

# Study on the Impact of Voluntary Disclosure on Corporate Risk and Corporate Value of the Firms Listed on Tehran Stock Exchange

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**Abstract:** *Firms normally disclose their information to enhance the credibility of their financial reports, reduce information asymmetry, and control the cost of capital. The disclosure of information for any reason other than legal obligations is called voluntary disclosure. While voluntary disclosure is costly, it seems to have positive impacts on corporate value and corporate risk. In this paper, we study voluntary disclosure as independent variable and corporate value and corporate risk as dependent variables. The statistical population of this research consists of the firms listed on Tehran Stock Exchange. The samples of this study are 99 firms listed on Tehran Stock Exchange during 2007-2012. The hypotheses were examined by panel data method. The results of this study confirmed that a significant relationship exists between voluntary disclosure and corporate value and between voluntary disclosure and corporate risk.*

**Keywords:** *Voluntary disclosure, corporate value, corporate risk, Tobin's q ratio*

## INTRODUCTION

Disclosure is a basic accounting principle which affects all aspects of financial reporting. The principle of disclosure demands that all important facts relating to financial events and activities of a business unit are reported completely and properly. Based on this principle, financial statements should contain all important, relevant and timely information and such information should be made available to different groups of users in a full, understandable and proper manner. On the other hand, corporate value and corporate risk are important criteria for the evaluation of firms by investors. Full, timely and voluntary disclosure purifies the capital market, prevents the transaction of individuals with access to disclosed information, reveals new choices, removes weak choices, and helps individuals to make the optimal decision. Firm evaluation is one of the most important and most complicated economic concepts in any country. In the developed countries with an advanced and organized capital market, firm value is determined by investment banks, investment advisors, and industrial rules and standards. In Iran, due to low efficiency of capital market and limited activity of the newly established capital banks, firm evaluation is done inexpertly and is based on trial and error. Most of investors want to know if the information disclosed by firms is a good criterion for the evaluation of corporate value and corporate risk. The present study aims to determine the impact of voluntary disclosure on corporate value and corporate risk.

## 2. Review of Literature

Disclosure literally means making information known to people. According to Kohler's Dictionary (Hassan et al., 2009), disclosure is the reflection of a fact or situation in the balance sheet, financial statements, explanatory notes, or audit reports. While disclosure means the presentation of information in its general sense, accountants often use this word in the sense of reflection of financial information in annual reports. Transparency means broad access to relevant and reliable information regarding periodical performance, financial situation, investment opportunities, corporate leadership, and corporate risk (Heflin et al, 2005). So far, various definitions have been given for transparency. These definitions can be divided into three groups: 1) definition in terms of information users, 2) definition in terms of responsibility, and 3) definition in terms of legal obligations (Taheri, 2010).

First group: Huang, P. and Zhang, Y. (Huang et al, 2012) maintain that transparency means the timely and reliable presentation of economic, social and political information, and making them available to all

beneficiaries. By contrast, the lack of transparency means the prevention of access to proper information, presentation of improper information, or inability of market to ensure the sufficiency, relevance, and quality of disclosed information.

Second group: Hussainey, K. & Walker, M. (Hussainey et al, 2009) argue that transparency means the disclosure of information necessary for evaluation of corporate performance and responsibility. They maintain that transparency is a tool used by firms to facilitate corporate performance evaluation process. Florini emphasizes the right of access to information with due observance of the privacy of both provider and user of information and the possibility to evaluate the corporate performance by using such information (Tajvidi, 2008). In effect, transparency is closely associated with responsibility. The demand for transparency may be explained by the fact that market considers firms to be responsible for their policies and performances.

Third group: the third dimension of transparency is legal obligation. Firms are obligated by the government and legislative authorities to disclose their information. The shared feature in all definitions is the quality of provided information ((Taheri, 2010). Disclosure, in its most accurate sense, includes management discussions, analyses, explanatory notes of financial statements, and supplementary statements (Jesper et al, 2008).

