



A model for predicting corporate governance and predicting business failure using accounting abnormality indicators

¹⁻ Akram mahnani -*PhD student in accounting, Islamic Azad University, Tabriz branch*

²⁻ Ahmad Mohammadi -*Assistant Professor - PhD in Accounting*

³⁻ Mahdi Moradi- *Assistant Professor - PhD in Accounting*

⁴⁻ Yunus Badavar Nahandi-*Assistant Professor - PhD in Accounting*

Date of Submission: 11-08-2024

Date of Acceptance: 25-08-2024

Abstract:

Objective: Most studies that attempt to predict business failure assume that accounts provide a true and fair view of a company's financial position, without considering that managers can apply accounting rules arbitrarily. do or even commit accounting fraud. The purpose of this research is to predict corporate governance model and predict business failure using accounting abnormality indicators. In the analysis method in this research, the combined data method and Eviews and Stata software packages were used. The results of the hypothesis test showed that the prediction of business failure during accounting anomalies has decreased compared to previous periods. Also, corporate governance has an increasing effect on the prediction of business failure during accounting anomalies.

Keywords: accounting anomaly of companies, market failures, corporate governance

I. Introduction:

The excessive emphasis of the capital market on profit and related information has made this number become one of the most important factors of stock price changes and by creating an unusual return, it makes the value of the company dependent on itself. On the other hand, companies try to reduce investment risk in order to increase their value. Investment risk is the fluctuation in realized and expected investment returns. From the point of view of investors, the higher the quality and quantity of information published by the company, the lower the information asymmetry of the company, and as a result, the future performance of the company is brighter. In such a case, investors have more accurate estimates of investment returns and fewer adjustments are made in the estimates. This reduces the risk of stocks of companies with

high quality information. In addition to historical information, investors, creditors and other users of financial information of companies also need information about the future of economic units and are always looking for access to information that shows the trend of future profits. One of the existing views in this case is to provide only historical and current information by the business unit, of course, in such a way that the investors can make their own predictions about the future (Jahankhani, 2012). Corporate governance refers to a set of processes, customs, policies and procedures, laws and factors that affect the way a company is guided, or supervised under the separation of ownership and management. The main argument is that since the corporation is nothing more than a legal entity, then its values must derive from the preferences or values of its stakeholders. In other words, corporate values are created when the values of the stakeholders become salient, key and internalized (Bowen et al., 2006). The high quality of financial reporting (disclosure) through the reduction of information asymmetry, has reduced the possibility of incorrect selection and moral hazard, due to the increase in the ability of shareholders and lenders to control and monitor the activities of managers, leading to a reduction in the costs of monitoring managers and in The result is forcing managers to choose suitable and efficient projects and reduce the risk and financing costs of the company, and ultimately increase the value of the company and the efficiency of investment (Thaqafi and Arab Mazarizdi, 2019). Three important aspects of corporate governance have been studied and paid attention to in this research: the size of the board of directors, the independence of the board of directors and the duality of the CEO. Since previous literature considers the board of directors to be the core of corporate governance (Gilan, 2006), board independence implies more effective monitoring



and is often beneficial to firms (e.g., helping firms make better decisions during a crisis and avoiding bankruptcy) (Erkens et al., 2012). However, larger board size (meaning more directors and better advice but less effective communication) and the presence of CEO duality (meaning more effective leadership but less effective monitoring) have both advantages and disadvantages for firms (e.g. negative effects). And it is positive. The quality of financial reporting determines the value of financial reporting, and for this purpose, providing a clear and complete definition of the quality of financial reporting is a global demand. In general, providing higher quality financial reports is effective in users' investment decisions and increasing efficiency. Therefore, providing ideal methods for evaluating the quality of financial reporting is another need in the field of financial reporting, and the more the prediction of business failure. The higher the benefits that the investors and users of financial reports get

¹ Bonn et al

In addition, predicting business failure is a broad concept that refers not only to financial information but also other non-financial information that is useful in users' decisions. On the other hand, the prediction of business failure is defined based on the two approaches of user needs and investor support. The first approach is based on the user's needs and the quality is determined according to the usefulness of the reports for the users. In this approach, there are several models including the theoretical framework (concepts) of reporting, the Jenkins Committee and the profit continuity model. In the second approach, investment support is emphasized and quality is defined mainly in terms of (full and fair disclosure) for shareholders. Ever since Mr. Levitt, the former chairman of the US Securities Exchange Commission, raised the issue of profit management and announced and implemented plans to prevent it, this approach has been given more attention. On the other hand, predicting business failure will limit management's incentives to engage in activities that have little value (Feng and Christian, 2010). The crisis of accounting anomaly in the world has caused very heavy and unpredictable consequences for many institutions and business enterprises. So that it has exposed them to all kinds of risks and dangers such as risks caused by network and online activities, cyber security and changes in relations with customers and suppliers, which has caused new pressures on the implementation of operations and the provision of services by companies. These special conditions

