Investigating the role of the disclosure type in predicting the profitability of companies listed in the Tehran Stock Exchange

Arefe Naghi Nahrsulduz

Islamic Azad University Germi Branch

ABSTRACT

In economics, inflation is a sustained increase in the general price level of goods and services in an economy over a period of time. When the price level rises, each unit of currency buys fewer goods and services; consequently, inflation reflects a reduction in the purchasing power per unit of money – a loss of real value in the medium of exchange and unit of account within the economy. A chief measure of price inflation is the inflation rate, the annualized percentage change in a general price index, usually the consumer price index, over time. The opposite of inflation is deflation. If economic growth matches the growth of the money supply, inflation should not occur when all else is equal. A large variety of factors can affect the rate of both. For example, investment in market production, infrastructure, education, and preventative health care can all grow an economy in greater amounts than the investment spending

* Corresponding author: arefe.naghi@gmail.com

1. Introduction

To make investment decisions, investors rely on financial information contained in the financial statements of economic units, particularly reported profit. Investors believe that a steady profit compared to volatile profit ensures higher dividend payment. Additionally, profit volatilities are considered as important risk criterion of company and business units with steady profit have lower risk. Therefore, business units that have smoother profit are considered highly by investors, and it is considered as appropriate investment. This makes some managers smooth to profit with different methods, including acceleration and the delay in shipping and billing, increasing and decreasing inventory at the end of the period, change in the method of depreciation calculation (Chini, 2009). The theory of the profit quality was proposed for the first time by the financial analysts and stock agents, because they were feeling that reported profit does not show the profit power of the company as they think. They found that the analysis of financial statements is difficult due to numerous weaknesses in measurement of accounting information. The important question is why financial analysts do not use reported net profit or profit of each share of company (without moderation) in their assessment and they act cautiously. The answer is that in determining the value of company, not only the profit quantity, but also its quality should also be considered. The quality of profit means the potential of profit to grow and the possibility for realization of future profits. In other words, the value of a share not only depends on profit of each share of current year, but also it depends our expectations of future and profitability power of future years and reliability coefficient to future profits. On the other hand, accountants and financial analysts understanding is one of the factors in the decision-making, appropriate information, and relevant with subject of decision. If the required information is distributed asymmetrically among people, it causes different results on a single subject (Ghaemi, 2005). In terms of access to companies' information, the principle known as disclosure arises. The principle of disclosure is one of the accounting principles that have an impact on all aspects of financial reporting .The principle of disclosure requires that all of the important facts related to financial events and activities of business unit to be reported appropriately and completely. According to this principle, essential financial statements should contain all of the important relevant and timely information and this information should be provided in understandable and complete way so that users can make conscious decisions. On the other hand, the data presented should not be presented in terms of quantity and quality in such a way that cause confusion for users of financial statements (Alivar, 2002). What should be considered in the capital market is that many of the people who invest in the market are ordinary people that their only way to access their important information is announcements published by the companies (Vatanparast, 2005) .However, terms of accounting information disclosure quality and transparency of a disclosure system are used in share and providing precise definition of quality and transparency to refer it is difficult (Setayesh et al 2011).

Research literature

In developed and advanced countries, various studies have been conducted with relatively wide knowledge of disclosure of information and its importance in performance of business units, for example, Gerald and Zhou (2001) in an article entitled "disclosure quality and management of profit" concluded that disclosure of company is lowly related with management of profit. They also found that there is a significant negative relationship between disclosure of company and profit management. Research conducted by Chang et al (2008) suggests that information asymmetry determined through the gap between supply and demand decreases with increased disclosure quality .Li (2010) showed that large companies compared to small companies that have high-quality competition have lower disclosure quality in comparison with small companies. The findings of the study conducted by Lou et al. (2006) suggest that the quality of disclosure in companies that are controlled by private suppliers is lower compared to companies that are controlled by the government (the quality of disclosure and stock returns). Iatridis (2011) showed that companies with higher disclosure quality show lower tendency for profit management and they have higher conditional conservatism and lower unconditional conservatism. Blanco et al (2014) in an article titled "The relation between type of disclosure in business unit and the quality of profit" found a positive relationship between profit quality and quantity of disclosure of part of the business unit. The results of study conducted by Dastghir and Bzazzadeh (2003) suggest that the increased disclosure reduces the cost of equity. In other words, investors prefer investing in companies with greater disclosure (less risk). Nurush and Hosseini (2008) examined the relationship between disclosure quality (reliability and timeliness) and profit management. One of the results of the study included the significant negative relationship between the quality of corporate disclosure and profit management .This result shows that those companies listed on the Tehran Stock Exchange observing disclosure requirements show less tendency to manage profit. It means that in companies with higher disclosure quality, lower profit management is seen. In other words, there is logical probability that companies would manage the profit to meet the expectations of the investors and realize their predicted profits.