One of the main goals of financial reporting is to produce the information needed for decision making. The achievement of this goal entails the proper disclosure of financial information and other relevant information. According to the council for determination of financial accounting standards, the general objective of financial reporting is to produce information which explain the financial impacts of transactions, financial operations and events influencing the financial status, and the results of business operations, whereby helping the investors, grantors of financial facilities, and other extra-organizational users to make decision about a business unit.

In terms of existence or inexistence of the rules and regulations regarding the disclosure of information, disclosure can be divided into two groups.

- Mandatory disclosure
- Voluntary disclosure

Sometimes firms are obligated by the relevant rules and regulations, professional authorities, or statutory standards, to disclose their information. This type of disclosure, called mandatory disclosure, is provided by means of financial statements, explanatory notes, and other relevant terms and regulations. Sometimes a firm voluntarily discloses additional information such as future performance predictions, financial analyses, and so on. This type of disclosure, called voluntary disclosure, is provided by means of explanatory notes, the press, media, and so on. Generally, the literature on voluntary disclosure is based on the fact that managers, compared to foreign investors, have more information and better understanding about the future performance of their firms, even in an efficient capital market (Lundholm et al ,2002). Therefore, the strategy of voluntary disclosure plays an important role in the reduction of information asymmetry between managers and foreign investors. In the following paragraphs, we will explain the motivations behind voluntary disclosure.

### **Economic Consequences of Disclosure**

#### **Economic Consequences of Voluntary Disclosure**

Some researchers have investigated the economic consequences of voluntary disclosure and discussed three potential impacts of capital market on the firms which voluntarily disclose their information. These impacts are the improvement of capital market liquidity, reduction of the cost of capital, and increase of information intermediaries.

**Improvement of stock liquidity:** Bhojraj, S. and Libby, R. (Bhojraj et al, 2015) argue that voluntary disclosure results in the reduction of information asymmetry between aware and unaware investors. Consequently, in the firms with high level of disclosure, investors can relatively ensure that any kind of share is traded with a fair price, which in turn increases the firm liquidity.

**Reduction of cost of capital:** One of the motivations behind voluntary disclosure is to reduce the cost of financing. Gabbioneta, C., Gassen, J. and Mazzola, P. (Gabbioneta et al, 2016) maintain that when a firm partly discloses its information, investors sustain some degree of risk in the prediction of their future investment returns and therefore demand additional returns as a compensation for the acceptance of the risk. By contrast, in firms with high level of disclosure and low level of information risk, investors sustain lower cost of financing.

**Increase of Information Intermediaries:** Chalmers, J., Liu, S., and Wang, Z. J. (Chalmers et al., 2016) argue that if the private management information is not fully disclosed in the form of mandatory disclosure, voluntary disclosure reduces information obtainment costs and increases the services provided by analysts. However, the impact of voluntary disclosure on the demand for analysis is unclear. On the one hand, the broad disclosure of information by firm enables financial analysts to produce new and valuable information (such as better predictions and purchase or sale offers) and consequently increases the demand for their services. On the other hand, general voluntary disclosure results in the transfer of private management information to investors and the reduction of demand for analysis.

