

INVESTIGATING THE RELATIONSHIP BETWEEN THE QUALITY OF MANAGEMENT'S EXPECTED PROFIT AND EQUITY

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Abstract

Investing and using investment opportunities is very important for companies. On the other hand, profit quality plays a significant role in helping investment decisions. The main goal of this research is to examine the relationship between profit quality and cost of equity in companies. The statistical population of this research is all the petrochemical and information technology companies accepted in the Tehran Stock Exchange. In order to test the hypotheses of this research, four regression models have been used using the mixed method with random effects. The results of the estimation of these models show that there is a significant relationship between profit quality factors such as the quality of accruals, profit continuity, profit predictability and profit smoothing with the price-to-income ratio as the cost of equity of companies accepted in There is the Tehran Stock Exchange. In addition, according to the positive coefficient of the company's profit quality variables, it can be concluded that increasing the quality of accruals, continuity of profit, predictability of profit and smoothing of profit will increase the ratio of cost of equity and vice versa.

Keywords: Profit quality, management, equity

INTRODUCTION

The purpose of financial reporting is to provide appropriate information for decision making by users of financial information. Financial reporting may be done in the form of financial statements or other information transfer tools. Most of the information provided by financial reporting includes predictions about future operations. Information outside the financial statements is mainly provided for this purpose. In addition to the information disclosed outside the financial statements, the financial statement information that is reflected in the financial statement items is widely based on management's forecasts and estimates. Therefore, it is expected that due to managers' incomplete estimations of the commercial future of companies, the information disclosed through financial statements and outside of it will contain common errors. Zahra Ghasemi Koktabeh et al. (2023) conducted a study entitled In the line of fire: a systematic review and meta-analysis of burnout among nurses, in which the quality of benefit due to non-burnout was discussed (Zahra Ghasemi Koktabeh et al., 2023). Hakime Dost Mohammadlou et al. (2023) conducted a study titled knowledge sharing as a moderator between organizational learning and error management culture in university employees, which showed the issue of management quality (Hakime Dost Mohammadlou et al., 2023). Jamal Valipour et al. (2023) conducted a study entitled Designing a credit risk management model in the network of agencies of after-sales service companies, using the financial components of after-sales services and innovative meta-algorithms. They dealt with risk management in their study. (Jamal Valipour et al., 2023).

In reality, divulgence is advising examiners and financial specialists almost the sum and timing of future cash streams, which makes a difference examiners and financial specialists anticipate future benefits. Subsequently, superior straightforwardness and revelation makes way better data for shareholders. The inquire about that has been done appears that a great divulgence progresses the precision of analysts' estimates of benefits within the taking after a long time (Jasper and Panberg, 2008). they put Concurring to financial rationale and sound behavior, speculators contribute where the rate of return is break even with to their anticipated rate of return. On the other hand, the rate of return anticipated by financial specialists depends on the peril of the company's future data. The vulnerability of data is additionally influenced by the sum of private data of the company and the mistake of open data. Subsequently, the higher the sum of private data of the company, or the lower

the exactness of the data given, the higher the company's peril and the higher the investors' anticipated return. On the other hand, supervisors of trade units, as mindful for planning budgetary articulations, with more information of the company's open and private data than the clients of budgetary explanations, possibly attempt to display the circumstance of the trade unit more favorably (Kaplan et al., 2004). Pejman Ebrahimi et al. (2023) conducted a ponder titled Self-compassion, work engagement and work execution among seriously care medical caretakers amid the COVID-19 widespread: the interceding part of mental wellbeing and the directing part of sex. They accepted that the illness Crown has had an affect on the quality of benefit (Pimaan Ebrahimi et al., 2023). Pejman Ebrahimi et al. (2023) conducted a consider entitled Transformational business enterprise and computerized stages: a combination of ISM-MICMAC and unsupervised machine learning calculations for the good thing about companies (Pejman Ebrahimi et al., 2023).