have made the triangle of fraud that is "pressure, opportunity and justification" to be activated. The International Ethical Standards Board for Accountants (IESBA), including the International Standards of Independence, which actually sets the standard code of conduct expected of a professional accountant, has specifically addressed the pressures placed on accountants that may lead to violations of the five fundamental principles. "Honesty, impartiality, professional competence and due care, confidentiality and professional behavior". The board is also publishing a publication to emphasize aspects of these principles that may be relevant to accountants in navigating the current crisis and identifying potential pressures related to accounting malpractice. References to standardization and regulatory bodies also to auditors and managers. Companies are reminded to exercise their professional judgment and pay serious attention to accounting standards, financial reporting, possible consequences of accounting anomalies (accounting anomalies) and emerging risks. For example, the Securities and Exchange Commission and the Public Company Audit Board in the United States issued a statement indicating that established companies or companies with significant performance in emerging markets are exposed to risks and may be at greater risk of their information being compromised by incomplete disclosure. or be misleading. Since the prediction of business failure may be higher or lower during a crisis, it is important to examine how accounting anomaly affects the prediction of business failure. Corporate governance refers to a set of processes, customs, policies and procedures, laws and factors that affect the way a company is guided, or supervised under the separation of ownership and management. The main argument is that since the corporation is nothing more than a legal entity, then its values must derive from the preferences or values of its stakeholders. In other words, company values are created when stakeholder values,

¹ Feng and Kristian

become prominent, key and internal (Bowen et al., 2006). The high quality of financial reporting (disclosure) through the reduction of information asymmetry, has reduced the possibility of incorrect selection and moral hazard, due to the increase in the ability of shareholders and lenders to control and monitor the activities of managers, leading to a reduction in the costs of monitoring managers and in The result is forcing managers to choose suitable and efficient projects and reduce the risk and



financing costs of the company, and ultimately increase the value of the company and the efficiency of investment (Thaqafi and Arab Mazarizdi, 2019). Three important aspects of corporate governance have been studied and paid attention to in this research: the size of the board of directors, the independence of the board of directors and the duality of the CEO. Since previous literature considers the board of directors to be the core of corporate governance (Gilan, 2006), board independence implies more effective monitoring and is often beneficial to firms (e.g., helping firms make better decisions during a crisis and avoiding bankruptcy) (Erkens et al., 2012). However, larger board size (meaning more directors and better advice but less effective communication) and the presence of CEO duality (meaning more effective leadership but less effective monitoring) have both advantages and disadvantages for firms (e.g. negative effects). And it is positive. The quality of financial reporting determines the value of financial reporting, and for this purpose, providing a clear and complete definition of the quality of financial reporting is a global demand. In general, providing high-quality financial reports is effective in users' investment decisions and increasing efficiency. Therefore, providing ideal methods for evaluating the quality of financial reporting is another need in the field of financial reporting, and predicting business failure. The higher it is, the more benefits investors and users of financial reports will get. In addition, predicting business failure is a broad concept that refers not only to financial information, but also to other non-financial information that is used in making decisions. Users will find it useful. On the other hand, the prediction of business failure is defined based on the two approaches of user needs and investor support. The first approach is based on the user's needs and the quality is determined according to the usefulness of the reports for the users. In this approach, there are several models including the theoretical framework (concepts) of reporting, the Jenkins Committee and the profit continuity model. In the second approach, investment support is emphasized and quality is defined mainly in terms of (full and fair disclosure) for shareholders. Ever since Mr. Levitt, the former chairman of the US Securities Exchange Commission, raised the issue of profit management and announced and implemented plans to prevent it, this approach has received more attention. On the other hand, predicting business failure will limit management's incentives to engage in activities that have little or negative value (Fang and Christian, 2010). The crisis of accounting anomaly in the world

has caused very heavy and unpredictable consequences for many institutions and business enterprises. So that it has exposed them to all kinds of risks and dangers such as risks caused by network and online activities, cyber security and changes in relations with customers and suppliers, which has caused new pressures on the implementation of operations and the provision of services by companies. These special conditions have made the triangle of fraud that is "pressure, opportunity and justification" to be activated. The International Ethical Standards Board for Accountants (IESBA), including the International Standards of Independence, which actually sets the standard code of conduct expected of a professional accountant, specifically addresses the pressures applied.

