Investigating the Quality of Risk Disclosure of Management Commentary and Financial Performance of the Company on the Investors' Judgments

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ABSTRACT

Disclosure of risk information plays an important role in the decision making process and the assessment of companies. The accounting standard-setters provide disclosure risk information of the company in the form of management commentary. The purpose of present study is to investigate the effect the quality of risk disclosure of management commentary and financial performance of the company on the investors' decision making. To test the research hypotheses, a scenario-based questionnaire has been used. The domain of research in 2018, the statistical population consists of all active financial analysts in Tehran Stock Exchange (TSE) and the research sample consists of 160 financial analysts. The results of the study showed that, when deciding on investing in a company with incremental financial performance, the higher quality risk of disclosure of the firm affects the willingness of financial analysts to investment in the company. Also, the results of the research indicate that when deciding on the earnings persistence of company's with incremental financial performance, the quality of company's risk disclosure high does not affect the financial analysts' judgment of continuing financial performance.

Keywords:

Management Commentary, Quality of Risk Disclosure, Financial Performance and Investor Judgment.

1. Introduction

Increasing the complexity of business in different domains and diversity of influencing factors on operations have raised the risk of companies and hence the risk of investment (Abdallah et al, 2015). Investors need to understand the uncertainty in order to manage their investment risk (Campbell et al, 2014). However, traditional financial statements contain little information on this regards and, therefore, high demand has been created for risk information disclosure (Rodriguez et al, 2014). The need to provide such information in order to help investors decision making has been addressed by various studies such as Solomon et al. (2000) and Cabedo and Tirado (2004).

Despite the importance of risk disclosure, stakeholder claims, and the emphasis of accounting standard setting bodies, managers are reluctant to provide extensive information with the aim of monopolizing information (Nagar et al, 2003). Some managers are more motivated to disclose risk information through various mechanisms such as reporting requirements (Lajili and Zéghal, 2005) and internal and external corporate governance mechanisms (Lim and Tan, 2007; Patelli and Prencipe, 2007). Accordingly, one of the important options in relation to risk disclosure, especially in countries with legal weaknesses in investor protection, is disclosure through management commentary report. A management commentary report is a report of a company's financial statements and other statistical data that will help management to understand the company's current and future financial position, risks, changes in financial position and results of operations. Also, the A management commentary report is a unique disclosure that includes a clear explanation of the most important resources, risks and relationships that management believes can influence the value of the business unit, and allows managers to tailor the guidance based on information content and formatting of management commentary report (Securities and Exchange Organization, 2016). This kind of information disclosure helps users to assess the entity's risks as well as their expected consequences, and since management's annual interpretative reports are presented prior to the financial statements, investors are likely to first receive risk and risk management information (Miihkinen, 2013). As one of the most significant new changes to the disclosure guidelines following the recent amendments are the provision of management commentary report, there is a need for further consideration in the area of disclosure and reporting. Therefore, the main purpose of this study is to investigate the impact of the quality of risk disclosure in the management commentary report and financial performance of companies on the judgment of investors. Therefore, the first contribution of the present study is that by doing this research, in addition to expanding the accounting literature on the quality of accounting information disclosure, the reaction of professional investors to the information source reveals the management commentary report and its usefulness for judging in the Iranian capital market. Also, In Iran the requirement of disclosure of the management commentary report in 2017 was announced by Tehran Stock Exchange (TSE). Therefore, the second contribution is that the implications and consequences of disclosure of management commentary report have not been investigated by researchers. In the following parts, the conceptual framework and prior studies are discussed. Then, the research hypotheses and their test methods are presented. Finally, the research findings, discussion, conclusions and suggestions based on the results are presented.

2. Literature Review

When it came to risk disclosure, this issue is attracted more attention by accounting and financial associations and institutions around the world. These institutions state that there is an information gap between companies and shareholders about risk and companies provide insufficient information in their annual report. Therefore, understanding the management motivations for risk disclosure provides useful information for standard setting bodies (Miihkinen, 2012). In this regard, various studies have provided incentives for better risk disclosure and one of them is the management commentary report (Mokhtar and Mellett, 2013; Elshandidy and Neri, 2015). Management commentary report is a descriptive report which provides a context for interpreting the entity's financial position, financial performance and cash flows. Management commentary report provides the opportunity for the manager to outline his goals and strategies for achieving those goals. Users typically use the information provided in the management commentary report to evaluate the business entity's outlook and its

general risks as well as the success of the manager's strategies to achieve the stated goals. The key elements of management commentary report include (1) the nature of the business, (2) management goals and management strategies to achieve those goals, (3) the most important resources, risks and relationships, (4) results of operations and prospects, and (5) the most important metrics and indicators of performance that management uses to evaluate the performance of a business in comparison to the stated objectives (Securities and Exchange Organization, 2016). Management commentary report may include financial information required by accounting policy makers and optional non-financial information. In addition, management commentary report can provide managers with an opportunity to examine actual performance and expected goals and to interpret why and how their results differ from their past expectations (Elshandidy and Neri, 2015).

