

## The Role of Financial Reporting Quality on the Relation between Reducing the Limitations of Dividend and Investment Decisions

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### Abstract

In theoretical foundations of accounting, the quality of financial reporting and its importance are indicated and strongly emphasized. The quality of financial reporting is an effective factor on investment decision making which can affect various dimensions of firms. This study aimed at investigating the relation between the qualities of financial reporting on reducing the limitations of dividend on investment decisions. In addition, the high importance of disclosure financial information in the present business world is the main reason to study this topic. In this study, the accepted data of firms in Tehran stock exchange have been selected annually for a period of time between 2006 to 2012. In this study, multivariable regression model was used to study the impact of financial reporting with quality on the restrictions through the policy of dividend on the investment. The pattern of Dechow model (2002) estimated by Mac Nicholez (2000) was also used. The results of this study showed that cash has impact on financial reporting and also the quality of financial reporting has impact on investment of listed companies in Tehran stock exchange.

**Keywords:** Financial reporting quality, Dividends, Investment decisions

### Introduction

Rapid growth and change in economic relationships has led to a severe competition in trade, industry and investments areas. Therefore, a firm needs to perform proper investments to preserve and develop its activities. Firms' financial reports should provide some information which is valuable for potential and actual investors, creditors and other users of actual investments, validity grant and similar decisions. In this regard, lots of studies in the field of financial reporting and dividend and the factors affecting them have been done. Miller's and Modigliani's dividend irrelevance (1996) theory predicts that in a perfect capital markets, dividend policy should not influence the investment decisions; however, in imperfect markets, external financial constraints resulted from asymmetric information, can make to forgo valuable investment projects for dividend. Studies done in this field showed that high – quality financial reporting can lead to decreasing the negative effects of dividend policies on investments and particularly, investment in the research and development activities. Besides, especially the reducing role of financial reporting quality is very important for some companies with larger proportion of firm's values.

The results of this study showed that the reducing role of the high- quality financial reports in some firms which have reduced their dividend was more observable than those which have increased their dividend. These results revealed the important role of the financial reporting quality in reducing contrariety in investments for firms and dividend decision, and thereby reducing the likelihood that firms forgo valuable investment projects in order to pay dividend.

### Theoretical principles

This study aimed at investigating the role of financial reporting quality in reducing the constraining effect of dividend on investment decision, that financial reporting quality and dividend

are two main components in this study, and it is expected that higher financial reporting quality influences dividends in the firms and finally, on the investment decisions. Financial reporting quality is defined as accuracy level of financial reporting in reflecting information related to operation and cash flows for profit unit (Lee, 2010). There are two general procedures for evaluating financial reporting quality: users' needs procedure and the procedure of supporting investors and shareholders. In users' needs policy, the financial reporting quality is defined by valuable financial information (being relevant): but in policy of supporting investors and shareholders, financial reporting quality is mainly defined by complete and fair disclosure for shareholders. In this area, the financial reporting quality is complete and transparent financial information which avoids misleading for users.(rahmani,2003)

Dividend term is usually defined as cash or non-cash payment of firms' revenues to the shareholders. Dividend may be paid by one of these aspects: cash earning and sharing cash earning which is the most common revenue turnover from firms to the shareholders. Firm's dividend policy from cash flows places can effect on firms' values, and funds consumption in using profitable investments opportunities will lead to pay dividend (Mehrani, 2004). Policy managers select dividend accurately because, they believe it affects firms' values and shareholders' wealth; investors also believe it because, cash dividend is considered as an effective factor on their expected cash in the future and the expected revenue (Moradi et al, 2011).

Miller and Modigliani (1961) have reported that in a perfect capital market, earning payment policy can't influence the firms' values, because:

1) Only, investments can affect the firms' values which lead to providing profits and the future cash flows;

2) Practically, investments are independent from dividend policies. The second proposed reason indicates Fama's and Miller's (1972) separation principle which plays an important role in predicting the dividend irrelevance theory. Dividend policy shouldn't affect investment decision. However, in perfect markets, dividend policy can influence the investment decisions.

When managers have more information about firms' assets and investment projects values than outside investors, problems related to adverse selection and also, moral hazard problems can influence having access to funds and external financial resources (Jensen and Mackling, 1976; Myers and Majluf, 1984). This constraint can be raised from a competition between the investment projects and dividend for financing internal funds, and at this state, firms which limited internal fund must choose between pursuing investment and paying dividends. Considering this point that managers are almost reluctant to cut dividends in their firms (Lintner1956), paying dividends can force these firms to forgo valuable investment projects. The results of recent researches showed some evidence on which dividend can be considered in the investments areas as a constraint or a factor with a negative effect.