Lashkari and Naderi (2009) examined the relationship between disclosure and stock returns of companies listed in Tehran's Stock Exchange. The relationship between the level of disclosure and stock returns was examined in this study and the hypothesis of the study for a period of five years (2002 to 2006) was generally tested. Significant correlation was not observed between level of disclosure and stock return. Then, for further investigation, the research hypothesis was tested annually, that no significant relationship was found in none of the years, while this relationship was positive in most years. It could be justified by fact that calculation of the disclosure quality is performed objectively. It means that by changes in measurement index of disclosure level, its size also changes or due to inefficient capital marker in Iran, investors may use other information resources to obtain information.

Fakhari and Fallah Mohammadi (2009) investigated the effect of information on disclosure of stocks of companies listed in Tehran's Stock Exchange. In this study, the level of disclosure was measured through a checklist based on voluntary disclosure and requirements of auditing. The research findings indicated significant and negative correlation between information disclosure and stock liquidity index.

Setayesh et al (2010) investigated the effect of the quality of disclosure on stock liquidity and cost of capital of the companies listed in Tehran stock exchange. The findings of their study on 105 companies in the period 2004-2008 indicate that there is a positive and significant relationship between the size of the company and its current and future liquidity. However, a significant relationship was not found between the current and future liquidity and quality of disclosure of company. In addition, there was negative and significant relationship between the quality of disclosure and the cost of capital of the company's current and future common stock.

Yaghoobnezhad and Zabihi (2011) in an article examined the relationship between disclosure quality and liquidity of the stocks in companies listed in the Tehran Stock Exchange. In this study, historical information of 2004-2008 years of 72 companies was examined. The main hypothesis of the study was that improved quality of disclosure is negatively correlated with stock liquidity. To test the relationship between disclosure quality and liquidity of the stock, multivariate regression using panel information was applied. The results showed no significant relationship between disclosure quality and stock liquidity.

Setayesh et al (2012) studied the effects of disclosure quality on the current and future performance of companies listed in Tehran Stock Exchange. The findings of investigations on 110 companies in the period 2044-2009 indicated direct relationship between the quality of disclosure and current and future performance of companies listed in Tehran Stock Exchange. Moreover, in all hypotheses, the relationship between control variables of the size and financial leverage and performance was significant.

Setayesh et al (2012) conducted an article to identify and explain the factors affecting the quality of information disclosure in companies listed in Tehran Stock Exchange. Regression results suggested that disclosure quality has significant and direct relationship with history, liquidity, profitability, and size of auditing company and it is inversely and negatively correlated with financial leverage and family-owned companies listed on the Tehran Stock Exchange.

 Results of study conducted by Hematfar and Maghadasi (2013) showed that there is no significant correlation between quality of disclosures of companies and the value of inflation-adjusted stock market. The findings also showed no significant relationship between reliability and timeliness and the value of inflation-adjusted stock market. Khajavi and Momtazian (1392) findings suggest that the quality of disclosure has a positive impact on the current and future stock returns .The findings of Rahimian and Ebrahimi Maimand (2013) suggested a negative relationship between disclosure quality and the level of discretionary accruals and significant and positive relationship between disclosure quality and conservatism.

The results of the research conducted by Mashayekhi and Farhadi (2013) showed negative and significant relationship between the quality of disclosure and the cost of equity for large companies, but this relationship for group of companies smaller than the mean is not visible. Chaharduli (2013) showed that there is positive and significant relationship between the quality of profits and quality of disclosure at maturity and stagnation stages, but significant relationship was not creation and growth.

