

The role of social trust on the reaction of investors regarding stock earnings announcement and the effect of disclosure quality on its relationship

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Abstract: Always the investors are trying to achieve desirable information in order to invest safer; and earning information is one of important channels of the relationship between firm managers and investors. It can be said that the investors encounter a type of doubt and mistrust towards the honesty of the information presented in making reasonable decisions. The present research is going to investigate on the role of trust as a behavioral stimulus and the most obvious characteristic of social capital and one of culture dimensions on the reactions of investors towards the announcement of stock earning, and the effect of disclosure quality regarding the viewpoints posed by 210 professional investors within 70 active firms in bourse. The research results showed that the trust level of capital market has been on an average level and that the trust does not affect the reactions of investors in it. Then, the hypotheses' test results showed that the role of trust on the reaction of investors compared to earnings announcement is affected by emphasizing on disclosure quality.

Key words: Social trust, Investors' reaction; Earning's announcement; Disclosure quality

1. Introduction

Earning's information is one of the important relation channels between firm managers and investors and its efficient disclosure results in a better understanding of investors regarding capital market and also a logical reaction towards the information. Regarding the controversies among the benefits of investors and managers and the incentives of managers to make the financial reports' results more complicated to hide the real firm performance, the reaction of investors to earnings announcement is affected by several factors. On the one hand incorrect and deviating data causes the reaction and decisions of the investors to be far from being logical and somehow makes the decisions of the investors challenging and following that a type of doubt and mistrust is created. Trust, as the most obvious characteristic of social capital and the most important cultural dimension, is considered as a behavioral stimulus and prepares almost all conditions for economic exchanges. The investors as the biggest and the most important users of the information presented by the firms always react to new information and thus seek correct and insured information to make logical and reasonable decisions. Regarding that the decisions made by the investors are not always logical (Lightner, 1998; Olsen, 1998; Brabazon, 2000), and considering behavioral financial theory, there are several important financial and non-financial factors that affect the logical reactions of investors. Also by

considering the social responsibility, the recognition of important affective factors on the reaction of investors becomes important to satisfy their needs on the part of foundations and firms. In this research we have dealt with studying the trust level in a country that has been transferred through financial disclosure on the understanding of investors and using the information by the firms. Specifically, the effect of social trust on the reaction of investors to earnings announcement, regarding disclosure quality will be investigated.

2. Theoretical framework

Social trust: trust, as a cultural factor, is considered as an important psychological and humane aspect that sets the ground and in many cases strengthens or weakens many social relationships. Trust is known as a feeling that can be learnt and an individual achieves it in dealing with factors surrounding him and may form behaviors and decisions of an individual. Trust may foster participation in different economic, political, social, and cultural fields and increase the tendency of individuals to cooperate with different groups in the society. Trust can be categorized into three levels of micro, medium, and macro.

Micro level (Coleman): in micro level social trust refers to the relationships between an individual and the relatives and micro relations. James Coleman, as the most outstanding interpreter, considered micro level as two dimensional in which a truster resides on the one hand and a trustee on another. The truster should decide to interact with another

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trustee one. The truster should decide whether to interact with the other party or not (i.e. accept the danger or not) and the trustee should also select between maintaining the trust and breaking it down.

Medium level (Giddings): in medium level the relationship is broader and it refers to the relations between individuals and institutions, parties, and social groups. Giddings has stated three types of trust as: fundamental, personal, and abstract. He stated that in modern societies dominated by abstract systems, trust is considered to be very important. He claimed that the need for trust is realized by distancing time and location relationships of the individuals (Giddings, 1998: 37).

Macro level (Francis Fukuyama): in macro level, trust is defined in a much broader area such as the trust of individuals to governmental institutions in the society. Fukuyama dealt with a type of economic approach towards trust and his theoretical foundation centers on maintaining social capital as a certain set of norms and informal values and the members of a group that cooperate and collaborate with each other share it.

3. The investors' reaction

Efficient market theory: after the introduction of efficient market theory by scholars such as Fama, the investors have always reacted to new information and incidents. This means that in an efficient market condition, the information is accessible for all in time and all individuals have a simultaneous access to information and make logical decisions. The efficiency of market is highly important because when capital market is efficient, not only the price of bonds is determined appropriately and just, but also capital appropriation that is considered as the most important production and economic development factor, is carried out desirably and optimally.