**Table 1:** Summary of the studies conducted by Iranian researchers

Researcher	Research Title	Results
Malekian, And Saghaei (Heflin et al,2005)	Investigation of financial characteristics of the firms listed on Tehran Stock Exchange	A significant relationship exists between firm size and stockholders' equities.
Noorifard (Noorifard,1998)	Study on the relationship between firm characteristics and disclosure	Firm size and profit margin are positively and significantly associated with disclosure.
Arziton (Arziton, 2004)	Investigation of the relationship between financial and functional structure of the firms and the level of disclosure	A significant relationship exists between financial and functional structure of the firms and sufficient disclosure in financial statements.
Bamber, L. S., Jiang, J., & Wang, I. Y. (Bamber et al, 2010)	Study on the relationship between voluntary disclosure and obligation of managers.	There is not a significant relationship between voluntary disclosure and obligation of managers.
Arvidsson, S. ( 2011)	Study on the relationship between disclosure level and stock returns in the listed firms	In contrast to the existing theoretical constructs, a significant relationship exists between disclosure level and stock returns.
Barth, M. E., & Landsman, W. R. (2010)	Study on the impact of the increased level of disclosure on the cost of common stock	The increased level of disclosure results in the reduced cost of common stock.
Aerts, W., Cormier, D., & Magnan, M. ( 2008)	Quality of financial reporting, information risk, and cost of capital	Capital cost in firms with low accrual quality is higher than in firms with high accrual quality
Akhtaruddin, M., Hossain, M. A., Hossain, M. & Yau, L. (2009)	The relationship between voluntary disclosure in internet and corporate value in the listed firms in Malaysia	The results of multivariable regression analysis confirmed that a significant relationship exists between voluntary disclosure and corporate value.
Barako, D.G., Hancock, P. & Izan, H.Y. P (2006)	Study on the relationship between voluntary disclosure and corporate value	A positive and significant relationship exists between voluntary disclosure and corporate value, but no relationship exists between mandatory disclosure and corporate value.
Huafang, X. & Jianguo, Y. (2007)	Study on the relationship between mandatory and voluntary disclosure and corporate value in Egypt	There is not a significant relationship between voluntary disclosure and corporate value, but a negative and significant relationship exists between mandatory disclosure and

Researcher	Research Title	Results
		corporate value.
Omar, B. & Simon, J. (2011)	Study on the effective factors in voluntary disclosure in the firms listed on Jordan Stock Exchange	The results of multivariable linear regression analysis confirmed that a significant relationship exists between voluntary disclosure and firm size, insertion of firm name in stock exchange, type of industry, and stock returns, but no relationship exists between voluntary disclosure, financial leverage, profitability, and liquidity.
Xiao, J.Z., He, Y. & Chow, C.W. (2004)	Investigation of the level of mandatory disclosure in the listed Chinese firms	This study which involved 174 firms confirmed that firms disclose 44% of their information in average and that firm size has a low impact on the level of mandatory disclosure.
Wang, K., Sewon, O. & Claiborne, M.C. (2008)	Investigation of the relationship between the comprehensiveness of annual reports of firms and the characteristics of these firms in China	The type of industry and auditing institute of the firms are not significantly associated with the disclosure level.
Cheng, C. S. A., Collins, D., & Huang, H. H. (2006)	Study on the impact of firm size on the presence in stock market and the impact of type of industry on disclosure in annual reports in the Japanese listed firms	Firm size (total assets) is significantly correlated with disclosure level and the cases of disclosure in production firms are more than in non-production firms.
(Ghazali, N. A. M., & Weetman, P. 2006)	Product market competition and disclosure of information	Product market competition as the most important mechanism of external governance affects the disclosure of information in two forms of strategy and governance.
(Leuz, C., & Wysocki, P. D. 2008)	The impact of increased voluntary disclosure, resulting from privatization and change of corporate leadership structure, on the value of firms listed on Tehran Stock Exchange	The increased voluntary disclosure results in the increased corporate value.
Huang and Zhang (Huang et al, 2012)	Does disclosure reduce agency costs?	In the firms with an unclear disclosure policy, investment in the projects results in the reduced firm value. Moreover, the broad disclosure of information reduces the ability of intra-organizational individuals to use the resources of their own firm.
(Xiaobo et al. 2014)	Does intra-organizational income contain useful	Managers who predict that stockholders will control their

Researcher	Research Title	Results
	information about the future performance of organizations?	decisions tend to voluntarily disclose their information in order to convince investors that they have made the right decision. Consequently, due to the reduced risk of abuse of resources by managers, voluntary disclosure can solve the agency problem to a great extent and reduce the agency cost of firms.

