



## Explaining the Effect of Accounting Concepts on the Level of Risk Disclosure in Annual Financial Reporting in Companies Listed on the Tehran Stock Exchange

**Ali Mazinani**

PhD Student of Accounting, Central Tehran Branch, Islamic Azad University, Tehran, Iran

**Zahra Lashgari\***

Assistant professor, Department of Accounting, Central Tehran Branch, Islamic Azad University, Tehran, Iran

Correspondent Author

Z\_lashgari@iauctb.ac.it

**Negar Khosravi Pour**

Assistant professor, Department of Accounting, Central Tehran Branch, Islamic Azad University, Tehran, Iran

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### ABSTRACT

The purpose of this study is to investigate the effect of accounting concepts on the level of risk disclosure in annual financial reporting in companies listed on the Tehran Stock Exchange. In this study, five indicators (Financial Distress, accounting conservatism, level of tax avoidance, Dividend policy and level of corporate social responsibility) have been used to examine accounting concepts. For this purpose, hypotheses were compiled and information related to companies that are members of the stock exchange for the period between 2009 and 2018 were examined and analyzed. The statistical population of the study according to the conditions considered for sample selection, including 140 companies that were selected by systematic elimination method. The research regression model was investigated and tested using the panel data method with a fixed effects approach. The results showed that among the accounting concepts, the index of financial distress and tax avoidance due to the decrease in the level of supervision, transparency and proper disclosure has a significant negative effect on the level of risk disclosure in annual financial reporting. also, the results confirm that Increasing the level of transparency that is part of companies' responsibility for increasing the level of public welfare has a significant positive effect on risk disclosure in annual financial reporting. However, accounting conservatism and corporate dividend policies do not have a significant effect on the level of risk disclosure in annual financial reporting.

### Keywords:

Level of Risk Disclosure in Annual Financial Reporting, Corporate Transparency and Accounting Concepts.



## 1. Introduction

At the present time, accounting information systems play a very important and vital role in the accomplishment of a country's economic activities. It can be said that all economic decisions are based on the information obtained from accounting systems. As a result, any research that paves the ground for accounting information to support economic actors and decision makers can lead to a better understanding of the accounting information significance and the need for their frequent high-quality disclosures. As it was also stated by Va'ez and Afari (1394), the accounting information shown in financial statements, specifically financial statements, is in fact the input of various types of decision-making models which are used by external and internal users to better understand the existing conditions and to make the best choices among the available ones. In the same vein, however, Slovic (1981) posited that risk information shows the risk factors that are important variables in investment process. Risk expectations affect the behavior of investment managers. Therefore, as also Verrecchia (1983) emphasizes, any information about a company's risk is useful for investors. Research on risk determinant factors shows that companies are unlikely to disclose risk information because of which their competitors can obtain some confidential information, and risk information may send an undesirable message to the market.

On the other hand, the annual report consisting of financial and non-financial components is the main source of information for investors and shareholders. As Rodriguez and Noguera Gamez (2014) also stated the increasing complexity of the business environment, processes, and legal constraints makes companies to demand for higher levels of information disclosure to increase transparency and reduce information asymmetry. That's why as Iatridis (2011) mentioned risk information and risk management have received a great deal of attention in recent years in the wake of large corporate bankruptcies in the United States and Western Europe.

Risk is an indispensable element for any company. In addition to financial risks, each company is exposed to non-financial risks, including trade risks and changes in the economic environment, which can severely affect a business unit. Therefore, following Linsley & Shrivs (2006), corporate risk can be

defined as any event, risk, threat, opportunity, damage, or risk that influences a company.

However, as Lee et al. (2019) has also claimed, disclosing information improves the investment efficiency of a company by reducing information asymmetry and representation problems between investors and companies. Therefore, any information about a company's risk is useful for investors. The researches on risk factors show that companies are reluctant to disclose risk information because competitors can obtain confidential information from this disclosure, and risk information may send an undesirable message to the market (See Yanqiong et al., 2018).

Beretta and Bozzolan (2004) define risk disclosure as spreading information about a company such as strategies, specifications, operations, and other external factors that have a potential impact on expected outcomes. However, risk disclosure in annual reports should be limited. According to the definition of Linsley and Shrivs (2006), informing the reader of the opportunities, prospects, risks, harms, threats, and disclosures that influence a company or will do in the future; the management's awareness of each of these items can also be considered as risk disclosure. Since this definition covers the aspects of opportunities, prospects, threats, and fears, beside encountering them, it is more comprehensive than the definition of Beretta and Bozzolan (2004).

In addition, managers of companies voluntarily disclose information to inform investors about the future prospects, goals and strategies of their company. Of course, high-quality disclosure of such information can be a significant help in creating transparency and market efficiency. Providing financial and non-financial information about a company voluntarily reduces information asymmetry, increases transparency, increases stock liquidity and thus improves the company's financial condition (Avang et al., 2016).