According to what was said, the question of the current study is if there is relationship between the level of information disclosure in company and profit quality or not. Accordingly, the research hypotheses was developed and tested experimentally as follows:

Level and type of the disclosure determine the current profit quality level.

Research methodology

On the other hand, the current study is descriptive-correlational research. Based on nature of data, it is considered among the qualitative studies. Based on objectives, it is also considered as applied study. In order to test hypotheses of study and as nature of data is based on qualitative and real data the method of study is survey type in terms of nature and content. Using secondary data extracted from the financial statements of companies listed on the Tehran Stock Exchange, it analyses the variables. It is also applied in terms of objective.

Applied research is a study improving the human societies using fundamental research results. The study period is from 2009 to 2013.

The population of study included all 487 companies listed in Tehran Stock Exchange. The studied companies will be selected according to the following restrictions:

1) To observe compatibility, their fiscal year should end in the last day of year.

2) Information needed to calculate variables of the study should be available in the studied year.

3) They should not change in activity or fiscal year during 2009 to 2013

4) They should not be among the investing banks, financial institutions, and companies.

5) They should be accepted in the Stock Exchange before 2008.

After investigation, the number of used companies reduced to 87 companies.

Table 1- sample selection based on research limitations

Companies listed in the Tehran Stock Exchange by the end of 2012	487
Financial and insurance intermediary companies	44
Companies that do their fiscal year does not end in March	88
Companies that data are not available or have been removed from the stock exchange	215
Companies listed in the stock exchange after 2008	57
The remaining companies in the sample of study	87

In the present study, to examine the relationship between the type of disclosure and the quality of the profit in the company's listed in Tehran stock exchange, a hypothesis was formulated and presented. For the hypothesis examines the relationship between disclosure type and current profit levels, multivariate regression model (Number 1) was used shown in Equation 1.

(1)

$$Prof\ it,t = \alpha + \beta 1\ Tindex\ j,t + Disc\ Eteka\ j,t + \beta 3\ Disc\ Moghe\ j,t + \beta 4\ VINDEN\ j,t-1 + \beta 5\ MINDEN\ it\ j,t$$

Model tools are as follows:

Independent variable: it is the current level of disclosure type (Tindex). In this study, its creation is total disclosure level of company. Disclosure level of company index is the criterion score published by company to total score of disclosure cases that is a negative number between 0 and 100.

Dependent variables: it is profit quality in this study. It has been shown by the main criteria reflecting the profitability as follows:

Company profitability (Prof it): it is equal to natural logarithm of net profit ratio to book value of equity.

$$\log prof \frac{NI}{BVE}$$

NI: net profit

Company size (Size it): This variable is the natural logarithm to book value of total assets to equity book value.

$$\log size \frac{BVTI}{BVE}$$

BVTA: The book value of total assets
BVE: book value of equity (Umaima et al., 2009)
The volume of transactions (lnDvol): the natural logarithm of daily stock transactions volume

$$\log dvol: \text{logarithm of daily stock transactions volume}$$

Market value of company (Vit): natural logarithm of ratio of market value of equity to book value of equity

$$\log vit \frac{MVE}{BVE}$$

MVE: market value of equity

Financial leverage of company (Lev it): the natural logarithm of the ratio of long-term debts to book value of equity

$$\log lev \frac{BVLD}{BVE}$$

BVLD: book value of long-term debts (Umaima et al, 2009)

Research findings:

Table (2)- descriptive findings

Index of scores	SD and mean
Company disclosure level index	53.1 ± 13.82
The reliability of company disclosures	32.1 ± 11.08
The timeliness of disclosure	45.3 ±19.11
Voluntary disclosure	0.43 ±0.17
Mandatory disclosure	0.63 ±0.102
Company size	12.21 ± 0.66
The volume of transactions	9.023 ±0.28
Market value of company	10.37 ± 0.78
Financial Leverage of company	8.89 ± 0.81
Profitability of company	-0.46 ±0.28

The research hypothesis: The levels of disclosure type determines the quality level of current quality

Table 3- introducing variables of study in terms of its role in research

Variable name	Type of variable	Variable symbol
Profitability of company	Dependent	Profit
Total disclosure level	Independent	Tindex
Reliability of companies	Independent	Disc Eteka
timeliness of disclosure	Independent	Disc Moghe
Voluntary disclosure level	Independent	VINDEN
Mandatory disclosure level	Independent	MINDEN