### 3. Research Method

#### Research Procedures

This study is a correlational research using multivariable linear regression for statistical analysis. The required variables were prepared to be used in the relevant models by Excel software. The data was analyzed by Eviews statistical software.

#### Statistical Population, Sample Size and Sampling Method

The statistical population of this research consists of the firms listed on Tehran Stock Exchange during 2007-2012. The samples were selected by systematic removal method. The firms which failed to meet the following requirements were removed from the statistical population:

1. Being listed on Tehran Stock Exchange by the end of 2012
2. Having provided the initial data required in this research to Tehran Stock Exchange for six consecutive years (2007-2012)
3. Fiscal period ending to 20th day of March (in order to omit the impacts of seasonal fluctuations)
4. Being other than investment companies, banks, financial and credit institutions, and insurance companies (due to their special nature)
5. Having shares traded for the studied fiscal period in Tehran Stock Exchange
6. Having no trading interruption more than one month

#### Research Hypotheses Test Models

H 1: Voluntary disclosure affects corporate value.

$$(Q_{it}) = \alpha_i + \beta_1 DS_{it} + \beta_2 f_{size\ it} + \beta_3 LEV_{it} + \beta_4 PR_{it} + \beta_4 IO_{it} + e_{it}$$

H2: Voluntary disclosure affects corporate risk.

$$(\beta_{it}) = \alpha_i + \beta_1 DS_{it} + \beta_2 f_{size\ it} + \beta_3 LEV_{it} + \beta_4 PR_{it} + \beta_4 IO_{it} + e_{it}$$

Figure 1 illustrates the conceptual model of the research

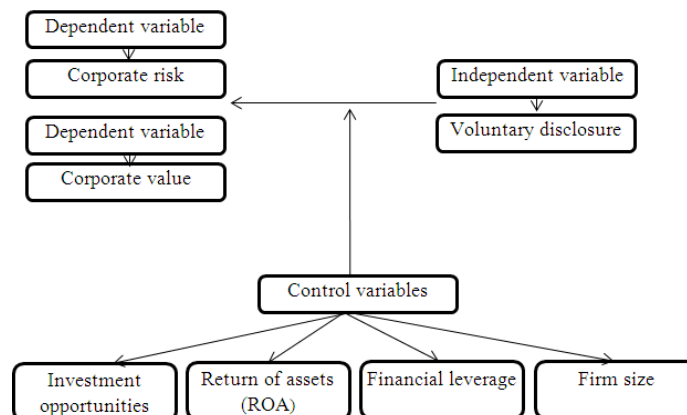


Figure 1: Conceptual model of the research

### Independent Variable

In this study, the level of disclosure is measured by Jensen's measure (2002), as follows:

$$DSCOR = DIS_{IT} / DIS_j$$

DSCOR firm disclosure level –  $t$  in year  $i$

Based on Jensen's model,  $t$  in year  $i$  – total disclosure of DISit firm

DISj - total points in Jensen's measure (total disclosure) – 62 points

In this mode, disclosure level is a number between 0 and 1.

### Dependent Variables

Corporate risk: In this study, we evaluated the corporate risk using  $\beta$  risk.  $\beta$  represents the systematic risk and shows the sensitivity of stock returns fluctuations to return fluctuations.  $\beta$  is measured by dividing stock returns covariance (risk assets) and market portfolio returns by portfolio returns variance.

Corporate value: We measured the firm size using Tobin's Q method. This ratio measures the relationship between market value and replacement value of a firm (assets replacement costs).