The industrial revolution in Europe led to the creation of large companies and factories, which required a lot of capital. It was not possible to provide this capital through one or more people, therefore large investments were made through the attraction of small capitals by joint stock companies. Due to the characteristics of public companies, including the ability to easily transfer the shares of these companies, the stock exchange markets flourished and thus the users of financial information of companies increased. Today, economic development is based on access to financial resources for investment. This is despite the fact that the decision of investors regarding investment in turn depends on the existence of appropriate financial reporting. Financial reporting discloses the allocation of capital resources in a commercial company and its profitability. Disclosure is a comprehensive term in accounting and covers almost the entire financial reporting process. One of the basic principles of accounting is the principle of disclosing all important and relevant facts about financial events and activities of commercial units. The aforementioned principle requires that financial statements be prepared and presented in such a way that in terms of reporting objectives, firstly, they are timely, relevant and reliable, and secondly, they are comparable and understandable.

It means that it can help the users of financial statements to make informed decisions (Alivar, 1993). In fact, the main purpose of disclosure is to help users in making investment decisions, interpreting the financial status of companies, evaluating management performance, forecasting future cash flows. In this regard, all the important facts of an economic unit should be properly and completely disclosed, so that it is possible to make a decision and avoid confusion. Prevented. Disclosure must be made through legal reports including basic financial statements that contain all important, relevant and timely information, and this information must be presented in a way that is comprehensible and completely possible; To provide users with the possibility to make informed decisions (Islamic Council, 1997). Arellano and Bond (1991) defined disclosure: "Disclosure generally means reflecting information. But accountants consider this word to have a more limited meaning and consider it as reflecting the financial information of a commercial entity in the form of financial reports, which are usually presented annually. Ebadi Daulat Abadi (1381) considers disclosure to include information that is useful for the ordinary investor and does not mislead the reader. In a more obvious way, the principle of disclosure means that no important information of interest to the ordinary investor should be removed or hidden (Abadi Daulat Abadi, 2003). Yahya Hassas Yeganeh (2008) considers disclosures that include or related financial information, both inside and outside of financial statements. Also, they introduce the disclosure of budget information as one of the disclosures outside the text of financial statements. Yahya Hassas Yeganeh (2008) in This research uses the agency theory to determine the factors influencing the voluntary disclosure of financial ratios. The agency theory is related to the relationship between the owners (stakeholders) and managers (brokers) of the company. The underlying basis of the agency theory is that one party (stakeholders) He appoints others (brokers) to perform services on their behalf, and at the same time, decision-making powers are imposed on the brokers by the beneficiaries. This theory analyzes the conflict between managers and shareholders.

So, this idea is for companies that are owned by many people and are run by a team chosen by the owners. Previous studies have found that when companies share information, it helps them and the



people who own shares in the company. Many studies have used agency theory to understand why companies share information. In these studies, it is suggested that sharing information can help make better decisions. It's important to know that even though sharing financial information has its advantages, there hasn't been much research on voluntary disclosure of financial ratios. So, this study looks at the reasons why companies choose to share their financial numbers in their yearly reports. In recent decades, experts have made conceptual frameworks for accounting standards. They say the main purpose of accounting and financial reporting is to give helpful information to people who use financial statements to make economic decisions. Standard creators and accounting theory experts think about information that is helpful for making economic decisions and has specific qualities. In accounting, the way information is reported and shared is important for making good economic decisions. The information needs to be relevant, trustworthy, easy to understand and able to be compared to other information. When creating conceptual frameworks, we believe that having certain qualities in financial reports and information can help decision-makers make better choices for the future. So, this article looked at how well management's decisions about running a company affect how much money the company makes and how much of that money goes to the owners of the company.