Financial behavioral: as Lyntz has pointed out, financial behavioral deals with how to interpret and act based on information to make structured investment decisions by the individuals (Lyntz, 1998: 7). Olsen stated that financial behavioral does not try to show that logical behavior is incorrect but it tries to show the application of psychological decision making processes in recognition and prediction of financial markets (Olsen, 1998: 11). Considering the viewpoints of the scholars it can be stated that: financial behavioral theory states that behavioral factors affect making financial decisions and financial analyses in addition to financial factors.

Disclosure quality: regarding the information presented by the firms, there is always a challenge for the investors that the information posed not only have information content, but also it should accompany disclosure quality. Disclosure is one of the basic accounting principles that affect all aspects of financial reporting. Therefore, several structures such as: appropriateness, comprehensiveness, being informative, and being in time have been represented disclosure quality up to now. Also information disclosure and the requirements have

been considered to understand it and they can have a tremendous effect on investors' trust.

4. Research literature

Carlin (2007) stated that by analyzing the different researches following Fukuyama's (1995) theory that consider the culture and social customs as an incentive for economic growth and markets' boom, there is still a need for an economic theory regarding this issue. Thus, by studying the roots of trust formation in the market and the relationship between trust, law, and economic growth they try to fill the gap. Therefore, in a theoretical and step model of trust that evolves in the market and regarding the value of social capitals, the level of control by the government and the potential for an economic growth was analyzed. When the value of a social capital is high, governmental regulations and trust alternate each other. In this case, the interference by the government may in fact reduce the total investment and reduce economic growth rate. On the contrary, when the value of social capital is low, the regulations and trust may complement each other. Also this shows that lack of interference on the part of the government is less than the desirable amount in a culture through which social capital is not highly valued and economic growth is low (Carlin, 2007). In 2012, Ricardo Perez carried out a research to assess the trust by using market data. In this research a simple model that expressed how to choose feedback by two important factors related to trust remarks that the previous trust to the salesperson and tendency to do the same when there is a probability of treachery and the behavioral assessment of the trust has been defined in a way that it is occurred naturally in a market and its derivation is unique. The final results refers that the cultural forces have less importance compared with good institutions – electronic markets and trust making mechanisms (Ricardo Perez, 2012). Xin Xianqanq et al. (2013) studied the role of trust on the reaction of investors towards earnings announcement in 25 countries. They investigated about the trust level in a country affecting the understanding of investors of firm's earnings announcement in conditions such as: 1- preserving the investor and requirements and the disclosure requirements in a country is weak and this shows that trust works as an alternative for institutions officially. 2- When the training level is low in an average state by relying on less educated individuals and adjusting economic decision makings. 3- When information asymmetry of a firm is higher and it shows that trust has a more important role in poorer environments.

In 2013, Mikhail Pevzner and et al considered a group of investigations dealing with culture and social capital and trust specifically, carried out a research about whether investors listen to what is told by the firms or not in a country where the trust level affects the understanding of investors and exploiting the information prepared by the firms.

They studied this regarding a big sample of 25 different countries of the world. The results showed that the reaction of investors to news and earnings' information issued by the firms was greatly dependent on the trust existed in those countries. Considering some characteristics such as: legal sources, supporting investors, disclosure requirements, and earnings quality, other cultural dimensions were made more documentary. The effect of the reaction of investors following disclosure requirements and maintaining weaker investors, low training level, and high information asymmetry were affected.

In 2004, Mohsen Khoshtinat and Hamid Raei carried out a research on the effect of social accounting information on the decision making by investors aiming at studying whether the accessibility of social accounting information for the investors affects their decision makings or not. If the answer is yes, to what extent there is an effect? They studied this regarding a 59 sample students from among MA students studying accounting in universities and higher educational centers in Tehran and concluded that the reporting of social accounting information has had an effect between %28 and %38 on decisions by the investors (Mohsen Khoshtinat and Hamid Raei, 2004).

In 2008, Morteza Zeinabadi studied the concept of trust in three levels of micro, medium, and macro in an n article entitled: "studying the trust status in Iran and the ways to replenish it". Then he tested these aspects in Iranian society. The results showed that the people's trust in micro level has been in an almost good level. The people had a good level of trust to their family members, their relatives and friends. Also the trust towards government was almost average. But the trust in medium level was not in a desirable and appropriate level (Morteza Zeinabadi, 2008).