### $\beta$ Risk Calculation Method

$$\beta = \frac{Cov(R_i, R_m)}{VAR(R_m)}$$

$R_i$ : Stock returns (risk assets)

$R_m$ : Market portfolio returns

### Tobin's Q Method:

$$Q = \frac{\text{Book value of debts} + \text{market value of stockholders' equities}}{\text{Book value of assets}} = \frac{(MV + BV)}{TA}$$

$TA$ : Book value of assets

$MV$ : market value of stockholders' equities

$BV$ : book value of debts

### Control Variables

Financial Leverage: This variable refers to how much a firm has financed by loans or borrowings. One of the most important scales of financial leverage is debt ratio which is measured by dividing total debts by total assets at the end of the period (the ratio of long-term and short-term debts to total assets). This ratio shows what part of the assets has been financed by debts or stockholders' equities.

$$LEV = \frac{TD}{TA}$$

$TD$ : Total debts

$TA$ : Total assets

### Firm Size

Firm size is the natural logarithm of total assets at the end of a fiscal year. The use of natural logarithm causes the probable coefficients of these variables to be affected by large scales. In other words, the variable of firm size is obtained from the natural logarithm of total assets (including total current and non-current assets) at the end of the fiscal period.

### Return of Assets (ROA)

ROA is obtained from the economic performance of a firm and is measured by dividing the profit before interest and tax by total assets.

$$ROA = EBIT / TA$$

### Investment Opportunities

This variable is obtained by dividing the market value of common stock by their book value.

$$IO = M/B$$

#### 4. Results

##### Descriptive Statistics

As shown in Table 1, the central parameters and dispersion have been separately calculated for all variables. For example, the variable of voluntary disclosure with 594 observations for 6 years has a minimum, maximum and mean of 0.075000, 0.300000 and 0.180093 respectively. The range of distribution changes of this variable from data mean covers 0 to 0.03 and no significant different exists in this range. The skewness coefficient is positive (0.265840) with a mode<median<mean relationship. Kurtosis coefficient for this variable is 3.135142, which indicates that kurtosis of the distribution is higher than normal distribution.

**Table 1:** Descriptive indices of the studied variables

Variable	Independent	Dependent	Dependent	Control	Control	Control	Control
Statistical Indices	Voluntary disclosure	Corporate value	Corporate risk	Firm size	Financial leverage	Profitability	Investment opportunities
Mean	0.180093	1.381915	0.461639	5.896287	0.652012	0.196874	3.221094
Median	0.175000	0.981853	0.292830	5.825068	0.651177	0.173887	2.016949
Maximum	0.300000	110.9772	6.528719	8.014712	0.707641	0.701606	103.7209
Minimum	0.075000	0.014222	0.181550	4.291191	0.168230	4.60E-05	0.084220
Standard Deviation	0.036273	4.659243	1.162410	0.599767	0.212620	0.120559	6.735355
Skewness	0.265840	22.12043	-1.118432	0.827126	2.056362	1.097371	11.78572
Kurtosis	3.135142	517.7916	20.88559	4.219673	19.13802	4.466473	169.8450
Number of observation	594	594	594	594	594	594	594

As you can see in the Table, the variables of investment opportunities and corporate value have the highest standard deviation, which indicates that difference and dispersion of these variables are more significant than other variables. The lowest standard deviation belongs to the variable of profitability, which indicates that the performances of the studied firms in this variable are almost similar to each other and the dispersion of this variable is lower than others.

Among the research variables, voluntary disclosure, corporate value, firm size, financial leverage, investment opportunities, and profitability have a right skewness with a mode<median<mean relationship. The kurtosis of all variables is higher than normal distribution. Only the variable of corporate risk has a left skewness with a mode>median>mean relationship exists. Similarly, the kurtosis of variables of voluntary disclosure, corporate value, firm size, and profitability is higher than normal distribution. Moreover, the kurtosis of variables of corporate risk, financial leverage, and investment opportunities are smaller than normal distribution.

##### Data Normality Test

We examined the research hypothesis using Kolmogorov-Smirnov Test. The results are shown in Table 2. The value of statistic and its comparison with the critical value in the error level of 5% indicates that the statistic is in H1 rejection range. Therefore, it could be said that the dependent data has a normal distribution.