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In the last few decades, experts in accounting and finance have come up with ideas about how accounting should work. They say that the most important thing about accounting and financial reporting is to give people the information they need to make good decisions about money. Experts who make rules for accounting and financial reporting think about what kind of information would be helpful for making business decisions. They want this information to have certain qualities. In accounting, good reporting and disclosure help people make smart economic decisions when the information is accurate, easy to understand, and can be compared to other information. In creating frameworks, we believe that having good qualities in financial reporting makes the information more helpful for making decisions about the future. In this article, we looked at how good management affects how much money a company will make and the value of the shareholders' investment.

RESEARCH METHODOLOGY

All the companies admitted to the Tehran Stock Exchange between 2007 and 2012 form the statistical population of this research. In this research, the systematic elimination method (screening technique) was used to select the statistical sample. Disclosure policy is the prediction of management profit and cost of equity. The place in this research is the Tehran Stock Exchange. The time base in this research is from the beginning of 2007 to the end of 2012. This research is descriptive, analytical and correlational in nature and method. Quantitative data required to conduct the research according to

the desired variables have been obtained from various sources, including yearbooks and various statistical reports published by the stock exchange organization.

"We got the information we need for stock market calculations from stock market software like Rahvard Navin and Tadbirpardaz. " Next, the overall and ultimate numbers from this data have been compared with the details in the stock exchange's trading system. During the first steps of gathering and organizing data, we used Excel software. At this point, the stock market data has been put into Excel from the exchange and trading software. After organizing the data and doing some initial calculations, Eviews 8 and Minitab software were used to analyze the information and test our ideas.

Discussion and Results

The naming information of model variables is reflected in Table 1-4. In this part, to enter the data analysis stage, the descriptive statistics of the data, including central indices, dispersion indices and deviation from normality, as well as Jarek's test, which confirms the normal distribution of the residuals, were calculated. The results are listed in Table 1:

Variable Type	Variable Name	Variable Symbol	Row
Dependent	Cost of equity capital	MPEG	1
Independent	Profit stability	EARN	2
controllable	size of the company	SIZE	3
controllable	The ratio of book value to market value	BM	4
controllable	Systematic risk	BETA	5

Table 1: Introduction and separation of symbols used for model variables

The results of tests and estimates

In this research, the method of static consolidated data is used to test the hypotheses. In this method, a Chow test, which is also called structural changes test, is used to choose between two pool models and fixed effects models. In the fixed effects model, each component has its own fixed value, and because a virtual variable is considered to work with each of these fixed values, the estimator of the fixed effects, Least Squares Dummy Variable Regression (LSDV) is also called. Chow test is a test of equality between a set of coefficients in a linear regression.

Chow test or test of structural changes related to the research hypothesis

In order to test the hypotheses of the research, first the time constant effects model is estimated and then the structural changes test will be used to check the significant difference. This test is hypothesized as follows to check the existence of fixed effects:

$$\begin{cases} H_0: \text{The widths of the origins are equal} \leftrightarrow \text{Pool Model} \\ H_1: \text{At least one of the width of the origin is not equal to the others} \leftrightarrow \text{Fixed effects model} \end{cases}$$

Table 2: The results of Chow's test related to research hypotheses

Chow's test				
Meaningful	Degrees of freedom	statistics	Cross section	Meaningful
0	-96,468	2.843006	F statistic	Research model
0	96	261.8785	Kai-two	

The Hausman test is about comparing different ideas.

The Chow test shows that the fixed effects model is the best choice for the hypotheses. Now we need to compare the fixed effects model with the random effects model to see which one is better. We use the Hausman test for this. Before we do the Hausman test, we need to first figure out the time-random effects model. The Hausman test is a way to see if there are random effects, and it is set up like this:

Hausman test				
Meaningful	Degrees of freedom	statistics	Test effect	Hypotheses
0.0022	5	18.726142	constant	Research model

Table 3: The results of the Hausman test related to the hypotheses

$$\begin{cases} H_0: \text{There is no correlation between individual effects and explanatory variables} \leftrightarrow \text{Pool Model} \\ H_1: \text{There is correlation between individual effects and explanatory variables} \leftrightarrow \text{Fixed effects model} \end{cases}$$

As can be seen, according to the level of significance obtained at this stage, the fixed effects model is chosen as the preferred model for the research hypotheses.