In Iran, the existence of accounting and auditing standards and some provisions as institutional mechanisms in Tehran Stock Exchange Organization emphasizes the need for regular disclosures of information, which can reduce the information gap between managers and owners of companies, not completely eliminating it, though. Thus, voluntary disclosure can help reduce the information gap and improve the quality of financial reporting. One of the

optional disclosures in the country's capital market is the risk disclosure in annual financial reporting. Economic issues in the country and the existence of various risks in the economy (such as the risks of sanctions and some significant systematic risks in the economy) and the discourse of managers' inefficiency have caused market activists to feel considerably insecure about the future of companies. So as Dawd and Charfeddine (2019) also suggested, one of the solutions that can reduce this uncertainty is risk disclosure in the annual financial reporting of companies.

On the other hand, since the relevant disclosures should be made through the due accounting system, there is an argument saying that accounting indicators can have effects on the level of disclosure in the financial statements. As a result, Lee et al (2019) argued on the effect of the financial distress index holding that the companies with financial distress avoid disclosing negative information to the market any more, because these companies will try to escape increasing negative reactions of the market. The companies with higher financial distress are expected to reduce the level of risk disclosure in their annual financial reporting.

In addition, there is an argument on the effect of the conservatism index and tax avoidance that companies with higher conservatism and tax avoidance have lower levels of supervision, transparency, and poorer reporting; and due to their conservatism, these companies try to hide some of the risks they face with from the market or postpone their disclosure. So, it is expected that higher levels of conservatism and tax avoidance by being less transparent will reduce the level of disclosure in annual financial reporting (Dawd and Charfeddine, 2019).

Also, in relation to the dividend policy index, Alkurdi et al. (2019) argued that companies with higher distributed dividend payouts are financially stronger and have been able to achieve some stability and transparency in their financial reporting. Therefore, these companies are not afraid to disclose any risk information and try to maintain the trust they have gained in recent years so as not to harm the interests of investors. Therefore, it is expected that the companies with higher dividend policies show higher levels of risk disclosure in their annual financial reporting.

Finally, in relation to the level of corporate social responsibility, Alkurdi et al. (2019) argued that companies with a higher level of social responsibility disclosure are more responsible and have a more accurate monitoring plan; these companies try to establish themselves a stable trend in the market and avoid creating tension in the market so as not to harm the interests of investors. Therefore, it is expected that with higher transparency and responsibility, more risk disclosure can be seen in annual reporting.

Considering the issues raised and reviewing the related domestic and foreign researches, it can be claimed that most studies are silent on risk disclosure in annual financial reporting, and few researches has been done in this regard. So, for the first time, this study was carried out on the effect of accounting concepts on risk disclosure in annual financial reporting in companies listed on the Tehran Stock Exchange

## **2. The Review of Literature**

In their article, Lai, Liu, and Chen (2020) investigated the relationship between internal control quality of financial reporting and investment efficiency. Their sample consisted of 3770 year-companies selected from the auditing analysis database for the years 2004 to 2008. The results showed that there is more likely to have inefficient investment in units with poorer internal control quality of financial reporting. They also showed that there is a significant negative relationship between the future cash flows and the investments made by companies with poor internal control quality of financial reporting.

Alkurdi et al. (2019) examined the impact of corporate governance on risk disclosure. Their sample included 15 banks working between 2008 and 2015. The results of their research showed that corporate governance features including the size of the board of directors, board independence, managerial ownership, institutional ownership and audit committee had a positive and significant effect on risk disclosure in the annual reporting of the companies.

Dawd and Charfeddine (2019) examined the relationship between corporate disclosure and firm performance in the companies listed in Kuwait Stock Exchange. They found that there is a nonlinear and U-shaped relationship between disclosure types and firm performance. In addition, they found that the

relationship between disclosure and firm performance was not determined by the firm size variable.

In their study, Li et al. (2019) investigated the effect of risk disclosure in financial reporting on investment efficiency. Their sample included 18,651 year-companies. They did their research based on collecting risk disclosure information and data mining method. The results of their research showed that risk disclosure in financial reporting of companies will improve the transparency of the company's information environment and ultimately will have a significant positive effect on investment efficiency.

Smith (2019) in his article entitled *Risk Disclosure, Liquidity and Investment Efficiency* showed that risk disclosure influences the investment efficiency of companies by having effects on the usefulness of the information obtained from stock prices. He also stated that risk disclosure reduces the expected investment level of companies and consequently the expected risk.

Rezaee and Tuo (2017) investigated the relationship between voluntary disclosure of non-financial information and sustainability performance. They collected 580 samples of companies' voluntary non-financial disclosures about product, competition, industry, customers, trends, and technology data from their 2010 annual reports. They found that information content and managerial motivation play an important role in assessing backgrounds as well as non-financial disclosure consequences. In particular, they found that earnings quality is a significant factor in influencing non-financial disclosures, while proprietary cost is a prominent factor in influencing historical non-financial disclosures. Using KLD database rankings to assess sustainability performance, they found a two-way relationship between non-financial disclosure and sustainability performance. In particular, forward non-financial disclosure is associated with sustainability performance, while this year's sustainability performance is associated with more disclosure of historical non-financial information in year-end annual records.