**Table 2:** Data normality test (Kolmogorov-Smirnov Test)

		Corporate Value	Corporate Risk
Parameters(a,b)	Number	594.00	594.00
	Mean	3.14	2.56
	Standard Deviation	0.68	0.88
	Positive absolute value	0.06	0.03
	Negative absolute value	-0.05	-0.03

Statistic value	1.33	0.79
Significance level	0.06	0.57

### Data Collinearity Test

We tested the collinearity using Pearson Correlation Coefficient. The results of correlation matrix are interpreted according to the following rules:

1. If  $r$  is bigger than 90%, very strong correlation exists between two variables.
2. If  $r$  is between 70%-90%, strong correlation exists between two variables.
3. If  $r$  is between 40%-70%, average correlation exists between two variables.
4. If  $r$  is between 0-40%, weak correlation exists between two variables.

**Table 3:** Correlation matrix between the research variables

	Corporate Risk	Voluntary Disclosure	Corporate Value	Firm Size	Financial Leverage	Profitability	Investment Opportunities
Corporate Risk	1						
Voluntary Disclosure	-0.00022	1					
Corporate Value	0.048779	0.064493	1				
Firm Size	-0.03401	-0.05123	-0.03381	1			
Financial Leverage	-0.02092	-0.02223	0.025682	0.01264	1		
Profitability	0.001077	0.001912	-0.06905	0.07848	-0.15028	1	
Investment Opportunities	-0.00102	-0.06278	-0.01359	-0.0065	-0.1018	0.173655	1

As you can see in Table 3, there is a weak correlation between all variables and therefore the problem of collinearity between the independent variables is resolved.

### Homogeneity of Variances

We investigated the homogeneity or heterogeneity of variances in each of the models using Arch, White and Glejser tests. The results confirmed the homogeneity of variances.

### Independence of Observations

Durbin-Watson Statistic was determined for all regression models. This statistic was between 1.5 and 2.5, which confirmed the lack of correlation in the regression model components.

### Stationarity Test

In order to prevent a false result, we first tested the stationarity of the model variables using Hardy test and found that all variables were acceptably static. The values of statistic for all variables were smaller than 5% and the data was static (Table 4).

**Table 4:** Unit root test (Shane and brothers) for determining data stationarity

Variables	Corporate Risk	Corporate Value	Voluntary Disclosure	Financial Leverage	Firm Size	Profitability	Investment Opportunities
Significance Level	0.000	0.000	0.000	0.000	0.000	0.000	0.000

### Test of Hypotheses

We estimated the models 1 and 2 (mentioned in the research methodology) using the mixed data (year-firm) relating to 99 firms listed on Tehran Stock Exchange. In order to estimate the model properly, we used Limer



test to make decision about the rejection or acceptance of the equality of the special fixed impacts and the selection of classic or panel data method. In the second step, we used Hausman test to determine whether fixed effects or random effects method should be used (Table 5).

**Table 5:** Limter test results for the selection of panel or pooling method

Hypothesis	Test	Test Statistic	Degree of Freedom	p-value	Test Result
1	Limer test	1.012493	5,583	0.4094	Random effects method is confirmed.
2	Limer test	3.842730	5,581	0.0020	
	Hausman test	39.555571	5	0.0000	

The significance level in Limter test is smaller than 5%, which means that y-intercepts of the firms are not different. The use of panel method in this case is compatible and efficient and the results produced by this method should be paid special attention.