¹ Bonn et al

¹ Feng and Kristian

It has focused on accountants, which may lead to the violation of the five basic principles of "honesty, impartiality, professional competence and due care, confidentiality and professional conduct". The board is also publishing a publication to emphasize aspects of these principles that may be relevant to accountants in navigating the current crisis and identifying potential pressures related to accounting malpractice. References to standardization and regulatory bodies also to auditors and managers. Companies are reminded to exercise their professional judgment and pay serious attention to accounting standards, financial reporting, possible consequences of accounting anomalies (accounting anomalies) and emerging risks. For example, the Securities and Exchange Commission and the Public Company Audit Board in the United States issued a statement indicating that established companies or companies with significant performance in emerging markets are exposed to risks and may be at greater risk of their information being compromised by incomplete disclosure. or be misleading. Since the prediction of business failure may be higher or lower during a crisis, it is important to examine how accounting anomaly affects the prediction of business failure. In recent years, Iran's business and economic environment has witnessed significant changes and developments in the capital market and the expansion of joint-stock companies and, accordingly, the number of companies admitted to the stock exchange, with the emergence of agency theory and the inevitable separation of ownership from management, the need to pay attention to Corporate governance mechanisms to prevent fraud



and deterrents from the risk of its occurrence with the aim of the favorable ranking of companies in accordance with the indicators of corporate governance and general economic policies of the country, i.e. clarifying the economy and making it healthy and preventing actions, activities and areas has provided corruption in the capital market, etc. One of the goals of financial reporting is to provide information that is useful for investors, lenders and other current and potential users in decisions related to investment and crediting and other decisions (Sepasi and Hosni, 2015). According to the accounting standard, the responsibility for preparing and presenting financial statements lies with the board of directors or other members of the management of the business unit (Accounting Standard No. 1, Clause 7). On the other hand, the main responsibility for preventing and detecting fraud lies with the executive directors and the management elements of the business unit. With this increase in authority in the management structure of the company, managers may engage in opportunistic behavior and make decisions that are in their personal interests and the opposite of the interests of the shareholders. Or vice versa, for the interests of the shareholders or to maintain the reputation of the company and not to be removed from the stock exchange board. Part of the emphasis of research and scientific sources is related to corporate scandals and the collapse of large companies in the United States, such as Enron, Worldcom, as well as the scandal of several companies in Europe, including Vivendi in France, etc., due to frauds in financial reporting due to the weak role of corporate governance. Shud (Mashaikhi, 2013) investigating the causes and pathology of the collapse of some large companies that had large losses, especially for the shareholders, it was determined that it was caused by the weakness of their corporate governance systems. In Iran, especially during the epidemic of business failure, it is important to research the role of these mechanisms, whose effectiveness has been realized in solving representation problems, like many developed countries, so it was decided that in order to support the interests of investors, it is necessary to establish a system appropriate and effective corporate governance to prevent potential wrongdoings and improve the prediction of business failure as a result of increasing the trust of shareholders, investigate this issue, i.e. the relationship between corporate governance and predicting business failure at the time of accounting anomalies.

II. Theoretical foundations and research background:

Small business failure:

In Webster's dictionary, it is defined as the state or condition of having a deficit or being insufficient, while in all business activities, planning, there is success, but not all of them achieve their goals. In the financial literature, the word There are non-differentiating words for business failure. Some of these words include unfavorable financial situation, failure, failure of business unit, deterioration, failure and bankruptcy, inability to pay debts (Rezaei Menesh, 2017). Accounting anomaly: Anomaly in the word means a deviation from the common rules and in the financial field it refers to a pattern in the average return of stocks that is not compatible with the conventional models in the literature of asset pricing (Nadri Bani, 1400: 14). Handijani Fard et al. (1402) They did a research called business failure: a scientometric study and content analysis. This research was first conducted using the method of co-occurrence analysis on the concepts of business failure and entrepreneurial failure (studies published in the Web-Oscience database from 2016 to 2021) and then using the qualitative content analysis of the key concepts extracted from the co-occurrence analysis, the conceptual model of the studies was developed. . This research, in terms of data collection method, is mixed in such a way that after quantitative analysis of researches using co-occurrence analysis, it analyzed the qualitative content of the key concepts extracted from this analysis. The findings showed that the word "business failure" has more occurrences with the words "performance", "strategy", "innovation", "failure", "growth" and "behavior". Also, the word "entrepreneurial failure" has more co-occurrences with the words "decision making", "self-confidence", "perspective", "learning from failure", "persistence" and "self". Based on the results of content analysis, the studies were divided into 6 general categories: 1) typologies of business failure 2) processes after business failure 3) bankruptcy prediction models and ratios 4) determinants of business survival and growth 5) individual factors affecting entrepreneur failure 6) environmental and institutional factors affecting business failure. In the end, practical suggestions and suggestions for future researches have been proposed. Naderi Beni et al.(1400) conducted a research called the Fama and French three-factor model accounting anomalies test at the company level using Hierarchical Bayes



approach and Markovian Monte Carlo simulation. The aim of the current research is to test the accounting anomalies of the Fama and French three-factor model at the company level due to the weaknesses of the portfolio approach. For this purpose, a sample consisting of 1150 observations of the company year (13800 observations of the company month) was selected in the Tehran Stock Exchange between 1387 and 1396, and then using hierarchical Bayes approach and Monte Carlo simulation of the standard Markov chain, the hypotheses were investigated and tested. became. The results of this research show that size, ratio of book value to market value, profitability, asset growth, accrual items of working capital, investments, number of shares issued and external financing for the three-factor model of Fama and French are recognized as anomalies at the company level. They do not.