Heidari et al. (2016) investigated the relationship between the quality of corporate risk disclosure and information asymmetry in the companies' risky conditions, recession and the presence of institutional analysts in Tehran Stock Exchange. To achieve the research aim, 100 companies were surveyed for the period between 1393 and 1389. They tested the

research hypotheses using random data model, and they also analyzed risk information disclosure through the content analysis of different sections of the report by board of directors. they also developed the research procedure based on Linsley and Schreiose's (2006) standards. The results of their research showed that there is a negative significant relationship between the quality of risk disclosure and information asymmetry (bid/ask spread and trading level). Also, the risk degree of a company has a significant effect on the relationship between the quality of risk disclosure and information asymmetry due to their level of technology and the presence of institutional analysts in the transaction volume. However, in Tehran Stock Exchange, the disclosure of risky information in different economic situations has identical effects on information asymmetry.

in their article, Namazi and Ebrahimi Meymand (2016) studied the characteristics of the risks disclosed in the annual reports and also the factors affecting the level of disclosing risk information. To do this, they analyzed the notes associated with the financial statements and the activity reports of the directors board gained from 275 year-companies for the time period from 1392 to 1388, using content analysis and listed the characteristics and the amount of disclosure of risk information. In this study, the data obtained from the content analysis indicate that the companies tend significantly to provide retrospective information, qualitative data, and risk source disclosure rather than futuristic information, quantitative data, and risk management solutions. Finally, firm size and financial leverage showed to have a positive significant relationship with the rate of risk disclosure and there was also a negative significant relationship between the market risk level of a company and its risk disclosure.

### 3. Research Hypotheses

According to the theoretical foundations and previous researches, the research hypotheses have been formulated as follows:

**Hypothesis 1:** The level of financial distress has a significant effect on risk disclosure in annual financial reporting.

**Hypothesis 2:** The level of accounting conservatism has a significant effect on risk disclosure in annual financial reporting.

**Hypothesis 3:** The level of corporate tax avoidance has a significant effect on risk disclosure in annual financial reporting.

**Hypothesis 4:** Corporate dividend policy has a significant effect on risk disclosure in annual financial reporting.

**Hypothesis 5:** The level of corporate social responsibility has a significant effect on risk disclosure in annual financial reporting.

### 4. Research Methodology

#### the population and statistical sample

The statistical population was all companies listed in TSEO during the time period from 2009 to 2018. The sampling method was a kind of convenience sampling; Using a systematic elimination method, among all listed companies at the beginning of 2008, those without the following characteristics were eliminated and the leftovers were picked to be analyzed:

- 1) the companies must be continuously active in the stock market during the time period under review.
- 2) The statistical sample includes only manufacturing and industrial companies.
- 3) The financial year of the companies should end on March 20.

According to the above conditions, finally, after these steps, 140 companies i. e. 1400 year-companies were selected for our aim to be investigated. These steps are illustrated in the following table:

**Table 1: steps of selecting the sample from listed companies**

The total number of listed companies	694
The number of the companies whose data is available and has continued to operate during the research period.	356
The number of the companies whose end of fiscal year is 12/29 S.	317
The number of investment companies, insurance, leasing, banks, etc.	72
The number of the companies that had incomplete information during the research period.	105
The number of the companies left as our sample	140

#### Research models and variables

The research models are selected as follows to test the hypotheses. The research model:

$$\begin{aligned}
 Risk\ Disc_{i,t} = & \beta_0 + \beta_1 Financial\ Distress_{i,t} \\
 & + \beta_2 Accounting\ Conservatism_{i,t} \\
 & + \beta_3 DPR_{i,t} + \beta_4 Tax\ Avoid_{i,t} \\
 & + \beta_5 CSR_{i,t} + \beta_6 size_{i,t} + \beta_7 Liquid_{i,t} \\
 & + \beta_8 Loss_{i,t} + \beta_9 Age_{i,t} + \beta_{10} MBV_{i,t} \\
 & + \beta_{11} CFO_{i,t} + \beta_{12} LEV_{i,t} + \beta_{13} ROA_{i,t} \\
 & + \epsilon_{i,t}
 \end{aligned}$$

#### Research dependent variable

Risk Disclosure Index: This index is obtained by textual analysis following the work of Hope et al. (2014) and Kravet and Muslu (2013). According to Kravet and Muslu (2013) and Li et al. (2019), the words risk, uncertainty, litigation, ambiguous, unstable, challenging, difficult, pressure, undesirable, contradictory, complex, diverse, contradictory, probable, influence or effect, intense, fluctuating, change and potential are considered as keywords for risk. Then, we extracted them from the text and counted their frequent use. Finally, the number obtained is divided by the total number of words in the text.

#### Research Independent Variables

Financial Distress Index: If the accumulated loss of the company is more than a half of the capital, the company is financially distressed (according to Article 141 of the Commercial Code) and the virtual variable is defined as one; otherwise it is considered non-distressed and defined as zero (Satayesh and Mansouri, 2014).

Accounting conservatism: The Givoli and Hayn's (2000) model is used to measure conservatism. The conservatism index is calculated based on the following model:

$$\text{Conservatism} = \left[ \left( \frac{\text{Operational accruals}}{\text{Total assets early in the period}} \right) \times (-1) \right]$$

Operating accruals are obtained from the difference between net profit and operating cash flow plus depreciation cost.