Mohammad Lashgari and Homa Mortazi (2011) carried out an applied research on behavioral financial theory and its effect on the amount of investment by individuals in Tehran Stock Exchange and investigated about 4 effective psychological factors (biorhythmic factors, gaining the prestige of being a stockholder, the amount of self-confidence, and individuals' logic) on the amount of investments by individuals. The results showed that the amount of investments has had a direct relationship with self-confidence of individuals and it has had a reverse relationship with individuals' logic. This means that individuals do not always act logically (Lashgari and Mortazi, 2011).

5. Research hypotheses

Hypothesis 1: social trust affects the reaction of investors regarding the announcement of firm's stock earnings.

Hypothesis 2: the relationship between trust and investors' reaction to earnings announcement depend on disclosure quality.

6. Research method

The statistical society under investigation in this research was comprised of firms enlisted in Tehran Stock Exchange during the years between 2009 and 2013. In this study, those firms were selected that have had the following characteristics:

- 1- During 5 previous years they have been ranked among 50 active firms in bourse.
- 2- The list for 50 active firms is published 4 times in a year; thus, they should have been in the list of 50 active firms for at least 4 times during 5 years.
- 3- They should have been present in bourse during the years between 2009 and 2013.
- 4- They should not be among those firms deleted from bourse during 5 previous years.
- 5- The financial information of the firms should be accessible.

Thus, after considering the conditions above, 70 firms were selected as our research sample. The present research is applied and a regression analysis has been utilized to test research hypotheses. The data were collected through databases and other related websites and Rahaward-e-Novin software and the distribution of a questionnaire.

7. Research variables

Social trust: in the present study, social trust has been used as independent variable as the most outstanding characteristic of social capital regarding the descriptions posed earlier. It was measured by using World Values Survey website measures and based on the overall question below and questions related to it through a questionnaire: "on the whole, do you think that one can trust most people or it is necessary to be very cautious in dealing with people?" After the main item that has been posed as the overall criterion to measure trust, 16 other questions were posed to measure the elements such as within group trust, outside group trust, trust to hierarchy, and trust to other institutions that an investor is dealing with in capital market. Finally, by using Likert scale 5 items questions being codified, the average response for each group of the sample under investigations was calculated as their social trust.

Investors' reaction: the investors always react towards the information presented by the firms. The best criterion to measure investors' reaction towards earnings announcement is unusual return variance. Also in the standard method for incidental researches, unusual return is the difference between real return and the expected return and practically market pattern prediction error is considered as one of return assessment methods.

Disclosure quality: regarding the issues considered for disclosure quality, the disclosure entails financial information that is useful for a common investor and does not lead to reader's deviations. In order to identify disclosure quality we can use disclosure quality ranking in bourse.

Firm size: to measure firms we can use indexes such as assets' value, sales amount, stock market value, and the number of stocks. In this research firm size was calculated by multiplying the number of common stocks issued by using usual stock market prices.

The ratio of debt to net firm's assets: this ratio represents total assets that have been supplied through liabilities. By increasing this ratio, the financial risk of a firm increases. In the present study, the ratio of liabilities is calculated as follows:

Liability ratio = total liabilities / total assets

Prediction dispersion: standard deviation is an index of earnings management that is assessed by earnings prediction error. And the variable of earnings prediction error equals with the income (loss) difference predicted and real income (loss) divided by absolute amount of earnings (losses) predicted.

[UE]: an amount of unexpected income that can affect the investors' reaction towards earnings announcement. In this research the effect of it on the investors' reaction was neutralized and the

unexpected earnings were calculated through the difference between real annual earnings and the expected annual earnings. Then, in order to do statistical tests, we tried to study the normality of the data by using non-parametric Kolmogorov-Smirnov test for all observations and groups in isolation. To test the meaningfulness of the regression equation we have used t statistic and to test the meaningfulness of the coefficients we utilized t statistic. In regression models, it is supposed that error sentences are independent from a period to another one but in many applications, error sentences are correlated in different periods. In such cases the error sentences are technically self-correlated or sequentially correlated. To study whether error sentences are self-correlated in a regression model or not, we have used Durbin-Watson test. The data analysis was carried out by using SPSS software in an error level of %5.