Survey evidences by Brav et al. (2005) also showed that many managers view maintaining current dividend level as a goal, and because they are willing to forgo valuable investments opportunities to maintain the dividend level. Brav et al's (2005) and Daniel et al (2010) provided evidences that firms facing a cash shortfall reduce investment below the expected levels in order to maintain dividend in firm.

Additionally, it is possible that firms reduce their investment volume to increase their dividend between the shareholders.

### **Background of the study and hypotheses**

Lang and Litzenberger (1989) in a research, studied dividend, cash flow signaling compared to the free cash flow hypothesis and they concluded that price reaction to the low expected

profitability is more for the future investments. These researchers stated that the obtained results are consistent with the free cash flow hypothesis, but they are not consistent with dividend signaling hypothesis.

Denis et al. (1994) in their research studied dividend information content changes, cash flow signaling, more investment, dividend and they concluded that price reaction the announced earning can be explained by earning changes importance level, but it doesn't relate to the expected profitability of the future investment for a firm. These research indicated evidence which support dividend signaling hypothesis, but they are not consistent with free cash flow hypothesis.

Brav et al. (2005) studied payout policy in the 21 century and the financial management for 384 companies and the results obtained from studying them showed that dividend decisions can create an important constraint for a firm or they have a main negative effect on the investment decisions.

Modares and Hesarzade (2008) studied the relationship between the financial reporting quality and the investment revenue. The findings of this research reflected firms with higher financial reporting quality level and enjoy more efficient investment, and also, they show higher reporting quality, more efficient investments.

Tehrani and zakeri (2009) investigated the relationship between the earning quality and the dividend. This research applied data from 50 accepted companies in Tehran's stock Exchange during 1996 – 2005. In this research the earning quality is defined as earning reliability. The results of this research showed that firm paying dividend have more, this effect is more obvious for firm with higher distribution level.

Daniel et al (2010) studied the potential investment decrease or external financing increase. The finding of these researchers showed that gaining dividend level and the expected investment in such situation is difficult. Generally, these researchers have found that dividend policy had an important negative effect on the investments and in practice, it leads to too less investments problems or decrease the performed investments in firms.

Kordestani and Rahimi (2011) in a relevant research studied the factors determining financial reporting quality selection and its economic effects on capital market. In this research, the factors determining the financial reporting quality selection and its economic effects on capital market have been investigated. These studies have been performed by the financing information for 101 accepted companies in Tehran's Stock Exchange during 1997-2007 and by multivariate linear regression analysis method. The results of this research revealed a positive relationship between the ownership structure and the financial reporting quality level.

Pourzamani and Ghamari (2014), in their study, investigated the relationship between the financial reporting quality and the speed of the stock price adjustment. The results of this research have shown that in Iran's capital market, the relationship between reporting qualities changes and the speed of the price adjustment are not significant, and with improving the financial reporting quality, the speed of the stock price adjustment does not have any significant change. Also, the findings of research showed that in Iran the speed of the stock price adjustment has an asymmetric behavior pattern toward good and bad news, and there is no significant difference in the average speed of the stock price adjustment toward good and bad news.

### **Research hypotheses**

From above described concepts, it can be said that the high-quality financial reporting can have a main and important role in reducing the limiting effect of dividend policy on the firms' investments. In this regard, the high-quality financial reporting provides the more accurate information about the future cash flows of the investment projects in a firm. Therefore, asymmetry

information between firms' managers and outside investors is decreased. Decrease in asymmetry information reduces the likelihood that investors purchase securities at an inflated price and so, the performed financial reporting can reduce the adverse. Selection cost of issuing new securities; therefore, the research hypotheses are:

$H_1$ : The effect of dividends on investments is less negative for firms with higher quality financial reporting than for firms with lower quality financial reporting, ceteris paribus.

$H_2$  : The effect predicted by  $H_1$  is stronger for R&D investments than for capital investments, ceteris paribus.

$H_3$ : The effect predicted by  $H_1$  is stronger among firms with a larger proportion of firm value attributable to growth options, ceteris paribus.