The management commentary report should include a clear explanation of the most important resources, risks and relationships that management believes can influence the value of the business, as well as how to manage those resources, risks and relationships. Management should disclose the entity's major risks and changes in those risks, along with its plans and strategies to counter or mitigate those risks and the extent to which the management strategies are effective (Securities and Exchange Organization, 2016). Therefore, the information presented in the risk section of the management commentary report specifically predicts the likelihood of occurrence this situation as well as the likely consequences. Risk disclosure transmits useful information to the market and improves stakeholder understanding of the risk exposure (Linsmeier et al, 2002). Hence, there is a high demand for transparent risk disclosure in annual reports. Also, high profitable companies have sufficient resources to invest in the risk management system that enables them to disclose risk (Deumes and Knechel, 2008). Barton and Mercer (2005) and Cianci and Kaplan (2010) in empirical research have shown that managers' reliable interpretations of negative financial performance can influence the judgment of non-professional investors and financial analysts. Also, their results showed that management's interpretations of business performance can influence the judgment of non-professional investors and financial analysts on firm profitability (Barton and Mercer, 2005; Cianci and Kaplan, 2010).

Experimental researches on risk disclosure issue suggest that risk disclosure has informational content and affects investor decision making (Jorion, 2002). Researches in this area have examined cases such as the characteristics of risk information disclosed (Linsley and Shrives, 2006), the relationship between risk disclosure and information asymmetry (Miihkinen, 2012). Finally, the results of most researches in this area suggest that risk disclosure is not performed properly (Jorion, 2002). The results of Beretta and Bozzolan (2004) research indicate that companies focus on disclosing past and present risks rather than disclosing information about future risks. In cases where future risks are also exposed, managers are reluctant to disclose the potential effects of positive or negative risks. In addition, managers feel that they have to attribute negative outcomes to external events (Linsley and Shrives, 2006). Fortin and Berthelot (2012) evaluated the quality of management commentary report using the risk disclosure section of management commentary report. In their research, the key information about the firm's risk, current situation and future performance was kept constant among the participants and the risk disclosure information was manipulated. The risk section of interpretative management report has provided before financial statements and disclosed prospective and qualitative information on strategic risks, market, operational, financial and environmental risks, as well as government laws and political risks. They believe that the potential consequences of negative information provided in the risk disclosure report can negatively impact the evaluation of non-professional investors of the firm performance (Fortin and Berthelot, 2012). Also, the results of Fortin and Berthelot (2012) suggest that disclosure of risk information has a significant impact on users' understanding of the firm's future performance and ultimately their investment decisions (Fortin & Berthelot, 2012). Therefore, investment understanding (i.e. future performance) and investor decisions are affected by risk disclosure. In addition, researches in the area of risk disclosure including Cianci & Kaplan (2010), Kahneman and Tversky (1979) and Weber (1994) showed that disclosure of risk information can be identified as having negative consequences for the future performance of the company. During evaluating a company for investment

purposes, investors consider the weight of negative information more than the weight of positive information in their decisions. Hirst et al. (2007) and Merkley et al. (2013) examined the impact of the individually disclosure of earnings components or cumulative earnings components disclosure on investors' judgments about earnings quality and sustainability (Hirst et al, 2007; Merkley et al, 2013). Their results show that investors and financial analysts can better judge earnings quality and sustainability when they receive earnings information in separate components. If managers attribute the changes in earnings to rational external (internal) factors, investors may consider profitability to be less (greater) compared to circumstances where these reasons are not disclosed (Linsley and Shrives, 2006). Lee and Park (2019) emphasized that the disclosure of qualitative information about the company improves the information environment, and showed that the expertise of the audit committee improves the quality of management commentary. Some prior studies on this issue are discussed in the following part.

Guthrie et al (2020) examined understand the level and features of risks disclosed by Italian organisations using integrated reporting (IR). The content analysis reveals that most of the Italian organisations incorporate many types of risk disclosure into their integrated reports. Organisations use this alternative form of reporting to communicate risk differently from how they disclose risks in traditional annual financial reporting. That is, the study finds that the organisations use their integrated reports to disclose a broader group of risks, related to the environment and society, and do so using narrative and visual representation.

Bochkay and Levine (2019) Using a sample from the United States for the period 1994 to 2012 showed that disclosure of information in management commentary has an impact on future earnings forecasts. Also, the results of their research showed that the management commentary generally leads to the improvement of the company's information environment.

Brown et al. (2018) examined the value content of the financial statements and disclosed the management commentary of the company's management. This research was conducted in the United States from 2003 to 2016. The research results indicate that the management commentary can provide more information and therefore, it has more valuable content.

Li (2017) showed that the disclosure of duplicates of information contained in the auditor's report in the management commentary reflects the emphasis of the company's managers on specific information about the company. Hence, disclosing duplicate information can be beneficial for investors.

Kim and Lee (2017) examined the impact of quality of management commentary report on the information environment of analysts in the North Korean capital market. The quality of disclosure of management commentary report was measured in accordance with the report's compliance with the guidelines in the Korean Stock Exchange during 2010 to 2014. The results showed that disclosure of management commentary report has a significant impact on the judgment and forecasts of analysts and investors and has implications for corporate executives, investors and financial report providers. In this regard, if managers provide investors with valuable information about the firm's future performance and cash flow through disclosure of management commentary report information, market demand for receiving information from financial analyst will decrease.