Regression model estimate of research hypothesis:

Table 4- regression test of research hypothesis

$$Prof\ it,t = \alpha + \beta 1\ Tindex\ j,t + Disc\ Eteka\ j,t + \beta 3\ Disc\ Moghe\ j,t + \beta 4\ VINDEN\ j,t-1 + \beta 5\ MINDEN\ it\ j,t$$

Dependent Variable: PROFIT?
Method: Pooled Least Squares
Included observations: 78
Cross-sections included: 5
Total pool (balanced) observations: 390

Variables	Coefficients	Standard error	Statistic t	P-Value
Constant value	0.104	-	-	0.000
Total disclosure level	.20	0.031	4.662	٠,٠٠٠
Reliability of companies	0.164	0.1005	1.507	0.093
timeliness of disclosure	0.082	0.173	5.113	0.063
Voluntary disclosure level	0.134	1.031	5.666	0.000
Mandatory disclosure level	0.095	1.01	1.89	0.332

Model fit characteristics

Determination coeffienct	0.22316	Dependent variable mean	740.6587
Adjusted coefficient of determination	0.192497	Dependent variable SD	1074.832
The standard error of regression	2.316	Residual sum of squares	63124046
Akaike statistics	13.9903	Goodness of fit	109.3290
Schwartz statistics	13.7610	Durbin Watson	1.893140

Based on results shown in Table 4, according to statistic value t obtained for indices of disclosure quality and significance level, it can be stated that as P-value for indices of total disclosure level and mandatory disclosure is lower than 0.05 these indices have significant impact on quality of profit studied companies. On the other hand, Durbin-Watson statistic calculated is 1.89, and as it can be concluded that estimated model has no auto-correlation problem.

Conclusion

According to the findings of regression test, it can be stated that indices of levels of disclosure type, total level disclosure (TINDEX) and voluntary disclosure considering the P-value smaller than 0.05 are significantly effective in determining the profit quality level of studies companies. On the other hand, the reliability of disclosure, the timeliness of disclosure and mandatory disclosure with respect to the P-value greater than 0.05 have significant impact on disclosure type of companies studied. In general, it could be concluded that in the case of the companies studied in this study, appropriate disclosure information of

would lead to the positive consequences such as reducing the asymmetry of information, reducing the uncertainty about the future performance of the company, reducing the cost of stock transactions, increasing liquidity, and enhancing the efficiency of the capital market. In the case of disclosure reliability, disclosure timeliness, and mandatory information disclosure, it can be stated that we cannot rely on information disclosure and information disclosure time has not been seriously considered by investors. In addition, due to lack of financial analysts, the disclosure of information level, relying on it, and time of disclosure, the companies could not change the level of information asymmetry in capital market significantly. Additionally, by relying merely on this criterion, we cannot justify the behavior of investors and its impact on bid and offer prices in the stock market (that is among the measurement criteria of information asymmetry) significantly. Results obtained from the second hypothesis results are inconsistent with results of studies conducted by Gerald and Zhou (2001); Chahardoli (2013) and Lashkari and Naderi (2009), while they are in line with results of studies conducted by Dastghir and Bazazzadeh (2003) and Setayesh et al (2012).

Research recommendations

It seems that the creation of organizations and databases that can provide certain list of information disclosure cases is necessary. Accordingly, we can organize the disclosure of information. Thus, companies should be ranked based on using information disclosure cases so that reliable studies to be conducted in this regard. However, given the current situation in the country's capital market, it is suggested that the Stock Exchange to take this responsibility.

References

Alivar, A, 2002, basic financial statements, first edition, Auditing Organization Publications

Beaver W.2002. Time Series Behaviour of Earning, Journal of Accounting Research, Vol. 8, Empirical Research in Accounting: Selected Studies,5: 62-99.

Blanco B, Garcia J, Tribo J. 2014. The relation between segment disclosure and earning quality. J. Account. Public Policy.

Chahardoli, N. 2013. The relationship between disclosure quality and profit quality throughout the life cycle of the company, Master's thesis, Tehran: Tehran University.