### Population and statistical sample

In this research, Tehran's stock Exchange information is applied. Due to access to this information and their transparent and variety in the studied firms, the statistical sample will be equalized.

The research is the accepted companies in Tehran's stock exchange; the systematic method with these conditions is used to select the sample:

- 1) The financial year end should be 29 February.
- 2) It should be continuously activate from 2006 to 2012.
- 3) The companies' information should be available for this research purposes.
- 4) Investment firms and banks are omitted due to their different natures.
- 5) There isn't any transactional stop more than 3 months.

With considering above constraints, the statistical sample in this research includes 153 companies. One of the most important stages in research is statistical data analysis. Using accurate statistical methods leads to effective results gathered by software and processing information required for research, then data is analyzed by Excel software. The final analysis was performed by software.

### Research Variables and data analysis

The first model:

1)  $RQ_{jt}$  is company's financial reporting quality  $j$  which is evaluated based on information at the end of year  $t-1$ .

The applied measure in this relation is based on the modified dechow's & dichev's (2002) model by MC Nichols (2002).

$$\Delta WCA_{jt} = \beta_0 + \beta_1 Cfo_{jt-1} + \beta_2 Cfo_{jt} + \beta_3 Cfo_{jt+1} + \beta_4 \Delta Revenues_{jt} + \beta_5 PPE_{jt} + \varepsilon_{jt}$$

$\Delta WCA_{jt}$  is the increase in accountants receivable (RECCH) plus increase in inventory plus decrease in accountants payable and accrued liabilities (APALCH) plus decrease in taxes accrued (TXACH) plus increase in other assets (liabilities) (AOLOCH), scaled by average assets (AT) price for a firm. CFO is cash from the operational activities, scaled by average property value in a firm.

$\Delta Revenues$  indicates change in corporates' revenues (SALE), scaled by average assets values. PPE is the property plant and equipment (PPEGT) values scaled by average assets.

From the mentioned model, row data was gathered by software and the Panel regression results are shown by software for a time period 2006 – 2012 (table 1):

Determination coefficient reveal the good practice of this model, and the applied variables indicate explaining power 87% for the model which is a good score, considering this point that the used method is of panel data.

**Table 1. Estimation results of panel regression for 2006-2012**

Variable	Coefficient	Standard Deviation	T statistic	Sig.
C	47103.61	162440.3	0.289975	0.7719
Cfo(1) or nghd(1)	0.902431	0.643634	1.402087	0.1614
Cfo or nghd	-3.363331	1.313229	-2.561115	0.0107
Cfo(1) or nghd(1)	-3.834995	0.738014	-5.19637	0
PPE or I	1.12812	0.498147	2.264633	0.0239
Sale or K	1.116009	0.113487	9.833786	0
Statistic Durbin-Watson : 2/15      R2 determination coefficient: 0/87				
F statistics: 27/00      R2modified: 0/84      F statistics significance: 0.00				

Resource: research findings

From this possibility, the coefficient influence on all variables in this study and they are significant. The results are: CFO (-1): Funds index shows a positive and significant effect on the financial reporting quality with a standstill. CFO: Funds index shows a positive and significant effect on the financial reporting quality CFO (1): Funds index shows a positive and significant effect on the financial reporting quality in the next year.

K: Equipment and plant level (value) shows a positive and significant effect on the financial reporting quality.

Sale or I: Sale change show negative and significant effects on the financial reporting quality.

To perform this research, the following multivariate regression model were used to study high-quality financial reporting for the constraint enforced by dividend policy influence the projected investments:

$$\text{Investment}_{jt} = \beta_1 \text{Dividend}_{jt} + \beta_2 \text{Dividend}_{jt} * \text{RQ}_{jt} + \beta_3 \text{RQ}_{jt} - 1 + \sum \beta_i \text{Controls}_{it-1} + \varepsilon_{jt}$$

In above equation,  $\text{Investment}_{jt}$  is firm  $j$ 's investment over year  $t$  scaled by total assets in a firm at the end of the year  $t-1$ .