Muslu et al. (2014) investigated the relationship between corporate information environment and disclosure of a prospective management commentary report using the California Stock Exchange Commission reports. The study was conducted between 1993 and 2003. The research results show that when their stock prices are less informative, companies more widely provide disclosure on management commentary report.

Moumen et al. (2015) investigated the relevance of risk disclosure in financial reports. The control variables in their research were profitability, size, and leverage. The results showed that there is a significant positive relationship between voluntary disclosure of risk information and market ability to predict earnings changes in the second year. Another finding of the study was that increasing the cost of ownership significantly reduces the relationship between risk disclosure and profitability and, as the cost of ownership increases, investors rely on information other than risk disclosure.

Bao and Datta (2014) categorized risk information into several types (30 types) and examined whether

risk disclosure affects users' perceptions of risk information or not? They found that about two-thirds of the types of risk disclosed did not affect users' perceptions of financial reporting in terms of information content. This study showed that fewer types of published risk types have information content and only disclosure of liquidity risks has information content and affects users' judgments and decisions.

Kravet and Muslu (2013) investigated the impact of corporate risk disclosure on investor judgment (from financial reports). The results showed that annual changes in risk exposure have a positive and significant relationship with the daily fluctuation of stock returns and trading volume and risk disclosure reveals new information about firm's confidence and risk and thus has a positive impact on investor judgment and understanding.

Management Commentary is a unique management disclosure because accounting regulators and standard-setters require specific components of information but also allow management to exercise discretion with respect to the information content and format within management commentary (Brown and Tucker, 2011). Given this mixed mandatory/discretionary nature, the quality and the usefulness of management commentary have continuously been the concern of accounting regulators and standard-setters across the world. Until now, only limited research has examined the influences of the management commentary quality (Li, 2017). While accounting standard-setting have particular concerns about investors 'lack of understanding of management commentary report, there is little empirical evidence as to why and how a superficial or in-depth understanding of management commentary report can influence investors' judgments and decisions. Due to the impact of the company's risk disclosure quality on financial analysts' decisions regarding investing in the company, it is suggested to standard compilers and regulators of Tehran Stock Exchange (TSE) to increase the quality of risk disclosure in the management commentary in order to increase usefulness of accounting information. Also, company managers are advised to provide useful information for investors to make decisions by observing the risk disclosure requirements related to the management commentary.

3. Research hypotheses

Based on the conceptual framework and research background, the research hypotheses are as follows:

Hypothesis 1: When the quality of company risk disclosure is higher, financial analysts are more willing to invest in companies.

Hypothesis 2: When deciding on investments in companies with incremental financial performance, the high quality of company risk disclosure affects the financial analysts' willingness to invest in companies.

Hypothesis 3: When the quality of corporate risk disclosure is higher, financial analysts consider the persistence of financial performance higher.

Hypothesis 4: When deciding on the earnings persistence of companies with incremental financial performance, the high quality of corporate risk disclosure influences the judgment of financial analysts on the persistence of financial performance.

4. Research Methodology

The present study is applied research and a quasi-experimental and survey research in terms of nature. In this research, a 2*2 between subjects experimental design is used between the research subjects of the risk disclosure quality of the corporate management commentary report (high quality of disclosure versus low disclosure quality) and current financial performance (incremental financial performance versus decreasing financial performance). In this study, a scenario-based questionnaire is used to test the research hypotheses. The standard questionnaire is adapted from Fortin and Berthelot (2012) research. However, in order to ensure the validity of the scenario, before the final distribution of the questionnaire, the scenario was reviewed by the accounting professors and their views applied to the scenario. In addition, in order to adjust the scenario to Iranian environmental conditions and following Fortin and Berthelot (2012) research, interpretive reports of management of existing companies in the pharmaceutical industry are analysed. Then, a checklist is developed in accordance with the guidelines for the interpretation of management commentary report issued by the Stock Exchange. Then, using the developed checklist, the risk section management commentary report of the pharmaceutical companies is reviewed. One company with the highest compliance with the requirements of the management

commentary report is selected as high quality and one company with the lowest compliance with the requirements of the management commentary report is selected as low quality. Risks related to manufacturers' competitiveness, product quality, liquidity risk and exchange rate risk are selected as risk sources and based on the pharmaceutical industry, the interpreted and operational plan are provided for them. Finally, the scenario and management commentary report are formulated based on the hypothetical company financial statements for the past 3 years.

The research population of this study is all financial analysts in Tehran Stock Exchange. Kutner et al. (2005) used test power to determine the sample size of each group. According to this method, if the error level is 5%, the test power is 90%, the number of 4 groups and the size effect is about one, the sample size of the study is 30 participants. Since this number represents the minimum number, 40 participants are considered in each group. From these analysts, the available analysts are selected as the statistical sample. The questionnaires are distributed to 160 financial analysts and all questionnaires are completed and returned. Since four types of questionnaires are used, each questionnaire is completed by 40 people.