Heteroscedasticity

In sequential statistics, random variables that have different variances are called heterogeneity of variance. On the other hand, a sequence of random variables is called equal variance if they have constant variance.

Variance heterogeneity identification methods

Tests have been proposed to identify the problem of heterogeneity variance, including: Park test, Goljeser test, White test, Brush-Pagan Godfrey test, Goldfeld-Quant test, Arch test, Harvey test, etc. The method that is usually used in these tests is to use an auxiliary regression. In this way, after estimating the model, the residual sentences (as the closest variable that can represent the error sentences) are extracted and their square is regressed on the explanatory variables of the model. There will be heterogeneity. In this research, ARCH test was used to discover the heterogeneity of variance with the help of Eviews 8 software.

Methods of resolving variance heterogeneity

1. Using the generalized least squares method instead of the ordinary least squares method.
2. Revision of the model specification.
3. Using the K-Class Limited Information Maximum Likelihood (LIML) method
4. Using logarithmic values of explanatory variable instead of simple values of that variable.
5. Using White's equivalent standard deviation estimate.

This study uses a different method, called the generalized least square method, instead of the ordinary least square method.

We are testing the research idea by using data and math models. The Fisher's F statistic was used to find out how important the regression model is. We used the Student's t-statistic to see how important the independent variables were in each model, with a 95% confidence level. The Durbin-Watson test was used to see if there was a pattern in the leftover data. If the linear regression model doesn't follow the usual rules, like having different amounts of variation or a connection between the errors in the model, we will use the "first-order autoregression" (AR₁) model to make changes and improve the model.

Multicollinearity

Table 4: Collinearity test of research variables

Collinear coefficients						
Research model		Standardized coefficients	t statistic	Meaningful	Collinearity statistics	
Variables	Constant amount	Beta	7.543	0	Tolerance statistic	VIF statistic
	Profit stability	0.028	0.697	0.486	0.988	1.012
	size of the company	-0.218	-5.492	0	0.991	1.009
	The ratio of book value to market value	-0.222	-5.602	0	0.994	1.006
	Systematic risk	-0.065	-1.606	0.109	0.969	1.032

In econometrics, collinearity happens when two or more independent variables in a multivariate regression are strongly related to each other. Correlation means there is a connection between the independent variables. The amount and type of collinearity will vary based on how strongly the independent variables are related to each other. Collinearity can be found in most regression models. What matters is how strong the relationship is between the independent variables. Having "perfect collinearity" goes against the basic rules of the regression model.

Ways to detect collinearity

1. Estimated coefficients show sensitivity to adding or subtracting variables in the model.
2. In the case of collinearity, the regression is generally significant and has a high R^2 , but the coefficients alone are meaningless.
3. If we regress each independent variable on the rest of the explanatory variables and compare their R^2 with the R^2 of the original regression. If the calculated R^2 is greater than the R^2 of the original regression, then the possibility of incomplete collinearity is severe.
4. If R^2 does not change significantly by removing a variable from the model or adding a variable to it, then the said variable is prone to collinearity.
5. Using TOLERANCE and VIF criteria in SPSS software

In this research, using the fifth method and with the help of SPSS19 software, the presence or absence of collinearity is checked, and the results are shown in Table 7-4.

R^2 in these two criteria is the regression coefficient of the explanatory variable J on other explanatory variables. If the TOLERANCE statistic is smaller than 0.2 or VIF is larger than 10, then there will be collinearity in the research model. According to the results obtained from Table 8-4, the research model does not have collinearity.

Testing the average of different research factors.

One big problem in time series regression is called spurious regression. Spurious regression means when there seems to be a connection between two things, but really there isn't. Even though the R^2 number is high, it doesn't mean the relationship is real. In studies using time series data, we assume that the time series stays the same over time. A time series can be the outcome of a random process.

