays a crucial role in applying appropriate corporate governance and in considering the interests of the all the shareholders and stakeholders. By separating the duties of the CEO from those of the President (head) of the directing board decreases the changes in financial crisis and the risk of financial distress.

As the number of the audit committee increases along with the increases monitoring and supervision, the quality of the financial reporting would enhance as well. The size of the audit committee is a crucial factor influencing the delivery of a more relevant and rich financial reports by the company.

The signals of liquidity problems can be identified and therefore the companies' financial distress can be predicated by using financial ratios and surveying the values mentioned in financial statements.

#### **Further Future Research Suggestions**

Since the present study used a specific research model, the prospective researchers are recommended to make use of other research models in this area.

#### **Other recommendation are:**

Evaluating the effects of corporate governance on profit soothing in public and private sector companies.

Evaluating corporate governance mechanism on profit management in different industries.

Investigating the relationship between the various mechanisms of corporate governance and macro-economic variables including inflation effect and changes in gross national products.

Evaluating the effects of the capital structure on profit management in companies listed in Tehran Stock Exchange.

Restudying the present research in different time intervals and investigating the effect of increasing the time intervals on enhancing the relationship between the mechanisms of corporate governance and companies' financial distress.

Investigating the relationship between the mechanisms of corporate governance, be it inter-organizational or intra-organizational, and companies' financial distress in loss-making companies in comparison to the profit-making companies using dummy variables in future research.

Investigating the effect of macro-economic variables on the relationship between the mechanisms of corporate governance and companies' financial distress.

Using other measurement models of financial distress on the relationship between the mechanisms of corporate governance and companies' financial distress.

#### **REFERENCES**

1. Ahmadpour, A., Kashanipour, M. & Shojaei, M. R. (2010). The Effect of Corporate Governance and Auditing Quality on the Cost of the Credit in Companies Listed in Tehran Stock Exchange. *Journal of Accounting and Auditing*, 17(62).
2. Elyasi, M. H., Karimi, S. & Rahimi, M. The Relationship between Information Clarification and the Behavior of the Investors in Exchange Companies. The National Conference of Accounting and Management.
3. Fallah, R. (2013). The Analysis of Financial Well-being in Companies based

- on the Components of Corporate Governance and Intellectual Capital (A Case Study: Iran Context). A PhD Dissertation. Islamic Azad University, Science and Research Branch.
4. Hassas Yeganeh, Y. & Baqoumian, R. (2005). The Relationship between Corporate Governance and the Quality of Financial Reporting. *Official Auditor*, 45-86.
  5. Hassas Yeganeg, Y. & Rezaei, M. (2008). The Relationship between Corporate Governance and the Quality of Discretionary and Non-discretionary Accruals in Companies Listed in Tehran Stock Exchange. *Journal of Accounting and Auditing*, 21, 75-93.
  6. Hosseini, S. J. & Karamshahi, B. (2011). The Relationship between Improving the Financial Reporting and Auditing. *Journal of Accounting Research*, 2(3), 1-21.
  7. Riahinejad, M. (2011). The Effect of Corporate Governance on the Quality of Financial Reporting in Companies Listed in Tehran Stock Exchange. A Master Thesis. Islamic Azad University, Science and Research Branch, Urmia.
  8. Rouzbehi, S. & Amini, R. (2012). The Relationship between the quality of Financial Reporting and the Value of the Companies Listed in Tehran Stock Exchange. *Journal of Accounting Knowledge*, 9, 23-39.
  9. Yousefi Azar, S. E. (2011). The Efficiency of Audit Committee on Improving the Quality of Financial Reporting. The First Regional Conference on Research and New Strategies in Accounting and Management.
  10. Anderson, R, Mansi, S & Reeb, D. (2004). Board characteristics, accounting report integrity, and the cost of debt. *Journal of accounting and economics*, vol 37. No 3, pp 315-342.
  11. Felo, A, Krishnamurthy, S& Solieri, S. (2003). Audit committee characteristics and the perceived quality of financial reporting: an empirical analysis. available at [www.ssrn.com](http://www.ssrn.com).
  12. Ranchman, G. (2014). The effect of board of commissioners, audit committee and internal auditor on financial reporting quality of banks listed on the Indonesia stock exchange. *International journal of economics, commerce and management*, vol2. No 10.
  13. Rainsbury, E, Bradbury, M& Cahan, S. (2009). The impact of audit committee quality on financial reporting quality and audit fees. *Journal of contemporary accounting and economics*, vol 5, pp 20-33