The research questionnaire consists of three sections. In the first section, the management commentary report is explained to the participants and then the requirements related to the risk section are presented. In the second part, the research scenario is presented. In this section, the participant is required to act as an investor who intends to invest in a company operating in the pharmaceutical industry. Following part is a brief overview of the company's history and the subject of its activity, and comparative information on the profit and loss for the three financial years of the hypothetical company. The comparative profit and loss statement is designed such that for the first and second years (two years ago), the earnings information per share is not significantly different but in the third year (current year), the basic earnings per share increase or trend to decreases. Subsequently, the risk section of the management commentary report is presented for the hypothetical company. If the risk section has high quality, the main reasons for the change in profit per share are explained, and if the risk section has low quality, the reasons for the change in profit per share are not explained. The participant is then asked to indicate the willingness to invest in the company and the likelihood of continued financial performance of the company in the next year. In order to ensure about the participant understanding, the control questions about the scenario are presented. In the third section, the demographic information of the participants is presented. Of the above questionnaires, two types of questionnaires have incremental and decreasing financial performance and the two types have high and low risk disclosure quality. Accordingly, the independent variables of research are financial performance and risk quality.

The dependent variables in this study are investors’ judgment and persistence of financial performance. The dependent variable of investors’ judgment is measured using two questions. In the first question the participants are asked about the investment probability and in the second question the investment attractiveness is determined. Participants responded to questions in the form of a 7-point Likert scale (with a score of 1 indicating "unlikely investment or low investment attractiveness" and a score of 7 indicating "highly probable investment or high investment attractiveness"). The second dependent variable, persistence of the financial performance process, is evaluated using two questions. The probability of continuing financial performance in the next year is evaluated in the first question, and the second question specifies the investor's assessment of the persistence of financial performance. Participants' answers to questions are evaluated in the form of a 7-point Likert scale (with a score of 1 indicating "likely not to continue or not at all good" and a score of 7 indicating "likely to continue or very good"). Independent variables are converted to zero and one by scenario type. If the risk discloser quality is high, then the scenario takes one and zero otherwise. In the case of the independent variable of current financial performance, if the financial performance of the current year is higher than in previous years, the scenario takes one and zero otherwise.

Since each dependent variable is measured using two questions, it is necessary to use multivariate analysis of variance (MANOVA) to analyse the data and test the hypotheses. In other words, when multiple dependent variables exist, multivariate analysis of variance (MANOVA) is used to test the hypotheses. Box test is used to ensure homogeneity of variance-covariance matrix in the multivariate analysis of variance (MANOVA). A higher level of significance

of this test statistic than 0.001 indicates homogeneity. On the other hand, the assumption of using multivariate analysis of variance (MANOVA) is that there is sufficient correlation between the dependent variables. Therefore, Bartlett test is used to test the correlation adequacy between the dependent variables in order to use multivariate analysis of variance (MANOVA). The statistical significance of this test indicates that there is a sufficient correlation between the dependent variables.

5. Research Results

Descriptive Statistics

The results of the descriptive statistics of the research participants are summarized in tables (1) and (2). Descriptive statistics on gender, age, work experience and education of the respondents are analysed.

Table1: The Results of Descriptive statistics on gender and age of the respondents

Age			Gender		
	Number	Percent		Number	Percent
Less than 5 years	24	15%	Man	110	68.75%
Between 5 to 10 years	120	75%	Female	50	31.25%
More than 10 years	16	10%			
Total	160	100%	Total	160	100%

Reference: Researcher Results

The results of descriptive statistics show that the highest frequency of age is 30-40 years (75%) and the least frequency is in the age of 40 years (10%). The results also show that 68.75% of respondents are male and 31.25% are female. Following are the results of the descriptive statistics of the respondents' work experience and education.

Table 2: The Results of Descriptive Statistics of Work Experience and Education of the respondents

Work Experience			Education		
	Number	Percent		Number	Percent
Less than 5 years	48	30%	Bachelor	100	62.5%
Between 5 to 10 years	84	52.5%	Master	50	31.25%
More than 10 years	28	17.5%	PhD	10	6.25%
Total	160	100%	Total	160	100%

Reference: Researcher Results

The results of descriptive statistics show that the highest frequency of work experience is 5-10 years (52.5%) and the least frequency is more than 10 years (17.5%). The results also show that the highest frequency is observed in undergraduates (62.5%) and those with Ph.D. had the least frequency (6.25%).

The results of comparing the average of analysts' judgment

The results related to analysts' judgments about the likelihood of investing in the company are presented in table 3, by separating the financial performance and the quality of the risk disclosure. This table presents the results of the mean and standard deviation of financial analysts' judgment in terms of risk quality and financial performance. The mean difference of financial analysts' judgments in the two modes of incremental and subtractive financial performance in terms of high, low and total quality risk are 1.250, 0.675 and 0.962 respectively, and their t statistic are 4.457, 2.246 and 4.677 respectively and their significance level are 0.000, 0.028 and 0.000. The results show that the mean of financial analysts' judgments on investments is different for increasing and decreasing financial performance conditions when disclosing of risk information is high. However, average financial analysts' judgment about investing is different for incremental and decreasing financial performance conditions when disclosing of risk information is low. Among all research samples, the quality of risk disclosure differs between financial analysts' judgments about investment in terms of incremental and decreasing financial performance. Therefore, it can be concluded that the interaction of performance and quality of risk disclosure of management commentary report has an impact on the financial analysts' judgment about investing in the company.