Chang, M. , D'Anna, G. , Watson, I. , & Wee, M. 2008. "Do investor relations affect information asymmetry? Evidence from Australia". Available at SSRN:http://ssrn. com/abstract=947191.

Cheni, L.C.2009. Do transparency and disclosure predict firm performance? Evidence from the Taiwan market. *Expert Systems with Applications*, 36: 11198–11203

Dastghir, M, Bzazzadeh, H. 2003. The effect of disclosure on common stock cost, financial studies, 16-83.

Fakhari, H, Fallah Mohammadi, N, 2009, investigating the effect of disclosure on liquidity of stocks of companies listed on the Tehran Stock Exchange, available on the site www.sid.ir.

Gerald J. Zhou J. 2001. "Disclosure quality and earnings management." Asia-Pacific Journal of Accounting and Economics 1: 1-20.

Ghaemi, M, 2005, Investigation of factors affecting the efficiency of the common stock of companies listed on the Tehran Stock Exchange. Message of Management, 17: 159-175.

-Hemmatfar, M., Mogadasi, M, 2013, evaluation of effect of disclosure quality (reliability and timeliness) on stock value of companies listed on the Tehran Stock Exchange, Accounting and auditing investigations, 2: 133-147. (Quality of disclosure 2)

Iatridisو George Emmanuel. 2011. Accounting disclosures, accounting quality and conditional and unconditional conservatism. International Review of Financial Analysis. 20, pp:88–102

khajavi, SH. Momtazyan, R. 2013. Evaluation of the relationship between growth and profitability of companies listed on Tehran Stock Exchange using the system of simultaneous equations, Accounting and Audit Investigations, Volume 21, Issue 1, pp. 73-88.

Lashkari, Z, Naderi, SH. 2009. Investigating the relationship between the level of disclosure and stock returns of companies listed in Tehran Stock Exchange, available on the site www.sid.ir.

Li Xi (2010) " the impact of product market competition on the quantity and quality of voluntary disclousure" Review of Accounting studies, Vol.15, PP. 663

Luo, S. and Courtenay S.M. and Hossain M., (2006) The effect of Voluntery Disclosure, Ownership Structure and Proprietary Cost on the return-future earnings relation, Pacific-Basin Finance Journal, Vol. 14, No. 5, pp. 501-521

Mashayekh, SH, Shahrokh, S, 2010, Evaluation of profit prediction accuracy by managers and factors affecting it, accounting and auditing investigations, 6: 32-48.

Nurush, A., Hosseini, S. 2009. Investigating the relationship between disclosure quality (timeliness and reliability) and profit management, accounting and auditing investigations, 55: 0.117 to 134.

Rahimian, N. Ebrahimi Meymand, M, 2013, The relationship between disclosure quality and conservatism in Tehran Stock Exchange, Journal of Research, Empirical Research in Accounting, Volume 2, Number 3, pp 149-167.

Rostamian, F. Khodaei, M, Haider, M. 2011. Relationship between features of profit quality and performance, Journal of Financial Accounting and Auditing, third year, 12: 79-111.

Setayesh, MH, Kazemn Nejad, Sarvestani, A, 2012, investigating the effect of disclosure quality on the current and future performance of companies listed in Tehran Stock Exchange, accounting and auditing investigations, 3: 1-20. (performance and quality of disclosure)

Setayesh, MH, Kazemn Nejad, Sarvestani, A, 2012, investigating the effect of disclosure quality on the current and future performance of companies listed companies in Tehran Stock Exchange, accounting and auditing investigations, 3: 1-20.

Setayesh, MH. Kazem Nejad, M, Zulfeghari, M, 2011, investigating the effect on liquidity of disclosure quality on liquidity and capital of companies listed on the Tehran Stock Exchange. Journal of Accounting Research, 3: 55-74. (Quality of disclosure)

Setayesh, MH. Kazem Nejad, M, Zulfeghari, M, 2011, investigating the effect on liquidity of disclosure quality on liquidity and capital of companies listed on

the Tehran Stock Exchange. Financial Accounting Journal, 9: 55-47

-Yaghoobnezhad, A, Zabihi, A, 2011, investigating the relationship between disclosure quality and liquidity of stock of companies listed on the Tehran Stock Exchange, Financial Analysis Securities Journal 10, 217-235.0