Tax avoidance index: To measure this index, two criteria have been used as follows:

- A) The difference between accounting profit and taxable profit  $BTB_{i,t}$ : It's the difference between accounting profit (pre-tax profit) and taxable profit (which is obtained from dividing

the tax cost by the legal tax rate) of company  $i$  in year  $t$  which is calculated through the difference between accounting profit and taxable profit divided by the book value of assets in order to homogenize the variables (Kubick et al., 2015). So if it is higher than the median, it takes 1, otherwise it gets 0.

difference between accounting profit and taxable profit  

$$= [\text{accounting profit} - \left(\frac{\text{taxt cost}}{0.25}\right)]$$

B) The ratio of tax expense and pre-tax profit  $ETR_{i,t}$ : It is obtained by dividing the tax cost of company  $i$  in year  $t$  by the pre-tax income of company  $i$  in year  $t$  (Kubick et al., 2015). if the obtained number is higher than the median, it takes 0, otherwise it will get 1. Finally, after determining a number for each year of the company, the tax avoidance index is calculated as follows:

$$\text{Tax Avoidance} = \frac{\sum_{j=1}^m d_j}{\sum_{j=1}^m H_j}$$

In this formula,  $\sum d_j$  stands for all items that have gotten the value of 1, and  $\sum H_j$  stands for all items for which the values 1 or 0 were assigned. Thus, for each company, the tax avoidance index was measured which is ranging from 0 to 1:

Dividend Policy (DPR): It is equal to the ratio of dividends per share to earnings per share (Charitou et al., 2010).

Disclosure of Corporate Social Responsibility: There is still no consensus between researchers and organizations to measure Corporate Social Responsibility and its dimensions and indicators. However, in order to compile a checklist for disclosing corporate social responsibility, a large number of theoretical and research sources were first examined to find related international standards and criteria in this field. Then, considering the many dimensions and components used in previous researches as well as its conditions in Iran, the final checklist of corporate social responsibility was extracted by keeping an eye to the international standards and guidelines, as illustrated by Table 2.

**Table 2: The criteria used to measure the disclosure of social responsibility**

Dimintions	Indexes
Bio-environmental	Air pollution; Recycling or waste prevention; Protection of natural resources; Receiving an award in the field of environment; Compliance with environmental laws and regulations; Other cases.
Products and Services	the quality, safety and health of products; Product development / market share; after sales services; Production stop; Other cases
Human Resources	General information about the workforce (such as age distribution of employees, gender distribution of employees, level of education); Staff training and development program; Employee salaries, benefits and bonuses; Staff's Sport welfare facilities; Staff morale and communication; Staff work environment (safety, health, hygiene); Retirement and termination benefits of employees; Other cases
Customers	Meeting customer needs; Customer complaints / satisfaction; Customer health; Other cases
Social	The observance of the laws and regulations related to the social dimension; Social investment (health, health, etc.) Gifts and charity services (civic institutions); Sponsors for social activities (sports, etc.); Other cases
Cultural Religious	Cultural-ideological investment (instruction, etc.); Sponsors of cultural-religious activities; Corruption, bribery, money laundering; Other cases
Energy	Energy saving and reservation; Development and exploration of new resources; Use of new resources; Other cases

Then, to measure the rank of corporate social responsibility, Content Analysis Method was used along with the Indicator Approach according to the following calculation:

$$CSR = \frac{\text{number of disclosed items}}{\text{total number of disclosable items}}$$

In Indicator Approach, Content Analysis works on the induction of results based on the presence or absence

of attributes defined in the message. In this approach, due to the disclosure of any of the corporate social responsibility items, 1 point is counted and if an item was not disclosed, it is considered 0. In the present study, if any of the indicators mentioned in the table above have been disclosed in the activity reports of the directors board of companies, it will be assigned 1, and if it has not been disclosed, it will be assigned 0. Then, for each company, the ratio of the number of disclosed

indicators to the total number of disclosable indicators expresses the percentage of corporate social responsibility disclosure (Vourvachis, 2007).

### Research control variables

**Company Size:** It's equivalent to the natural logarithm of the company's total assets (Andrew et al., 2018).

**Liquidity:** It's equivalent to the ratio of cash to the company's total assets or it's amount to the cash a company holds (Andrew et al., 2018).

**Loss:** Loss is an imaginary variable meaning that if a company has a loss in the current year, it is assigned 1, and otherwise 0 (Andrew et al., 2018).

**Age:** It is equal to the natural logarithm of the company age from the date of establishment (Andrew et al., 2018).

**Market-to-Book Value (MBV):** It's defined as the ratio of market value of equity to book value of company equity (Andrew et al., 2018).

**Operating Cash Flow (CFO):** It's equal to the company's operating cash flow and is adjusted with the total corporate assets (Andrew et al., 2018).

**Financial Leverage (LEV):** It's equal to the ratio of total liabilities to total corporate assets (Fosu, 2013).

**Return on Assets (ROA):** It's Equal to the ratio of net profit to total corporate assets (Andrew et al., 2018).

## 5. Results and Discussion

### Descriptive Statistics

The statistical results of the research variables are shown in Table 3.

According to the above statistical figures, specifically the closeness of mean and median in most of the research variables, it can be stated that all variables have a normal distribution. In addition, standard deviations, kurtosis and skewness coefficients were calculated to examine the normality of data distribution (Keller & Warrack, 2003).