8. Research findings

8.1. First hypothesis

Table 1: Results of statistical analysis for testing the first hypothesis

Adjusted R ²	Durbin Watson Statistic	F statistic	Meaningfulness level of F
0.17	2.012	13.834	0.000
Variable	beta coefficient amount (standardized)	t statistic	Meaningfulness level (P-value)
Trust	0.02	0.176	0.861
Size	0.402	3.637	0.001
Lev	0.357	2.876	0.015
UE	0.156	2.248	0.007
PD	0.032	0.73	0.468

The results of statistical analysis regarding the regression pattern validity have been represented in first part of the table above. The identification coefficient in the regression model is 0.17 and it shows that this model has been able to explain %17 of the changes in unusual return of our statistical sample firms through independent and control variables. Also results show that Durbin-Watson statistic has been between 1.5 and 2.5 and therefore, there not been a strong self-correlation between regression pattern errors and lack of self-correlation between errors is accepted as one of the basic presuppositions of the regression regarding the adjusted model. The results of regression's analysis of variance (ANOVA) which is decided on based on F statistic for the adjusted pattern in testing the first hypothesis have been represented in two last columns of the table 4-6. The statistical hypotheses related to F statistical analysis were as follows:

H₀: $\rho=0$: The regression pattern is not meaningful.

H₁: $\rho \neq 0$: The regression pattern is meaningful.

The meaningfulness level of F statistic for the model is less than test error level ($\alpha=0.05$) and thus, H₀ is rejected and the estimated regression has been

meaningful statistically and the relationships among research variables have been linear. The results of statistical analysis for each of independent and control variables of the first hypothesis test pattern have been represented in second part of table 4-3.

The estimated coefficient for the variable Trust that shows the investors' reaction to trust level has been 0.02 with a meaningfulness level of 0.861 that has been higher than 0.05 (test's error level). This finding showed that there has not been any meaningful relationship between variables above statistically.

Regarding control variables the results showed that there has been a reverse and meaningful relationship between firm size and investors' reaction. Meanwhile, the relationship between financial leverage and investors' reaction has been direct and meaningful. In other words, firms with bigger size have had less unusual return but they are firms with high amounts of liability in their capital structure and have appropriated more unusual return for the investors. Also there has been a direct and meaningful relationship between unexpected earnings and unusual return of stocks and this shows that firms that have had more changes in

earnings' prediction, have appropriated more unusual return for the stockholders. On the whole, the results showed that social trust did not have a meaningful effect on investors' reaction. This finding has contradicted the claim posed in first research

hypothesis and this hypothesis was rejected in an assurance level of %95.

8.2. Second hypothesis

Table 2: Results of statistical analysis for testing the first hypothesis

Adjusted R ²	Durbin-Watson Statistic	F statistic	Meaningfulness level of F
0.287	1.874	14.259	0.000
Variable	beta coefficient amount (standardized)	t statistic	Meaningfulness level (P-value)
Trust	0.141	0.712	0.291
DQ*Trust	0.108	2.801	0.019
Size	-0.547	-2.121	0.012
Lev	0.078	2.016	0.024
UE	0.278	2.405	0.002
PS	0.041	0.284	0.632

The results of statistical analysis regarding the regression pattern validity have been represented in first part of the table above. The identification coefficient in the regression model is 0.287 and it shows that this model has been able to explain %28.7 of the changes in unusual return of our statistical sample firms through independent and control variables. Also results show that Durbin-Watson statistic has been between 1.5 and 2.5 and therefore, there not been a strong self-correlation between regression pattern errors and lack of self-correlation between errors is accepted as one of the basic presuppositions of the regression regarding the adjusted model. The meaningfulness level of F statistic for the model is less than test error level ($\alpha=0.05$) and thus, the estimated regression has been meaningful statistically and the relationships among research variables have been linear. The estimated coefficient for the variable Trust that shows the investors' reaction to trust level, has been 0.141 with a meaningfulness level of 0.291 that has been higher than 0.05 (test's error level). This finding showed that there has not been any meaningful relationship between variables above statistically. Also the coefficient calculated for the variable DQ*Trust that shows the effect of disclosure quality on the relationship between trust level and investors' reaction, equals 0.108 with a meaningfulness level of 0.019 that has been less than 0.05. This finding showed that disclosure quality has had a meaningful effect on investors' reaction to social trust level and it shows that in firms with higher disclosure quality the unusual return of the firm increases by increasing social trust level. Regarding control variables the results showed that there has been a reverse and meaningful relationship between firm size and investors' reaction. Meanwhile, the relationship between financial leverage and investors' reaction has been direct and meaningful. Also there has been a direct and meaningful relationship between unexpected earnings and unusual return of stocks and this shows that firms that have had more changes in earnings' prediction,