The following regression model was used to test H1:

$$(Q_{it}) = \alpha_i + \beta_1 DS_{it} + \beta_2 f_{size\ it} + \beta_3 LEV_{it} + \beta_4 PR_{it} + \beta_5 IO_{it} + e_{it}$$

We first used F statistic to determine the significance of the entire model. The probability of F statistic is 0.000, which indicates that the regression model is correct with a confidence level of 99% and the entire regression is significant. To investigate this relationship, we used *t* statistic in error rate of  $\alpha = 0.01$ . As you can see in Table 6, the probability of voluntary disclosure, firm size, financial leverage, profitability, and investment opportunities is significant with a confidence level of 99% and error rate of 1%. The coefficient of determination (R) is a parameter which explains the power of the relation between independent variables and dependent variable. The adjusted coefficient of determination in this model is around 3%, which means that 3% of dependent variable changes can be explained by independent variables.

The value of Durbin-Watson Statistic indicates that autocorrelation problem does not exist. This statistic is between 1.5 and 2.5, which confirms that no correlation exists in the components of regression model. As shown in Table 7, correction factor for significance level of *t* and *f* statistics (given that the probability of F statistic is 0.000) indicates that regression model is correct with a confidence level of 99%. Since a significant relationship exists between voluntary disclosure and corporate value and this variable is the independent variable of this model, and given that all control variables mentioned above are significantly associated with corporate value, this hypothesis is confirmed.

**Table 6:** Regression results for dependent variable of corporate value

Components of Model	Coefficients ( $\beta$ )	Standard Error	T Statistic	Significance Level
y-intercept	1.331234	0.041392	32.16149	0.0000
Voluntary Disclosure (DS)	-0.352560	0.093985	-3.751245	0.0002
Firm Size (SIZE)	-0.204302	0.005703	-35.82093	0.0000
Financial Leverage (LEV)	-0.316243	0.016028	-19.73071	0.0000
Profitability (PR)	0.295411	0.029273	10.09144	0.0000
Investment Opportunities (IO)	-0.005744	0.000509	-11.29112	0.0000

AR(1)	0.063081	0.004160	15.16384	0.0000
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**Table 7:** The entire model significance test

Durbin-Watson Statistic	Significance Level	F Statistic	Adjusted Coefficient	Coefficient of Determination
2.013660	0.000000	372.2583	0.036856	0.036956

The following regression model was used to test H2:

$$(\beta_{it}) = \alpha_1 + \beta_1 DS_{it} + \beta_2 f_{size\ it} + \beta_3 LEV_{it} + \beta_4 PR_{it} + \beta_5 IO_{it} + e_{it}$$

Due to the use of mixed data, we used fixed effects method to solve the heterogeneity of variances. The probability of F statistic is 0.000, which indicates that the regression model is correct with a confidence level of 99% and the entire regression is significant. To investigate this relationship, we used t statistic in error rate of  $\alpha = 0.01$ . As you can see in Table 8, the probability of voluntary disclosure, financial leverage, and profitability is significant with a confidence level of 99% and error rate of 1%. The adjusted coefficient of determination in this model is around 46%, which means that 46% of dependent variable changes can be explained by significant independent variables.

The value of Durbin-Watson Statistic is between 1.5 and 2.5, which confirms that no correlation exists in the components of regression model. As shown in Table 9, correction factor for significance level of t and f statistics (given that the probability of F statistic is 0.000) indicates that regression model is correct with a confidence level of 99%. Since a significant relationship exists between voluntary disclosure and corporate risk and this variable is the independent variable of this model, and given that the control variables of financial leverage and profitability are significantly associated with corporate risk, this hypothesis is confirmed.

**Table 8: Regression results for dependent variable of corporate risk**

Components of Model	Coefficients ( $\beta$ )	Standard Error	T Statistic	Significance Level
y-intercept	1.361659	0.509885	2.670519	0.0078
Voluntary Disclosure (DS)	-2.287766	1.199793	-2.906800	0.0070
Firm Size (SIZE)	0.356804	0.188275	2.895121	0.0086
Financial Leverage (LEV)	-0.083909	0.068840	-1.218896	0.2234
Profitability (PR)	-0.777539	0.409132	-2.900460	0.0079
Investment Opportunities (IO)	0.001780	0.003390	0.525046	0.5998
AR(1)	-0.112310	0.038413	-2.923774	0.0036