Elka et al. (2021) carried out a research on the selection of the most appropriate tool for accounting and it is focused on 13 criteria: accuracy, interpretability of results, sample size or presence of multicollinearity, among others. Overall, they found that no single tool is primarily better than the others because it depends on the choice of criterion. The study of Amani et al. (2017) conducted a research on the applications of data mining in accounting, and the information shows that 14% of the applications of data mining in accounting use decision trees. Several studies compare data mining methods for bankruptcy prediction by obtaining different evidence.

Research hypothesis

Hypothesis 1:

Prediction of business failure during accounting anomalies compared to previous periods of decline

Hypothesis 2:

Corporate governance has an increasing effect on predicting business failure during accounting anomalies.

III. RESEARCH METHOD:

independent variable

Predicting business failure: The measurement of predicting business failure was based on the method (Cohen and Zarvin, 2010; Cheng et al., 2016), which includes cash flow from operations (CFO): net cash flow from It is one of the operational activities of company i in year t

Discretionary expenses (DISX) and

Costs (PROD): Estimated production costs

$CFO_{it}/Asset_{it-1} = \alpha_1(1 / Asset_{it-1}) + \alpha_2(SALE_{it} / Asset_{it-1}) + \alpha_3(\Delta SALE_{it} / Asset_{it-1}) + \epsilon_{it}$ (1)

$DISX_{it}/Asset_{it-1} = \alpha_1(1 / Asset_{it-1}) + \alpha_2(SALE_{it}$

$/ Asset_{it-1}) + \alpha_3(\Delta SALE_{it} / Asset_{it-1}) + \epsilon_{it}$ (2)
 $PROD_{it}/Asset_{it-1} = \alpha_1(1 / Asset_{it-1}) + \alpha_2(SALE_{it} / Asset_{it-1}) + \alpha_3(\Delta SALE_{it} / Asset_{it-1}) + \alpha_4(\Delta SALE_{it-1} / Asset_{it-1}) + \epsilon_{it}$ (3)

where CFO is cash flow from operations. DISX is the sum of a company's research and development expenses, advertising expenses, and selling, general, and administrative (SG&A) expenses. PROD is the sum of cost of goods sold (COGS) and change in inventories. Then the abnormal level of CFO, DISX and PROD (ie AB_CFO, AB_DISX and AB_PROD) was calculated by subtracting their normal level from their actual level. Then, RM1 and RM2 indicators were used to measure the prediction of business failure. which is given below $RM1 = AB_CFO * (-1) + AB_DISX * (-1)$ (4) $RM2 = AB_DISX * (-1) + AB_PROD$

A higher value of RM1 and RM2 indicates a higher level of REM and thus a lower prediction of business failure. Relying on the previous literature (Al-Hadhab and Klacher, 2018; Cheng et al., 2016; Katmon and Al-Farooq, 2017), we used the following model to investigate the effect of accounting anomaly on the prediction of business failure and the reducing effect of corporate governance. In

¹ . Alka et all

¹ . Amani et all

The duration of this epidemic $RM_{it} = \alpha_0 + \alpha_1 POST_{it} + \alpha_2 GOV_{it} + \alpha_3 POST * GOV_{it} + \beta Controls_{it} + \gamma IndustryFE_{it} + \delta YearFE_{it} + \epsilon_{it}$ where RM refers to RM1 or RM2. If it is the year 2018 (that is, the epidemic period), POST is equal to 1 and otherwise it is 0.

Corporate governance (GOV): To measure the corporate governance index, TOPSIS method based on the study of Mehrani and Nowrozi (2014) was used. The mentioned index consists of six measures of board size, independence of the board, dual duties of the CEO, institutional ownership, concentration of ownership and independent auditor. How to calculate each variable is given below

1- The size of the board of directors: The size of the board of directors refers to the number of members of the board of directors.

2- Independence of the board of directors: The independence of the board of directors is operationally defined as the number of non-obligatory (independent) members in the composition of the board of directors divided by the total number of members of the board of directors.