The results related to the analysts' judgments about the financial performance of the firm are presented in table 4. This table presents the results of the mean and standard deviation of financial analysts' judgments in terms of risk quality and financial performance. The mean difference of financial analysts' judgment in the two modes of incremental and subtractive financial performance under high, low and total risk conditions are 0.225, 0.100 and 0.162 and the t-statistic are 0.672, 0.319 and 0.705 respectively and also p-value are

0.503, 0.451 and 0.482. The results show that the average judgment of financial analysts does not differ for incremental and decreasing financial performance conditions regarding the persistence of financial performance when disclosure of company risk information is high. The average judgments of financial analysts about persistence do not differ for incremental and subtractive financial performance when disclosure of company risk information is low. Among all research samples, the quality of risk does not differ between financial analysts' judgments of financial performance in terms of incremental and decreasing financial performance. Therefore, it can be concluded that the interaction of financial performance and risk quality of the management commentary report of companies does not influence the judgment of financial analysts about the persistence of firm's financial performance.

Table3: Average judgment of analysts on investment in the company

	High-quality risk disclosure			Low-quality risk disclosure			Total		
	Mean	Std. Deviation	Number	Mean	Std. Deviation	Number	Mean	Std. Deviation	Number
Increasing Financial Performance	4.650	1.291	40	4.225	0.999	40	4.437	1.167	80
Decreasing Financial Performance	3.400	1.215	40	3.550	1.616	40	3.475	1.422	80
Different for Mean Financial Performance	1.250			0.675			0.962		
t Statistic (Significance level)	4.457 0.000			2.246 0.028			4.677 0.000		

Reference: Researcher Results

Table4: Average judgment of analysts on Earnings Sustainability in the company

	High-quality risk disclosure			Low-quality risk disclosure			Total		
	Mean	Std. Deviation	Number	Mean	Std. Deviation	Number	Mean	Std. Deviation	Number
Increasing Financial Performance	4.550	1.484	40	4.075	1.366	40	4.312	1.437	80
Decreasing Financial Performance	4.325	1.508	40	3.975	1.440	40	4.150	1.476	80
Different for Mean Financial Performance	0.225			0.100			0.162		
t Statistic (Significance level)	0.672 0.503			0.319 0.451			0.705 0.482		

Reference: Researcher Results

The Results of Testing First and Second Hypotheses

The first hypothesis examines the impact of high quality of risk disclosure on financial analysts' greater willingness to invest. The results of testing this hypothesis are presented in table 5. The F-statistic is 0.405 which is not significant at the 5% error level. In other words, it can be stated that the quality of risk disclosure does not affect financial analysts' willingness to invest. Therefore, the first hypothesis of this research is rejected.

The second hypothesis examines the interaction of financial performance and risk disclosure quality on analysts' willingness to invest. The results of testing this hypothesis are presented in table 5. The F-statistic is 3.066 which is significant at the 5% error level. In other words, it can be stated that the high quality of risk disclosure has effect on financial analysts' willingness to invest when they decide on investing in companies with incremental financial performance. Therefore, the second hypothesis of the research is not rejected.

Bartlett test results indicate that there is sufficient correlation between the dependent variables. Also, the results of the Box test show that there is homogeneity between the research variables.

Table 5: The Results of MANOVA for First and Second Hypotheses

variables	Wilks' Lambda	df	F-test	Sig	Partial Eta Squared
Intercept	0.079	2	9012.00	0.000	0.921
Financial Performance	0.849	2	13.731	0.000	0.151
Risk Disclosure Quality	0.995	2	0.405	0.667	0.005

variables	Wilks' Lambda	df	F-test	Sig	Partial Eta Squared
Financial Performance * Risk Disclosure Quality	0.962	2	3.066	0.049	0.038
F Box's Test	1.890		Bartlet test	86.668	
Sig	0.049		Sig	0.000	

Reference: Researcher Results

The Results of Testing Third and Fourth Hypotheses

The third hypothesis examines the impact of the high quality of corporate risk disclosure on the judgment of financial analysts about the persistence of financial performance. The results of testing this hypothesis are presented in table 6. The F-statistic is 1.739 which is not significant at 5% error level. In other words, it can be stated that the quality of risk disclosure does not affect the judgment of financial analysts about the persistence of corporate financial performance. Therefore, the third hypothesis is rejected.

The fourth hypothesis examines the interaction of financial performance and corporate risk on the judgment of financial analysts regarding the persistence of financial performance. The results of testing this hypothesis are presented in table 6. The F-statistic is 0.534 which is not significant at 5% error level. In other words, it can be stated that the high quality of corporate risk disclosure does not affect the judgment of financial analysts on the persistence of financial performance when deciding about the continuation of corporate financial performance with incremental financial performance. Therefore, the fourth hypothesis is rejected.

Bartlett test results indicate that there is sufficient correlation between the dependent variables. Also, the results of the Box test show that there is homogeneity between the research variables.

Table 6: The Results of MANOVA for Third and Fourth Hypotheses

variables	Wilks' Lambda	df	F-test	Sig	Partial Eta Squared
Intercept	0.075	2	9522.00	0.000	0.925
Financial Performance	0.910	2	7.703	0.001	0.090
Risk Disclosure Quality	0.978	2	1.739	0.179	0.022
Financial Performance * Risk Disclosure Quality	0.993	2	0.534	0.587	0.007
F Box's Test	2.670		Bartlet test	42.265	
Sig	0.004		Sig	0.000	

Reference: Researcher Results

The Role of Demographic Characteristics on Research Findings

This section examines the effect of gender, age, education and work experience of financial analysts on the results of testing the research hypotheses.