**Table 9: The entire model significance test**

Durbin-Watson Statistic	Significance Level	F Statistic	Adjusted Coefficient	Coefficient of Determination
2.023748	0.000069	3.573955	0.446316	0.464310

## 5. Conclusion

In this paper, we studied voluntary disclosure as independent variable and corporate value and corporate risk as dependent variables. The statistical population consists of the firms listed on Tehran Stock Exchange. The

statistical samples of this study are 99 firms listed on Tehran Stock Exchange during 2007-2012. The research hypotheses were tested by panel data method.

The first hypothesis concerns the impact of voluntary disclosure on corporate value, accompanied with the intervention of control variables. The results of this study suggest that investors are facing information asymmetry problem in the process of disclosure. This problem occurs when one party has more information than the other party. Information asymmetry between investors may result in the wrong evaluation and may create a motivation for the correction of wrong evaluation through disclosure of more information. Voluntary disclosure reduces the uncertainty and information asymmetry and increases the confidence of investors. The reduced uncertainty results in the reduced need to management activities, reduced financial costs, and the increased corporate value. Moreover, voluntary disclosure potentially reduces earnings manipulation, making the stock prices a reliable reflection of the firm's financial status. This result is in line with financial theories stating that better disclosure through the reduced cost of capital or the increased cash flows results in the increased corporate value. Disclosure of more information reduces information asymmetry, which in turn increases the confidence of extra-organizational individuals. This reduces the expected return rate, increases the demand for the firm stocks, and improves the corporate value.

The second hypothesis concerns the impact of voluntary disclosure on corporate risk, accompanied with the intervention of control variables. The results of this study suggest that investors in capital market demand higher interest due to the lack of information asymmetry in order to sustain the existing risk. Consequently, managers voluntarily disclose their information to mitigate the problem of information asymmetry and achieve fair prices for investment opportunities. Therefore, disclosure of more information reduces the cost of common stock. In other words, investors are more willing to invest in firms which higher degree of disclosure and lower risk.

Pourheydari (Pourheydari et al., 2012) reported that a significant inverse relationship exists between disclosure quality and cost of debt. Tehrani (Tehrani et al, 2009) examined the impact of disclosure on stock liquidity which was measured by means of stock purchase and sale prices. They reported that a significant inverse relationship exists between disclosure and stock liquidity. Bischof, J., and Daske, H. (Bischof et al, 2013) reported that a negative and significant relationship exists between disclosure quality information asymmetry.

Wang, K. T. and Li, D. (Wang and et al, 2016) conducted a study on the relationship between voluntary disclosure and stockholders' equities. They measured the level of voluntary disclosure using the annual reports provided by firms and the rankings of investment management institute. They found that voluntary disclosure results in the reduction of stockholders' cost of capital.

Leuz, C. and Wysocki, P.D. (Leuz et al, 2016) examined the value of voluntary and mandatory disclosure in capital market. They found that, after controlling certain variables such as firm size and profitability, mandatory disclosure was negatively and significantly associated with corporate value. They also reported that voluntary disclosure was positively correlated with corporate value, but this relationship was not significant. This result is in line with the findings of the present study.

Chung, H. and Jung, W.O. (Chung et al, 2016) conducted a research under title of "does disclosure quality affect information asymmetry?" They reported that price gap was negatively correlated with disclosure of information. In other words, the improved quality of disclosure results in the reduced information asymmetry, which is determined by the price gap between supply and demand.

As regards the first hypothesis, it is recommended to investigate the impact of economic conditions such as inflation and currency fluctuations on the relationship between production market competition and other effective factors in capital structure and corporate risk and the impact of these factors on the level of voluntary and mandatory disclosure. It is also recommended that the Stock Exchange provide education to stockholders and investors, particularly those with a low knowledge on the nature, quality, calculation method of financial statements, and voluntary disclosure in the listed firms.

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