3- Duplicity of the duties of the CEO: If the CEO is also the chairman of the board of directors,



this situation is referred to as the duality of the duties of the CEO. In this research, duality is defined as a virtual variable, in which for companies where the CEO is the chairman of the board of directors, the value of this criterion (0) and for companies where the CEO is not the chairman of the board of directors, the number of this criterion of corporate governance is considered (1).

4- Institutional ownership: Institutional ownership means a percentage of shares of a stock company that belongs to banks, insurances, financial institutions, holding companies, organizations and institutions and government companies.

5- Ownership concentration: Ownership concentration is obtained by Herfindahl-Hirschman index.

6- Independent auditor: If the quality control score of the auditor is A, then the number 1 is assigned to it, and if it is other than A, the number is assigned to zero. The quality control score is published by the society of official accountants of Iran.

Controls refer to controlled variables, including:

SIZE: (company size): the natural logarithm of the total book value of company i's assets in year t

BM: Ratio of market value to book value of company i's equity in year t

LEV: (financial leverage), the ratio of total liabilities to total assets of company i in year t

ROA: net profit divided by the total assets of company i in year t
LOSS: one if the observation is among the

Loss: making companies and zero otherwise ,

GROWTH (annual change in net sales): sales growth rate of company i in period t-1

BIG4: (dummy variable equal to 1 if the company's audit was performed by group A auditors and 0 otherwise).

6- Findings:

Descriptive statistics are a set of criteria that can provide a general description of the collected information for the researcher. It should be noted that descriptive statistics cannot generalize the results to general situations, but these criteria are only used to provide an overview of the research.

Table 1: Descriptive statistics of research variables

the maximum	minimal	standard deviation	average	number	symbol	Variable name
0.967	0.00011	0.150	0.156	1161	ABCFO	Abnormal operating cash flows
0.989	0.00017	0.196	0.200	1161	ABDISX	Unusual discretionary expenses
0.799	0.00013	0.0577	0.048	1161	ABPROD	Abnormal production costs
-0.0081	-1.696	0.289	-0.356	1161	RM1	Predicting business failure (first criterion)
0.3442	-0.927	0.186	-0.151	1161	RM2	Predicting business failure (second criterion)
0.897	0.171	0.182	0.57	1161	GOV	corporate governance
21.327	11.035	1.521	14.764	1161	Size	Company size
11.788	0.69	1.550	2.338	1161	MTB	Market to book value ratio
1.824	0.03	0.212	0.554	1161	Lev	Financial leverage
0.67	-0.58	0.156	0.144	1161	ROA	return on assets
6.594	-0.90	0.615	0.388	1161	Growth	Sales growth
Qualitative research variables						
Cumulative frequency percentage	Abundance percentage	description	symbol	name		
90.35	1049	0	Loss	The loss of the company		
9.65	112	1				
37.21	432	0	EffectiveIndus	Effective industries		
62.79	729	1				
49.96	580	0	PMC	High product market competition		
50.04	581	1				



The main centrality index is the mean, which indicates the balance point and the center of gravity of the distribution and is a good indicator to show the centrality of the data. For example, the average value for the financial leverage variable is equal to (0.554), which shows that most of the data are concentrated around this point. In general, dispersion parameters are a measure to determine the degree of dispersion from each other or the degree of dispersion of them compared to the average. One of the most important dispersion parameters is the standard deviation. The value of this parameter for the market to book value ratio is equal to 1.550 and for abnormal production costs is equal to 0.0557, which shows that these two

variables have the highest and lowest standard deviation, respectively. The minimum and maximum also show the minimum and maximum in each variable gives For example, the largest value of financial leverage is 1.824, which shows that in the sample companies there is a company whose total liabilities are greater than total assets and its equity is negative.

Hypothesis H0: The prediction of business failure (the first criterion) during accounting anomalies has not decreased compared to previous periods.

Hypothesis H1: The prediction of business failure (the first criterion) has decreased during accounting anomalies compared to previous periods.

Table 2, descriptive statistics of predicting business failure (first criterion) by groups

standard deviation	average	number	Group name	Variable name
0.33	-0.528	387	After the business failed	Predicting business failure (first criterion)
0.221	-0.270	774	Before the business failed	

Table 3: Comparison of business failure prediction averages (first criterion)

level of significance	difference	degree of freedom	t statistic	level of significance	F statistic	Variable name
0.000	-0.258	1159	-15.828	0.000	116.456	Predicting business failure (first criterion)
0.000	-0.258	565.289	-13.938			

As can be seen, two values have been reported for the significance of each criterion. If the assumption of equality of variances is accepted, the first value is used, otherwise, the second value is used to reject or confirm the hypothesis. According to the value of 0.000 and 0.000 in the fourth column, which are less than 5%. Therefore, Lunn's test shows that the assumption of equality of variances is rejected. Therefore, the second value reported in the last column is used, and considering that this value is less than 5% for predicting business failure (the first criterion), so the assumption of equality of means is rejected, and considering the positive coefficient of the statistic t can be concluded that in the group after

business failure, the prediction of business failure (first criterion) has decreased.