The effect of analysts' gender on financial analysts' judgments about investment and persistence of financial performance is presented in table 7.

Table 7: The Results of Gender Effect on Financial Analysts' Judgment

		Sum of Squares	df	Mean Squares	F-test	Sig
Investment in Company	Between Groups	0.208	1	0.208	0.825	0.365
	Within Groups	39.541	157	0.252		
	Total	39.748	158			
The Persistence of Financial Performance	Between Groups	0.450	1	0.450	0.211	0.647
	Within Groups	335.399	157	2.136		
	Total	335.849	158			

Reference: Researcher Results

Table 7 shows that the value of F-statistic for comparing the variance between group and within group of gender variable for investing in the company is 0.825 and the significance level is 0.365. These findings show that there is no significant difference between male and female financial analysts' judgments about investing in the company. Also, the value of F-statistic for comparing the variance between group and within group of gender variable for persistence of financial performance is 0.211 and significance level is

0.647. These findings show that there is no significant difference between male and female financial analysts' judgments about the persistence of financial performance.

Table 8 shows the effect of analysts' age on their judgments.

Table 8: The Results of Age Effect on Financial Analysts' Judgment

		Sum of Squares	df	Mean Squares	F-test	Sig
Investment in Company	Between Groups	0.286	3	0.095	0.374	0.772
	Within Groups	39.714	156	0.255		
	Total	40.000	159			
The Persistence of Financial Performance	Between Groups	2.300	3	0.767	0.358	0.783
	Within Groups	334.143	156	2.142		
	Total	336.443	159			

Reference: Researcher Results

Table 8 shows that the value of F-statistic for comparing the variance between group and within group of age variable for corporate investment is 0.374 and the significance level is 0.772. These findings indicate that there is no significant difference between financial analysts' judgments about corporate investment. Also, the value of F-statistic for comparing the variance between group and within group of age variable for the persistence of financial performance is 0.358 and significance level 0.783. These findings indicate that there is no significant difference between financial analysts' judgments about the persistence of financial performance.

Table 9 indicates the effect of analysts' education on their judgments.

Table 9: The Results of Education Effect on Financial Analysts' Judgment

		Sum of Squares	df	Mean Squares	F-test	Sig
Investment in Company	Between Groups	0.526	3	0.175	0.693	0.557
	Within Groups	39.474	156	0.253		
	Total	40.000	159			
The Persistence of Financial Performance	Between Groups	13.283	3	4.428	2.137	0.098
	Within Groups	323.161	156	2.072		
	Total	336.444	159			

Reference: Researcher Results

Table 9 shows that the value of F-statistic for comparing the variance between group and within group of education variable for investing in companies is 0.693 and the significance level is 0.557. These findings indicate that there is no significant difference between financial analysts' judgments about corporate investment. Also, the value of F-statistic for comparing the variance between group and within group of education variable for continuing financial performance is 2.137 and significance level is 0.098. These findings indicate that there is no significant difference between financial analysts' judgments about the persist of financial performance in companies.

Table 10 indicates the effect of analysts' work experience on their judgments.

Table 10: The Results of Work Experience Effect on Financial Analysts' Judgment

		Sum of Squares	df	Mean Square	F-test	Sig
Investment in Company	Between Groups	0.342	2	0.171	0.677	0.509
	Within Groups	39.658	157	0.253		
	Total	40.000	159			
The Persistence of Financial Performance	Between Groups	13.932	2	6.966	3.391	0.036
	Within Groups	322.512	157	2.054		
	Total	336.444	159			

Reference: Researcher Results

Table 10 shows that the value of F-statistic for comparing the variance between group and within group of work experience variable for investing in companies is 0.677 at the significant level of 0.509. These findings indicate that there is no significant difference between financial analysts' judgments about corporate investment. Also, the value of F-statistic for comparing the variance between group and within group of work experience variable for the persistence of financial performance is 3.391 and significance level is 0.036. These findings indicate that there is a significant difference between the judgments of financial analysts regarding the persistence of financial performance in companies.

6. Discussion and Conclusions

The disclosure of risk information can be identified as potentially negative consequences for the future performance of the company. When evaluating a company for investment purposes, investors consider

negative information more than positive information and negative signs more than positive signs. Details of risk and risk management are disclosed in the management commentary report and financial statement notes to provide stakeholders with information needed to evaluate the performance and effectiveness of management in the face of business uncertainty. Management should provide a clear explanation about the most important resources, risks, and relationships that may impact the value of the business. In addition, management should disclose to the stakeholders how these resources, the risks and relationships are managed that can affect the judgment and decision making of investors. Moreover, incremental and subtractive financial performance reporting together with disclosure of information about the reasons for these changes in management commentary report can affect the persistence of financial performance. Therefore, the purpose of this study is to investigate the impact of risk disclosure quality on investor decision making regarding investment and persistence of financial performance of the firm.