Examining the above criteria, it can be stated that the data related to independent and dependent variables have a normal distribution because the variables have the minimal distance to the value calculated for kurtosis coefficient. In addition, the mean value of the financial leverage variable is about 61%, which indicates a high amount of debt in the capital structure of Iranian companies. Also, the corporate liquidity variable is of a mean of about 4%, which indicates the problem of high liquidity in Iranian companies due to the high volume of debt.

In addition, the asset return variable is of a mean of almost 10%, which indicates that the listed companies did not earn a commensurate return, given the inflation rate in the last decade, which could in itself be due to sanctions. On the other hand, the corporate dividend policy variable is of a mean of approximately 54%, which indicates a high volume of dividend distribution in Iranian companies. This high volume of profit distribution can be due to high inflation in the economy due to which companies have to distribute high amount of dividends to compete with other markets.

Table 3: Descriptive statistics of research variables

Variables	Number	Mean	Median	SD	Maximum	Minimum
Risk Disclosure in Financial Reporting	1400	.003	.002	.003	.036	0
Accounting Conservatism	1400	.024	.020	.124	.375	-.355
Corporate Tax Avoidance	1400	.492	.500	.178	1	0
Dividend Policy	1400	.539	.619	.399	1.355	0
Corporate Social Responsibility	1400	.143	.133	.053	.533	.033
Company Size	1400	6.008	5.949	.677	8.414	4.356
Company Liquidity	1400	.039	.026	.039	.208	.002
Company Age	1400	1.545	1.591	.167	1.826	.903
Market-to-Book Value Ratio	1400	1.865	1.579	.869	6.374	1.005
Operating Cash Flow to total assets ratio	1400	.120	.103	.123	.451	-.232
Financial Leverage	1400	.615	.624	.192	.987	.104
Return on Assets	1400	.096	.081	.130	.454	-.339
Descriptive statistics of two-dimensional variables						
Financial Distress	1400	0.038	.000	.192	1	0
Company loss	1400	0.123	.000	.329	1	0

**The Dependent Variables Multicollinearity Test and Variance Homogeneity Analysis**

Multicollinearity means a strong correlation between independent variables as measured by VIF measure. The values below 10 in this measure indicate the absence of Multicollinearity between independent variables (Aflatooni, 2013). The results showed that the calculated value for all the research variables is less than the allowed one. Therefore, it can be claimed that no Multicollinearity was observed between the research variables. In addition, a modified Wald Test was used to examine the variance homogeneity between the model residues. This test was performed in Stata software (Aflatooni, 2013). The results of this test for research models indicate the existence of variance homogeneity between the residues of the model. Also, the distribution normality of the regression residues was investigated, which confirms the normality of these residues.

**Inferential Statistics**

According to the discussed theoretical foundations, five hypotheses were formulated, examined and then tested. To do this, first the adequacy of the research model in testing five hypotheses was examined. However, before fitting the research model, it was necessary to perform the Chow test to evaluate the use of panel data method with fixed effects versus combined data method for the research sample. The

results of the Chow test for the research model were shown in Table (4).

**Table 4: The Chow Test Results of the Research Model**

Model under Examination	Statistics	Level of Error	The Accepted Method
Research Model	23.492	0.000	Fixed Effects Method

According to the statistics and the error level of Chow Test for the research model, the results indicate that the H0 (Zero Hypothesis) is not confirmed; therefore, fixed effects method is the preferred model. It is necessary to choose the Hausman test to choose between the panel data method with fixed effects or the panel data with random effects. The results of the Hausman test are also shown in Table (5).

**Table 4: The Hausman Test Results of the Research Model**

Model under Examination	Statistics	Level of Error	The Accepted Method
Research Model	27.583	0.010	Fixed Effects Method

As shown in Table (5), the results suggest that using fixed effects method is the preferred method for the research model. Therefore, below, the research model is estimated according to the preferred method in Table (6).

**Table 6: The Estimation Results of the Research Model \***

Variables	Variable Coefficient	Standard Deviation	T test statistics	Error Level
Width of Origin	-./.....	./.....	-./.....	./.....
Financial Distress	-./.....	./.....	-./.....	./.....
Accounting conservatism	-./.....	./.....	-./.....	./.....
Dividend policy	./.....	./.....	./.....	./.....
Corporate tax avoidance	-./.....	./.....	-./.....	./.....
Corporate social responsibility	./.....	./.....	./.....	./.....
Company size	./.....	./.....	./.....	./.....
Company liquidity	./.....	./.....	./.....	./.....
Company loss	-./.....	./.....	-./.....	./.....
Company age	./.....	./.....	./.....	./.....
Market-to-Book Value	./.....	./.....	./.....	./.....
Operating Cash Flow to Total Assets Ratio	./.....	./.....	./.....	./.....
Financial Leverage	./.....	./.....	./.....	./.....
Return on Assets	./.....	./.....	./.....	./.....
The coefficient of determination		./.....		
Adjusted coefficient of determination		./.....		
Watson-Camera Statistics		./.....		
F Statistics		./.....		
Probability of F statistics		./.....		