The first hypothesis states: the prediction of business failure (the second criterion) during accounting anomalies has decreased compared to previous periods. Therefore, the hypothesis can be written as follows:

Hypothesis H0: The prediction of business failure (the second criterion) has not decreased during accounting anomalies compared to previous periods.

Hypothesis H1: There was no income and income (permanent standard) over the past few years in a financial account that was attributed to this period before the previous period.



Table 4, descriptions of the differences between the gain and the value (dominant criterion) to dismantle this error

Standard deviation	Myangin	Count	Group name	variable name
0.24	-0.245	387	After that, there is no profit or loss between me.	Is there a checkbox between the earning and the car (dominant standard)
0.129	-0.105	774	Before that, there is a checkbox between the earning and the car	

Table 5: Measurement of the meter between the screws and the car (Dom standard)

surface meaning	disparity	Azadi degree	His command	surface meaning	Famare	variable name
0.000	-0.14	1159	-12.864	0.000	197.120	Is there a checkbox between the earning and the car (dominant standard)
0.000	-0.14	501.502	-10.691			

This is a perspective that can be observed based on the amount of information in this domain, which is very different in the form of a barbaric assumption, and it is worth noting that the amount of information in the first place is the amount of the domain for the purpose of responding or confirming the hypothesis. May be used. With an amount of 0.000 and 0.000 each, six meters per meter over 5 square feet. We have no choice but to do so. This is a barbaric imposition, and people are forced to do so. There is an amount of over 500 km of domain that has been used for the last time you use it, and this is how much money there is for the connection between the network and the car (domestic standard) of 5 km. The amount of data used by the user is mandatory. It must be subject to a registered tax decree. A few minutes later, as a result of this error, after the

connection between the switch and the switch between the switch and the (permanent standard) car were too large.

The second hypothesis states: corporate governance has an increasing effect on predicting business failure (the first criterion) during accounting anomalies. Therefore, the hypothesis can be written as follows:

Hypothesis H0: Corporate governance does not have an increasing effect on the prediction of business failure (first criterion) during accounting anomalies.

Hypothesis H1: Corporate governance has an increasing effect on predicting business failure (the first criterion) during accounting anomalies.

Table 6, the test result of the first model

colinear	level of significance	z statistic	standard error	Coefficients	symbol	Variables
1.39	0.019	2.35	0.021	0.0507	GOV	corporate governance
9.35	0.000	-3.71	0.071	-0.264	Corona	Predicting business failure
8.27	0.037	2.09	0.088	0.185	GOV* Corona	Corporate governance* predicting business failure
1.47	0.069	-1.82	0.012	-0.023	Size	Company size
2.01	0.130	1.51	0.009	0.014	MTB	Market to book value ratio
1.63	0.328	-0.98	0.053	-0.052	Lev	Financial leverage
2.43	0.000	-5.33	0.103	-0.551	ROA	return on assets



1.35	0.007	-2.69	0.027	-0.074	Loss	The loss of the company
1.21	0.000	-4.94	0.014	-0.07	Growth	Sales growth
---	0.513	0.65	0.174	0.114	C	
				0.3281	Coefficient of determination	
				100.17	Parent statistics	
				0.0000	level of significance	

The results of Table 6 show that the interactive variable of corporate governance*prediction of business failure has a positive coefficient and a significance level of less than 5%, so corporate governance has an increasing effect on the prediction of business failure (the first criterion) in Time has accounting anomalies and the first hypothesis is accepted at the confidence level of 95%. The control variables of return on assets, unprofitability of the company and sales growth have a significance level of less than 5% and a negative coefficient, so they have an inverse and significant relationship with the dependent variable. The coefficient of determination is equal to 32%, which shows that the independent and control variables in the model have been able to explain 32% of the changes in the dependent variable.

Wald's statistic is equal to 100.17 and its significance level is less than 5%, so it can be said that the fitted model has sufficient validity. The collinearity test shows that there is no variance inflation factor in the model variables.

The second hypothesis states: corporate governance has an increasing effect on the prediction of business failure (the second criterion) during accounting anomalies. Therefore, the hypothesis can be written as follows:

Hypothesis H0: Corporate governance does not have an increasing effect on predicting business failure (the second criterion) during accounting anomalies.

Hypothesis H1: Corporate governance has an increasing effect on predicting business failure (the second criterion) during accounting anomalies.