The results of testing the first hypothesis suggest that by increasing the quality of corporate risk disclosure, financial analysts' willingness to invest in the company does not increase. The results of this study are inconsistent with those of Fortin and Berthelot (2012) and Lee and Park (2019). In other words, increasing the quality of risk alone has not been able to influence financial analysts' judgments on investment. Therefore, the risk quality of management commentary reporting has not increased the usefulness of the information disclosed. The results of testing second hypothesis show that the high quality of risk disclosure of company has effect on financial analysts' willingness to invest in the company during deciding about investing in company with incremental financial performance. This result is consistent with those of Fortin and Berthelot (2012) and Lee and Park (2019). In interpreting this result, it can be stated that the interaction of the quality of risk disclosure and the financial performance of the firm has an impact on the financial analysts' willingness to invest in the firm and the companies that have higher risk disclosure quality and better financial performance are more likely to increase their investment. The results of testing the third hypothesis suggest that by increasing the quality of risk disclosure, financial analysts do not consider the persistence of a firm's financial performance higher. The results of this study are inconsistent with those of Fortin and Berthelot (2012) and Lee and Park (2019). In other words, increasing the quality of risk alone did not affect analysts' judgments about the persistence of financial performance. Therefore, the risk quality of management commentary reporting has not increased the usefulness of the information disclosed. The results of testing the fourth hypothesis indicate that when deciding on the persistence of a firm's financial performance with incremental financial performance, the high quality of corporate risk disclosure does not affect the financial analysts' judgment on the persistence of financial performance. Therefore, quality of corporate risk disclosure does not provide the useful information for investor decision making. This result is inconsistent with those of Fortin and Berthelot (2012) and Lee and Park (2019). In other words, the interaction of financial performance with risk disclosure quality has not affected financial analysts' judgments about the persistence of financial performance.Therefore, financial analysts' judgments for evaluation the persistence of financial performance dose not attention to the financial performance and risk disclosure quality.

Based on the research results, there are some suggestions for policy makers and financial analysts. Regarding the impact of corporate risk disclosure quality on financial analysts' decision making regarding investing in the company, it is recommended to place more emphasis on enhancing the quality of risk disclosure in management commentary report in order to enhance the usefulness of accounting information. Corporate executives are also advised to provide useful information for investor decision making by observing the risk disclosure requirements of the management commentary report. Future researches can examine the impact of other quality dimensions of management commentary report from an analytical perspective.

One limitation of this study is that some other information that may influence financial analysts' decisions on investment may not be considered. In addition, this study focuses only on the quality of disclosure, and the results of the study need to be used cautiously about the quality of management commentary report.

References

1) Abdallah, A, A-N, Hassan, M, K, McClelland, P, L. (2015). "Islamic financial institutions, corporate governance, and corporate risk disclosure in Gulf Cooperation Council countries ". Journal of Multinational Financial Management, 31: 63–82.
2) Bao, Y., & Datta, A. (2014). "Simultaneously discovering and quantifying risk types from textual risk disclosures ". Management Science, 60(6), 1371-1391.
3) Barton, J., & Mercer, M. (2005). "To blame or not to blame: Analysts' reactions to external explanations for poor financial performance ". Journal of accounting and economics, 39(3), 509-533.
4) Beretta, S., Bozzolan, S., (2004). "A framework for the analysis of firm risk communication ". The International Journal of Accounting 39 (3), 265–288.
5) Bochkay, K., & Levine, C. B. (2019). Using MD&A to Improve Earnings Forecasts. Journal of Accounting, Auditing & Finance, 34(3), 458–482.
6) Brown, S. V., Hinson, L. A., & Tucker, J. W. (2018). Value Relevance of Financial Statements and Firms' MD&A Disclosure.
7) Brown, S. V., & Tucker, J. W. (2011). "Large-sample evidence on firms' year-over-year MD&A modifications". Journal of Accounting Research, 49(2), 309-346.
8) Cabedo, J.D., and J.M. Tirado. (2004). "the disclosure of risk in financial statements ". Accounting Forum, 28 (2):181-200.
9) Campbell, J.L, Chen, H, Dhaliwal, D.S, Lu, H, & Steele, L.B. (2014). "The information content of mandatory risk factor disclosures in corporate filings ". Review Accounting Studies, 19(1): 396-455.
10) Cianci, A. M., and S. E. Kaplan. (2010). "The effect of CEO reputation and explanations for poor performance on investors' judgments about the company's future performance and management ". Accounting, Organization and Society 35, 478–495.
11) Davies, J., Moxey, P., and Welch, I. (2010). "Risk and reward: Tempering the pursuit of profit ". London: ACCA journal. Downloaded from qfaj.ir at 0:06 +0430 on Tuesday April 10th 2018.
12) Deumes, R., and R.W. Knechel. (2008). "Economic incentives for voluntary reporting on internal risk management and control systems ". Auditing: A Journal of Practice & Theory, 27 (1): 35- 66.
13) Elshandidy, T and Neri, L. (2015). "Corporate Governance, RiskDisclosure Practices, and Market Liquidity: Comparative Evidencefrom the UK and Italy ". Corporate Governance. 23 (4): 331–356.
14) Fortin, A., & Berthelot, S. (2012). "MD&A risk disclosures and nonprofessional investors' perceptions and investment decisions". In Advances in Accounting Behavioral Research (pp. 1-28). Emerald Group Publishing Limited.
15) Guthrie, J., Rossi, F. M., Orelli, R. L., & Nicolò, G. (2020). "Investigating risk disclosures in Italian integrated reports". Meditari Accountancy Research.
16) Hirst, D. E., Koonce, L., & Venkataraman, S. (2007). "How disaggregation enhances the credibility of management earnings forecasts ". Journal of Accounting Research, 45(4), 811-837.
17) ICAEW. (1999). No surprises: "The case for better risk reporting ". London: Institute of Chartered Accountants in England and Wales.
18) Jorion, P. (2002). "How informative are value-at-risk disclosures? ". *The Accounting Review*, *77*(4), 911-931.
19) Kahneman, D., & Tversky, A. (1979). "Prospect theory: An analysis of decision under risk ". Econometrica, 47(2), 263–291.
20) Kim, Sunghye and Ayoung Lee. (2017). "An Impact of Management Discussion and Analysis(MD&A) Quality on Analysts Forecasts Characteristics ". ISSN 1229-327X(Print) / ISSN 2508-7207(Online).
21) Kravet, T., & Muslu, V. (2013). "Textual risk disclosures and investors' risk perceptions ". Review of Accounting Studies, 18(4), 1088-1122.
22) Kutner, M. H., Nachtsheim, C. J., Neter, J., & Li, W. (2005). "Applied linear statistical models ". , 4th ed. New York: McGraw-Hill.
23) Lajili, K., and D. Zéghal. (2005). "A content analysis of risk management disclosures in Canadian Annual Reports ". Canadian Journal of Administrative Sciences, 22 (2): 125-142.
24) Lee, J., & Park, J. (2019). The Impact of Audit Committee Financial Expertise on Management Discussion and Analysis (MD&A) Tone. *European Accounting Review*, *28*(1), 129-150.