According to the results shown in Table (6), especially the obtained F-statistic (=165.58) and its error level (=0.000), it can in general be claimed that at the 99% confidence level, the research model is of a high significance. Also, considering the adjusted coefficient of determination obtained for the model, i.e. 94%, it can be generally stated that the control and independent variables of this study explain more than 94% of the changes of the dependent variables. In addition, given Watson-Camera statistic value of 1.837, it can be argued that there is no first-order autocorrelation between model residues. Also, the results show that among the control variables, only the variables of company size, company age and financial leverage had significant effects on risk disclosure in financial reporting.

### Testing the Research Hypothesis

Li et al. (2019), working within the framework of data mining method, showed that risk disclosure in financial reporting of companies improves the transparency of the company's information environment, and ultimately, will have a significant positive effect on investment efficiency.

According to the 1<sup>st</sup> hypothesis, the effect of financial distress on risk disclosure in annual financial reporting was investigated in companies listed on Tehran Stock Exchange. According to the results obtained of the model estimation shown in Table (6), the coefficient of financial distress variable is -2.597 and its error level is 0.000. Therefore, considering the negative coefficient of this variable and its significance level, it can be claimed that financial distress has a significant negative impact (at the error level of 5%) on the level of risk disclosure in annual financial reporting.

According to the theoretical foundations, it is argued that companies with financial distress refrain from disclosing negative information to the market because these companies do not want to be exposed to the market's negative reactions due to their distressness. Therefore, it is expected that we will see a decrease in the level of risk disclosure in annual financial reporting in companies with higher financial distress. Therefore, the first hypothesis of the research was confirmed at the level of 0.05 significance (these results are in consistency with those of Li et al., 2019).

The effect of accounting conservatism on risk disclosure in annual financial reporting was, according

to the 2<sup>nd</sup> hypothesis, investigated in companies listed on Tehran Stock Exchange. According to the results of the model estimation recorded in Table (6), the accounting conservatism variable coefficient was -0.00001 and its error level was 0.776. Therefore, considering the negative coefficient of this variable and its significance level, it can be claimed that accounting conservatism has a negative non-significant effect (at the level of 5% error) on the level of risk disclosure in annual financial reporting.

It can be argued that companies with higher conservatism are less transparent and weaker in reporting. Conservative companies try not to disclose many of the risks that the company faces with or they may disclose them to the market with a time delay; Therefore, it is expected that a higher level of conservatism will reduce the level of risk disclosure in annual financial reporting through less transparency. Therefore, the second hypothesis of the research is rejected according to the level of significance.

After reviewing a sample to assess the relationship between conservatism and investment efficiency, Lara, Osma, and Penalva (2010) concluded that even if there is full awareness of profitable investment opportunities, managers may not choose them. This wrong choice can be due to 1) moral vulnerability, short-term vision and inability to choose the right project, or 2) lack of funding sources due to the high capital costs. Conservatism, meanwhile, reduces profit management opportunities, and the existence of inflated profits at the time of their distribution as well as giving reward to managers based on these inflated profits.

According to the 3<sup>rd</sup> hypothesis, the effect of tax avoidance on risk disclosure in annual financial reporting was investigated in companies listed on Tehran Stock Exchange. According to the results recorded in Table (6), the tax avoidance variable coefficient of the companies is -0.0001 and its error level is 0.030. Therefore, considering the negative coefficient of this variable and its significance level, it can be claimed that tax avoidance has a significant negative impact (at the level of 5% error) on risk disclosure in annual financial reporting.

In the same vein, Alkurdi et al. (2019), who studied the impact of corporate governance on risk disclosure, showed that corporate governance characteristics such as board size, board independence, management ownership, institutional ownership and

audit committee have a positive and significant effect on risk disclosure in annual reporting.

However, it can be argued that companies with higher levels of tax avoidance are much less transparent and poor in reporting due to low supervision. These companies try not to properly disclose all the risks that the company faces. Therefore, it is expected that higher tax avoidance through less transparency will reduce the level of risk disclosure in annual financial reporting. Therefore, considering the level of significance, the third hypothesis of the research is confirmed at the error level of 5% (this finding is in accordance with the results of the research of Alkurdi et al., 2019).

The effect of dividend policy, according to the 4<sup>th</sup> hypothesis on risk disclosure in annual financial reporting was investigated in companies listed on Tehran Stock Exchange. According to the results obtained from the model estimation, the dividend policy variable coefficient is 0.016 and its error level is 0.301. Therefore, considering the positive coefficient of this variable and its level of significance, it can be claimed that dividend policy has a non-significant effect (at the level of 5% error) on risk disclosure in annual financial reporting.

Hejazi et al. (2017) investigated the effect of managers' qualifications on the dividend policy of companies listed in Tehran Stock Exchange. This research, which is a quasi-empirical research in the field of positivist accounting research, indicated that the managers' qualifications have a positive and significant relationship with corporate dividend policy. More capable managers pay more dividends.

Nevertheless, it can be argued that companies with higher distribution of dividends are financially stronger and have achieved a degree of stability and transparency in financial reporting. Therefore, these companies are not afraid to disclose risk information; They try to maintain the trust they have gained in recent years so that they do not harm the interests of their investors. Therefore, it is expected that we observe a higher level of risk disclosure in annual financial reporting of companies with higher dividend policy. Therefore, due to the level of significance, the fourth hypothesis of the research is rejected at the level of 5% error.