Table 7, the result of the second model test

colinear	level of significance	z statistic	standard error	Coefficients	symbol	Variables
1.39	0.000	5.97	0.0107	0.064	GOV	corporate governance
9.35	0.000	-7.12	0.013	-0.099	Corona	Predicting business failure
8.27	0.000	5.74	0.072	0.412	GOV* Corona	Corporate governance* predicting business failure
1.47	0.000	-3.63	0.004	-0.018	Size	Company size
2.01	0.009	2.62	0.003	0.009	MTB	Market to book value ratio
1.63	0.514	-0.65	0.032	-0.0209	Lev	Financial leverage
2.43	0.000	-5.13	0.049	-0.252	ROA	return on assets
1.35	0.007	-2.69	0.017	-0.045	Loss	The loss of the company
1.21	0.003	-2.94	0.007	-0.021	Growth	Sales growth
---	0.048	1.98	0.074	0.146	C	
				0.2321	Coefficient of determination	
				246.60	Parent statistics	
				0.0000	level of significance	

The results of Table 7 show that the interactive variable of corporate governance*prediction of business failure has a positive coefficient and a significance level of less than 5%, so corporate governance has an increasing effect on the prediction of business failure (the

second criterion) in time. It has accounting anomalies and the second hypothesis is accepted at the confidence level of 95%. The control variable of the ratio of market value to book value has a positive coefficient and a significance level of less than 5%, therefore it has a direct and significant relationship



with the dependent variable, but the control variables of company size, return on assets, company loss and sales growth have a significance level of less than 5% and the coefficient is negative, so they have an inverse and significant relationship with the dependent variable. The coefficient of determination is equal to 23%, which shows that the independent and control variables in the model have been able to explain 23% of the changes in the dependent variable. Wald's statistic is equal to

246.60 and its significance level is less than 5%, so it can be said that the fitted model has sufficient validity. The collinearity test shows that there is no variance inflation factor in the model variables.

The result of the test of the first and second models (high and low financial leverage)

In this section, the hypotheses related to the first and second models of the research are adjusted separately for high and low financial leverage companies and the results are examined:

Table 8, the test results of the first and second models (high and low financial leverage)

Low financial leverage		High financial leverage		Low financial leverage		High financial leverage		Variables
RM2	RM1	RM2	RM1	RM2	RM1	RM2	RM1	
possibility	Coefficients	possibility	Coefficients	possibility	Coefficients	possibility	Coefficients	
0.350	0.0116	0.439	0.0156	0.438	0.0135	0.157	0.0421	corporate governance
0.002	-0.094	0.000	-0.256	0.000	-0.146	0.000	-0.390	Predicting business failure
0.858	0.008	0.021	0.180	0.100	0.081	0.000	0.296	Corporate governance* predicting business failure
0.537	0.0024	0.0232	0.0076	0.395	0.002	0.021	0.0104	Company size
0.002	0.011	0.019	0.0158	0.942	0.0003	0.605	0.003	Market value to book value
0.000	-0.538	0.000	-0.984	0.042	-0.090	0.077	-0.111	return on assets
0.410	-0.032	0.360	-0.041	0.016	-0.0306	0.005	-0.052	The loss of the company
0.106	-0.016	0.008	-0.035	0.000	-0.0425	0.000	-0.098	Sales growth
0.225	-0.070	0.007	-0.245	0.015	-0.086	0.000	-0.322	C
constant		constant		constant		constant		Effects
0.21		0.33		0.16		0.24		Coefficient of determination
19.03		36.32		14.23		23.29		Test statistics
0.000		0.000		0.000		0.000		level of significance

The results of Table 8 show that the interactive variable of corporate governance* predicting business failure for companies with high financial leverage has a positive coefficient and a significance level of less than 5%, so for companies with high financial leverage, corporate governance has an increasing effect on Predicting business failure (first criterion) at the time of accounting anomalies. Also, the interactive variable of corporate governance* predicting business failure for companies with low financial leverage has a

positive coefficient and a significant level of less than 5%, so for companies with low financial leverage, corporate governance has an increasing effect on predicting failure. The business (first criterion) has accounting anomalies at the time. In addition, the hypothesis for the second criterion of predicting business failure in both high and low financial leverage has been rejected. The significance level of parent in all four fitted models is less than 5%, so it can be said that the fitted model has sufficient validity.



Table 9, summary of findings

the result		The title of the hypothesis
acceptance		Hypothesis 1: The prediction of business failure (the first criterion) during accounting anomalies has decreased compared to previous periods.
acceptance		Hypothesis 1: The prediction of business failure (the second criterion) has decreased during accounting anomalies compared to previous periods.
acceptance		Hypothesis 2: Corporate governance has an increasing effect on predicting business failure (the first criterion) during accounting anomalies.
acceptance		Hypothesis 2: Corporate governance has an increasing effect on predicting business failure (the second criterion) during accounting anomalies.
Lever down	Lever up	Description of the results of the second hypothesis according to the above lever
	confirmation	Hypothesis 2: Corporate governance has an increasing effect on predicting business failure (the first criterion) during accounting anomalies.
	rejection	Hypothesis 2: Corporate governance has an increasing effect on predicting business failure (the second criterion) during accounting anomalies.
confirmation		Hypothesis 2: Corporate governance has an increasing effect on predicting business failure (the first criterion) during accounting anomalies.
rejection		Hypothesis 2: Corporate governance has an increasing effect on predicting business failure (the second criterion) during accounting anomalies.