A random process is called stationary when the average, spread, and how the data is related to itself stay the same over time. To make sure the research results are accurate and the relationships in the regression are real, a test was done to check the significance of the variables. Finding and determining if the research variables have a unit root in the EGLS model. The test was performed using Eviews 8 software and various statistical tests like Levin, Lin and Chu, Im, Sons and Shin, Fisher-Dickey Fuller, Fisher-Phillips, Perron, and Bartlett's scale. The test results (Table No. n) The numbers 4 to 8 show the importance of the factors, so we can reject the idea that the factors have only one source.

$$\begin{cases} H_0: \text{The existence of a single root} \\ H_1: \text{Absence of a single root} \end{cases}$$

Fisher-Phillips, Perron	Generalized Fisher-Dickey Fuller	Im, Sons and Shane	Levin, Lin, and Chu	
0.0000	0.0000	0.0000	0.0000	Cost of equity of shareholders
0.0000	0.0000	0.0000	0.0000	Sustainability of profits

Table 5: Mana test of hypotheses during the research period

Testing hypotheses:

First hypothesis: There is a significant relationship between the quality of the profit disclosure policy predicted by the management and the cost of equity.

$$MPEG_{it} = \alpha_0 + \beta_1 EARN_{it} + \beta_2 Size_{it} + \beta_3 BM_{it} + \beta_4 Beta_{it} + \varepsilon_{it}$$

Table 6: Estimation results obtained from the research model test

Meaningful	t statistic	Standard deviation	Coefficient	Variables
0.0000	5.832092	1.145124	6.678466	constant number
0.0041	-1.166377	3.15E-08	-3.68E-08	Profit stability
0.0000	-5.822329	0.097401	-0.567102	Company size
0.7650	0.299045	954731.2	285507.7	The ratio of book value to market value
0.0617	-1.873208	0.020338	-0.038097	Systematic risk
F statistic	8.010272	Adjusted coefficient of determination	0.554437	
F statistic probability	0.000000	Watson camera statistics	2.257219	

Based on the F statistic in Table 6, we can say that the regression model is important. The Durbin-Watson number is 2.25, which is a good number. It shows that there is no connection between the different parts of the main model. The adjusted coefficient value shows that the variables in the model can explain 55% of the dependent variable. Based on the results we found, the profit plan has a big impact on how much money investors expect to make. Additionally, when there is uneven access to information, it directly affects the cost of ownership in a company.

Conclusion

The main purpose of this research is to investigate the disclosure of the policy of forecasting the income and cost of current equity and the disclosure of the policy of forecasting the income and cost

of future equity capital. In order to carefully examine the effect of each factor on the dependent variables, The components were considered and tested in an independent hypothesis as follows:

Research hypothesis: There is a significant relationship between the profit quality policy predicted by the management and the cost of equity.

In this research, the following model was developed as the basic research model for testing the hypotheses:

$$MPEG_{it} = \alpha_0 + \beta_1 EARN_{it} + \beta_2 Size_{it} + \beta_3 BM_{it} + \beta_4 Beta_{it} + \varepsilon_{it}$$

$$MPEG_{it} = \alpha_0 + \beta_1 Spread_{it} + \beta_2 Size_{it} + \beta_3 BM_{it} + \beta_4 Beta_{it} + \varepsilon_{it}$$

The general results of hypothesis testing using different relationships are presented in Table 1-5.

Table 7: Test results of research hypotheses

Type of relationship	hypothesis
reverse	hypothesis

Comparing results

Companies that make good profits are less risky for investors to give them money. So, people who give companies money want to invest in companies that make a lot of money. Actually, it is easier for institutions and companies with good profits to get money from investors because they are seen as trustworthy. On the other hand, if companies make less money, they need to pay more to investors to get their attention. This means the companies have to pay more to get money from investors and financial institutions. The test results support the explanations given in the research.

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