According to the 5<sup>th</sup> hypothesis, the effect of corporate social responsibility on risk disclosure in annual financial reporting was investigated in

companies listed on Tehran Stock Exchange. According to the results recorded in Table (6), the coefficient of corporate social responsibility variable is 0.134 and its error level is 0.012. Therefore, considering the positive coefficient of this variable and its significance level, it can be claimed that corporate social responsibility has a significant positive effect (at the level of 5% error) on risk disclosure in annual financial reporting.

In the same field, Green and Liu (2018), who surveyed the relationship between social responsibility and investment efficiency, concluded also that there is a positive and significant relationship between social responsibility and investment. In addition, social responsibility and company value have positive and significant relationships with investment efficiency.

Theoretically, it can be argued that companies with higher social responsibility are more responsible and have a more precise monitoring plan; These companies try to have a stable trend, and to avoid creating tension in the market so that the interests of investors are not harmed. Therefore, due to higher transparency and responsibility, we expect to observe a higher level of risk disclosure in annual financial reporting. Therefore, considering the level of significance, the fifth hypothesis of the research is confirmed at the level of 5% error (this finding is consistent with those of Alkurdi et al., 2019).

## 6. Conclusion

In this study, these five accounting concepts 1) financial distress, 2) accounting conservatism, 3) level of tax avoidance, 4) dividend policy and 5) level of corporate social responsibility were selected. Then, the effect of each one on risk disclosure in annual financial reporting was investigated in companies listed on the Tehran Stock Exchange. To do this, 5 hypotheses were developed and analyzed using the available information. In each hypothesis, the effect of one of the aforementioned accounting concepts was discussed on the level of transparency and consequently the level of risk disclosure in annual financial reporting. The hypotheses testing, statistical results, and arguments presented above showed that among the concepts of accounting, financial distress index and tax avoidance have significant negative effects on the level of risk disclosure in annual financial reporting due to the reduction in supervision, transparency and proper disclosure; Also, the findings confirm that the

corporate social responsibility index has a significant positive effect on risk disclosure in annual financial reporting by increasing the level of transparency that is part of corporate responsibility for increasing the level of public welfare. However, accounting conservatism and corporate dividend policy do not have significant effects on the level of risk disclosure in annual financial reporting.

### 6.1. Practical suggestions

The following suggestions which are in line with the results of the current research may prove useful to follow:

According to the above results, company managers can identify and control the effects of risk. In addition, managers are advised to consider factors such as corporate accounting concepts in their analysis and evaluation, especially while deciding on the amount of risk disclosure in their annual financial reporting.

In addition, according to the results of the research, investors, during the evaluation of companies and investment decisions, are advised to pay attention to the amount of corporate risk disclosure in all reports, especially the activity report of the board of directors. Also, as the results showed that risk disclosure is influenced by accounting concepts, standardization authorities are suggested to require companies to disclose risk information so that investors can more easily assess companies and make rational decisions.

In addition, legislators and financial policymakers are advised to support financial markets, especially the capital market, to prevent disorder and instability, and to enact laws to increase exemptions for companies that are more concerned with issues such as disclosure and transparency; by these they can motivate companies to make long-term decisions and strategies. It is also suggested that supervisors pay more attention, while doing their duties, to the issues like the level of disclosure, market transparency, different company strategies, and the discourse of reducing market fluctuations in order to increase the quality of disclosure, because these factors signal future market success.

### 7. References

- \* Ebrahimi, Seyed Kazem, Bahrami Nasab, Ali, & Baghian, Javad. (2017). The effect of audit quality and observance of shareholders' rights on the possibility of fraudulent reporting, *Auditing Knowledge*, 17 (69), pp. 125-149. [In Persian]
- \* Aflatooni, Abbas. (2017). *Statistical Analysis in Accounting and Financial Management* by Eviews, Tehran: Termeh Publications. [In Persian]
- \* Heidari, Mehdi, Mansourfar, Gholamreza, and Rezaei, Mehdi. (2016). The Qualitative Effect of Risk Disclosure Components on Information Asymmetry, Regarding To the Moderating Variables, Firm-Riskiness, Economic Downturn and Institutional Analysts in Tehran Stock Exchange, *Financial Research Journal*, 18 (3), pp. 391-414. [In Persian]
- \* Stayesh, Mohammad Hossein and Mansouri, Shole, (2014). The comparative investigation of corporate governance mechanisms in financial distressed and non financial distressed listed companies of Tehran Stock Exchange, *Financial Research Journal*, 16 (1), pp. 99-112. [In Persian]
- \* Taheri, Mandana, Rahmani, Ali, and Soleimani Amiri, Gholamreza, (2019). Value relevance of risk disclosure in Iranian listed banks. *Financial Accounting Research*, Year 11, Issue 1, Consecutive (39), pp. 1-22. [In Persian]
- \* Namazi, Mohammad, and Ebrahimi Meymand, Mehdi. (2016). 'Studying the Disclosure of Risk and Influential Factors on This Disclosure', *Journal of Financial Accounting Knowledge*, 3 (2), pp. 1-29, [In Persian]
- \* Va'ez, Ali, & Afri, Amjad, (2015), The Effect of the Quality Rating of Companies' Information Disclosure on the Investment Efficiency of Managers. *First International Conference on Accounting, Management and Economics Auditing*, Isfahan, Conference Secretariat. [In Persian]
- \* Alkurdi, A., Hossainey, KH., Tahat, Y., Aladwan, M. (2019). The Impact of Corporate Governance on Risk Disclosure: Jordanian Evidence, *Academy of Accounting and Financial Studies Journal*, 2019 Vol: 23 Issue: 1.
- \* Andrew, C, C. Shuping, C. Adam, E and Bin, M. (2018). Does Long-Term Earnings Guidance