IV. Discussion and conclusion:

There is no clear and obvious framework or definition of predicting business failure that is comprehensive in the accounting literature. But researchers and theorists have tried to define business failure prediction so that it can be effective and used. The Financial Accounting Standards Board argues in conceptual statement number two that quality is defined in terms of the general objectives of financial reporting, that is, providing useful information for users to make investment decisions, granting credit, and the like. This board then defines the quality features necessary to meet the stated goals. Predicting business failure improves the usefulness of information. Also, predicting business failure means the usefulness of financial statements for investors, creditors, managers and other people related to the company. The prediction of business failure can be defined as the ability of financial statements to convey information about the company's operations and, in particular, to predict its expected cash flows to investors, based on the opinion that accruals represent the informational value of profit. It improves by reducing the effect of unstable

fluctuations in cash flows. Predicting business failure is beneficial

The accounting information and reported profit figures are for stock market users. In the previous chapter, the prediction of business failure at the time of accounting anomalies compared to previous periods was investigated. According to the results, it was determined that the period after the prediction of business failure, the prediction of business failure has decreased. That is, with the spread of the pandemonium of predicting business failure and the involvement of people in the international community, Iranian society is not exempt from this, and in companies active in the Tehran Stock Exchange, the opportunistic behavior of company managers in this period is more than before and predicting business failure. And work has been declining. This result is in accordance with the research results of Pourflah Pasand (2019). Also, it is in accordance with the research results of Hsu et al. (2022). Financial reports should always provide reliable information to help users make decisions, and the main goal of financial reporting is to provide useful information for decision makers. The low quality of financial reporting may give misleading



information to investors and they may get confused in their decisions. On the other hand, one of the most important guidance and control tools of companies is corporate governance. A good and appropriate corporate governance leads to the efficiency of the companies' performance, and since corporate governance is considered a framework for reaching the company's goals, therefore, by increasing the quality of corporate governance, the prediction of business failure is increased and appropriate information is also provided for the better use of investors and shareholders. becomes The results of the second research hypothesis show that corporate governance mechanisms have a direct and significant effect on the prediction of business failure. This means that by increasing the quality of corporate governance, the number of responsibilities and methods applied by the board of directors and managers with the aim of determining the strategic path that guarantees the achievement of goals, controlling risks appropriately and consuming resources appropriately. Including, it is increased and conditions are provided to predict business failure more. Therefore, with monitoring and control, the opportunistic behavior of managers is reduced and as a result, the prediction of business failure increases. This result is in accordance with the research results of Salehi Kordabadi and Zad Dosti (2019), Arwahi and Rajaeizadeh Harandi (2001) and Behbahaninia and Asgari (2000). Also, it is in accordance with the research results of Hsu et al. (2022).

Resources :

– Armin, Omid and Durandish, Maitham (2019), investigating the relationship between social responsibilities, systematic risk, corporate governance and cash retention in companies listed on the Tehran Stock Exchange, the third national conference on accounting, economics and innovation in management, Bandar Abbas, 4(1), 34-58. – An action. Ismail, Meshki Miaoghi. Mehdi, Kord Rostami. Sohrab, Khurdiar. Sina (2019), Investigating the relationship between social responsibility and cash retention with an emphasis on the mediating role of systematic risk factors and corporate governance, Accounting Knowledge and Management Audit, 9(34), 35-45. – Sanobar, Nasser, Khalili, Majid, Thaqfian, Hamed (2013). Investigating the relationship between social responsibility and financial performance of companies, Business Management Studies, Volume 2, Number 4; From page 28 to page 52 – Arab Salehi, Mahdi, Ghazal Sadeghi and Mahmoud

Moinuddin. (2012) "The relationship between social responsibility and the attitude of customers of companies listed on the Tehran Stock Exchange". Accounting Experimental Research No. 9, pp. 1-20 – Lawson, Alan, (2011): Ethical management in government services, translated by: Mohammad Reza Rabiei Mandjin and Hassan Kiorian, Tehran, Yakan Publishing House. – Mahfovi, Gholamreza; Akbari, Mohsen; Ghasemi Shams, Masoumeh (2016), Investigating the effect of corporate social responsibility on investment sensitivity to cash flow, Investment Science Quarterly, 6(30), 25-38. – Mohagheg Damad, M. (1373). "Nature and environ