have appropriated more unusual return for the stockholders. On the whole, the results showed that the relationship between trust and investors' reaction to earnings announcement has been potentially increased by firms' disclosure quality. This finding is compatible with the claim posed in second research hypothesis and this hypothesis was approved in an assurance level of %95.

9. Discussion and conclusion

Regarding the theoretical foundations and previous research results in order to test the hypotheses and also the results of the, in the present research we can discuss that in capital market and among investors, social trust is composed of within-group trust, out of group trust, trust to hierarchy, and inter-individual trust and adjusted trust in itself and without considering the adjusting factors affecting capital market were not in a level that could have a strong effect on their reactions. It seems that probably the decisions made were commonly non-logical and were based on short-term return achievement resulted from price fluctuations resulting from the broadcast of news and different information that somehow emphasizes on lack of efficiency of capital market. Therefore, it is necessary to consider effective factors on social trust in capital market in order to study the role of trust on investors' reaction and try to maintain trust level in an appropriate level by reinforcing effective factors on it. The research findings showed that social trust did not have any relationship with investors' reaction among professional investors. Thus, in societies with average trust levels, some requirements have been taken into consideration for information disclosure quality and this can be considered as an adjusting factor in the role of social trust (interpersonal and adjusted). The reason is that investors' trust to such requirements affects investors' reactions. Proper and in time issuance of information in the market creates a positive outlook towards justice in market and its consistency. The

improvement of market transparency may increase the competition among active parties in the market. In a way that in firms with high disclosure quality unusual return on the role of social trust (interpersonal and adjusted) affect investors' reaction. In this case besides the reduction of misuse risk and the systematic nature of approaches increases social trust present in the market and investment risk reduction is gained for the investors and managerial cost and interactions reduces. Thus, it should be noted that: "social trust forms within the framework of proper, just, and fair relations". By considering control variables we can see that the investors have a negative reaction to the liability amount in capital structure and it was a positive reaction towards prediction dispersion. The research findings have represented the very first evidences of trust as an outstanding factor in changes of the reaction of investors compared to earnings announcement. Also it has had important outcomes regarding the requirements of disclosure quality, increasing information content, high value of financial statements, and finally capital market efficiency.

By considering theoretical foundations and referring from research results, some applied suggestions are suggested in order to make benefit of the previous studies practically in societies and firms as follows:

Following the test of hypotheses and the study achievements of the researcher, regarding that earnings information affects investors' reaction. Also paying attention to market efficiency and helping investors and other users of information to make logical decisions, also in order to reinforce social trust and social capital in business units, following that , the research results and theoretical foundations have emphasized on social responsibility of firms and considered it important to avoid the ambiguity and wandering of users and presenting a desirable out of organization reporting and supplying the information needs of users' financing, paying attention to social accounting on the part of formal institutions and business units.

Regarding the results of the second research hypothesis, high information disclosure of information results in the effectiveness of trust on reactions of investors, it can be suggested to managers in business units to think on utilizing all financial and social capacities and managerial costs' reduction to identify effective factors on the level change of social trust and to think of required and appropriate thoughts in order to reinforce it within the requirements and guidelines of information disclosure in order to support the investor.

For development and advancement of primary foundations of the present research within research areas, it can be offered to future researchers to consider social trust level in the capital market by considering its fundamentals and theoretical foundations to observe the following suggestions posed and test the case in firms enlisted in Tehran Stock Exchange and capital market.

The role of social trust around earnings changes and the reaction of investors in negative and positive market dates compared with the received information by them.

The effect of personal characteristics of the investors on investors' reactions to stock price and its effect on market quality.

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