25) Li, W. (2017). "Level of business insights in the MD &A and nonprofessional investors' judgments". Accounting & finance, 57(4), 1043-1069.
26) Lim, C. Y. and Tan, P. M. (2007). "Value relevance of value-at-risk disclosure ". Review of Quantitative Finance and Accounting, 29(4): 353–370.
27) Linsley, P.M., and P.J. Shrives. (2006). "Risk reporting: a study of risk disclosures in the annual reports of UK companies ". British Accounting Review, 38 (4): 387-404.
28) Linsmeier, T.J., D.B. Thorton, M. Venkatachalam, and M. Welker. (2002). "The effect of mandated market risk disclosures on trading volume sensitivity to interest rate, exchange rate and commodity price movements ". Accounting Review, 77 (2): 343-377.
29) Merkley, K. J., Bamber, L. S., & Christensen, T. E. (2013). "Detailed management earnings forecasts: do analysts listen? ". Review of Accounting Studies, 18(2), 479-521.
30) Miihkinen. A .(2013). "The usefulness of firm risk disclosures under different firm riskiness, investor-interest, and market conditions: New evidence from Finland ". Advances in Accounting, incorporating Advances in International Accounting, 29: 312– 331
31) Miihkinen. A. (2012). "What Drives Quality of Firm Risk Disclosure? The Impact of National Disclosure Standard and Reporting Incentives under IFRS ". The International Journal of Accounting, 47(4):437-468.
32) Mokhtar E, S., Mellett, H, (2013). "Competition, corporate governance, ownership structure and risk reporting ". Managerial Auditing Journal, 28 (9): 838 – 865.
33) Moumen, N., Othman, H. B., & Hussainey, K. (2015). "The value relevance of risk disclosure in annual reports: Evidence from MENA emerging markets ". Research in International Business and Finance, 34, 177-204.
34) Muslu, V., Radhakrishnan, S., Subramanyam, K. R., & Lim, D. (2014). "Forward-looking MD&A disclosures and the information environment ". Management Science, 61(5), 931-948.
35) Nagar, V., Nanda, D. and Wysocki, P. (2003) . "Discretionary Disclosure and stock-based incentives". Journal of Accounting and Economics, 34 (1-3): 283-309.
36) Patelli, L. and Prencipe, A. (2007) . "The relationship between voluntary disclosure and independent directors in the presence of a dominant shareholder ". European Accounting Review, 16: 5–33.
37) Rezaei, Akbar. (2014). " Step-by-step guide for data analysis using SPSS, Second Edition ". Forouzat Publications. [In Persian]
38) Rodríguez Domínguez., L and Ligia Gámez, C, N. (2014). "Corporate reporting on risks: Evidence from Spanish companies ". Spanish Accounting Review, 17 (2): 116–129.
39) Securities and Exchange Organization. (2016). "Guidelines for the Application of Interpretative Reporting Rules of Management (Publishers Accepted in Tehran Stock Exchange and Overseas Iran) ". Securities and Exchange Organization. [In Persian]
40) Solomon, J. F., Solomon, A., Norton, S. D., & Joseph, N. L. (2000). "A conceptual frame-work for corporate risk disclosure emerging from the agenda for corporate governance reform ". British Accounting Review, 32: 447–478.
41) Weber, E. U. (1994). "From subjective probabilities to decision weights: The effect of asymmetric loss functions on the evaluation of uncertain outcomes and events ". Psychological Bulletin, 115(2), 228–242.