- Mitigate Managerial Myopia?. [www.ssrn.com/abstract=2570037](http://www.ssrn.com/abstract=2570037)
- \* Beretta, S., Bozzolan, S., (2004) A framework for the analysis of firm risk communication *The International Journal of Accounting* 39. pp 265–288.
  - \* Charitou, A., Lambertides, N and TheodoulouG, . (2010). The Effect of Past Earnings and Dividend Patterns on the Information Content of Dividends When Earnings Are Reduced, *A Journal of Accounting Finance and Business Studies, ABACUS*, 46 (2): 153-187.
  - \* Dawd, I. and Charfeddine, L. (2019) ‘Effect of aggregate, mandatory and voluntary disclosure on firm performance in a developing market: the case of Kuwait’, *Int. J. Accounting, Auditing and Performance Evaluation*, Vol. 15, No. 1, pp.31–56.
  - \* Fosu, s. (2013). Capital structure, product market competition and firm performance: evidence from South Africa. *The Quarterly Review of Economics and Finance*,53, 140-151.
  - \* Givoly, D., and C. Hayn. 2000. The changing time-series properties of earnings, cash flows and accruals: Has financial reporting become more conservative? *Journal of Accounting & Economics* 29 (3) (Jun): 287.
  - \* Hope, O., Hu, D. & Lu, H. (2014).The Benefits of Specific Risk-Factor Disclosures, *Rotman School of Management, Working Paper*.
  - \* Hope, O., Thomas, W.B., 2008. Managerial empire building and firm disclosure.
  - \* Iatridis, G. (2011). Accounting disclosures, accounting quality and conditional and unconditional conservatism. *International Review of Financial Analysis*, 20(2), 88-102.
  - \* Keller, G., & Warrack, B. (2003). *Statistics for management and economics* (6th ed.). Pacific Grove, CA: Duxbury Press.
  - \* Kravet, T., & Muslu, V. (2013).Textual Risk Disclosures and Investors’ Risk Perceptions, *Review of Accounting Studies*, 18, 1088~1122.
  - \* Kubick, T, R., Lynch, D, P., Mayberry, M, A & Omer, T, C. (2015). Product Market Power and Tax Avoidance: Market Leaders, Mimicking Strategies, and Stock Returns, *THE ACCOUNTING REVIEW*, Vol. 90, No. 2, pp. 675–702.
  - \* Lai, S. M., Liu, C. L., & Chen, S. S. (2020). Internal Control Quality and Investment Efficiency. *Accounting Horizons*.
  - \* Li, Y., He, J., Xiao, M. (2019). Risk Disclosure in Annual Reports and Corporate Investment Efficiency, *International Review of Economics and Finance*, 112(3), pp 522-558.
  - \* Linsley, P. & Shrive, P. (2006). Risk reporting: A study of risk disclosures in the annual reports of UK companies. *The British Accounting Review*, 38(4), 387-404.
  - \* Rezaee, Z., & Tuo, L. (2017). Voluntary disclosure of non-financial information and its association with sustainability performance. *Advances in Accounting*, 39, 47–59. doi:10.1016/j.adiac.2017.08.001
  - \* Rodriguez Domínguez, L. & Noguera Gámez, L. C. (2014). Corporate reporting on risks: Evidence from Spanish companies. *Revista de Contabilidad*, 17(2), 116-129.
  - \* Slovic, P., Fischhoff, B., & Lichtenstein, S.(1981).Facts and Fears, *Social Perception of Risk*, *Advances in Consumer Research*, 8(1), 497~502.
  - \* Smith, Kevin, Risk Disclosure, Liquidity, and Investment Efficiency (June 12, 2019). *Stanford University Graduate School of Business Research Paper No. 19-8*. Available at <http://dx.doi.org/10.2139/ssrn.3282057>
  - \* Verrecchia, R. E., Discretionary disclosure, *Journal of Accounting and Economics*, Volume 5, 1983, Pages 179-194, ISSN 0165-4101, [https://doi.org/10.1016/01654101\(83\)90011-3](https://doi.org/10.1016/01654101(83)90011-3).
  - \* Vourvachis, P. (2007). On the use of content analysis (CA) in corporate social reporting (CSR): Revisiting the debate on the units of analysis and the ways to define them. *British Accounting Association Annual Conference*, Egham, England.
  - \* Yanqiong Li, Jie He, Min Xiao, (2018) Risk Disclosure in Annual Reports and Corporate Investment Efficiency, *International Review of Economics and Finance*, doi: 10.1016/j.iref.2018.08.021.