**Table 2. Estimation results of panel regression for 2006-2013**

Variable	Coefficient	Standard Deviation	T statistic	Significance coefficient
C	319316.9	20384.35	15.66481	0
Divi	-11085.9	3114.544	-3.559399	0.0004
AQDivi	0.001082	0.000582	1.859293	0.0635
AQ(-1)	0.002958	0.003198	0.625033	0.03554
Size	0.149552	0.013023	11.483391	0
VA	-17882.43	4585.543	-3.899741	0.0001
Ris	-81.04335	142.7295	-0.567811	0.5704
Qt	0.999561	0.01523	65.62984	0
Nghd	0.094987	0.038561	2.463294	0.0141
AH	0.008395	0.005479	1.532253	0.1261
Statistic Durbin-Watson : 1/8      R2 determination coefficient: 0.69				
F statistics: 1730/58      R2modified: 0.69      F statistic significance: 0.00				

Resource: research findings

In this relation, investment includes one of the following: Total investment, research and development (R&D) investment, or capital investment. Following recent research on investments, Total investment is defined as the sum of research and development expenditure, capital expenditure, and acquisition expenditure, less cash receipts from sale of property, plant and equipment.

$Dividend_{jt}$  is firm  $j$ 's common dividend between the common shareholders over year,  $t$  scaled by assets of a firm at the end of year  $t-1$ . In addition to these variables in the present study, firm size variable ( $size$ ), investment opportunities set ( $Tobinq$  ratio).

Bankruptcy risk ( $Bankruptcy$ ), assets tangibility ( $Tangibility$ ), leverage and total cash balance ( $cash$ ) are used to control the economic factors affecting investment in a firm. According to the above table, the determination coefficient shows a good practice for the model, and the used variables show explaining power 69% for this model which is a good score, considering use of panel data method. The results indicate that there is no autocorrelation and it reveals score 18.

$Divi$ : Dividend index shows a positive and significant effect on investment.

$AqDivi$ : dividend index shows a positive and significant effect on investment.

$AQ$ : The financial reporting quality shows a positive and significant effect on investment; and the controlling variables also show significant effects on investment.

### Discussion

According to statistics and probability, which indicates that the variable is significant, Dividend policy has an impact on investment and therefore this hypothesis cannot be rejected (H1).

According to statistics and probability, which indicates that the variable is significant, quality financial reporting has impact on investment and therefore this hypothesis cannot be rejected (H2).

According to statistics and probability, which indicates that the variable is significant, dividend has impact on the quality of financial reporting and therefore this hypothesis cannot be rejected (H3).

### Conclusion

In this research, it is attempted to understand the existing relationships on the financial reporting role in firm's decisions. In practice, decisions related to investments and dividend policies are considered as the main activities in a firm, and the constraints resulted from asymmetric phenomenon for information can force firms forgo valuable investment project in order to pay dividend.

The current study also showed that the high-quality financial reporting role in the research and development investment are more considerable for firms with more growth options and also for firms which have reduced their dividend. (Biddle and Hilary, 2006; Biddle et al)

This study investigated the effect of the high-quality financial reporting on the effectiveness of the investment process. In this study, the effect of dividend policy in a firm was not studied. On the contrary, in this study, from the theory of non-relationship between Miller's and Modigliani's dividend policy (1961) the effect of the financial reporting quality on contraction of two main decision, i.e, dividend policy and investment decision are concentrated. Finally, in this research, it is shown that the high-quality financial reporting can practically lead to reducing the effects of constraints resulted from dividend policy on the investment decisions.

### References

Biddle, G., G. Hilary, & R. Verdi. (2009). How does financial reporting quality relate to investment efficiency? *Journal of Accounting and Economics*, 48: 112–131.

- Brav, A. J. R. Graham, C. R. Harvey, & R. Michael. (2005). Payout policy in the 21st century. *Journal of Financial Economics*, 77 (3): 483–527.
- Daniel, N. D. D. J. Denis, & L. Naveen (2010). Sources of Financial Flexibility: Evidence from Cash Flow Shortfalls. Working paper, Purdue University.
- Dechow, P. & I. Dichev (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review* 77: 35–59.
- Denis, D. J. D. K. Denis, & A. Sarin. (1994). The information content of dividend changes: Cash flow signaling, over-investment, and dividend clienteles. *Journal of Financial and Quantitative Analysis*, 29: 567–587.
- Fama, E. & M. Miller. (1972). *The Theory of Finance*. Hinsdale, IL: Dryden Press.
- Goldman, E. & Viswanath, P.V. (2013). Does Cash flow Volatility Explain Dividend Policy? A Study of Exporting and non-Exporting Firms in India. Online paper in: [iegindia.org/wshop2526july/paper18.pdf](http://iegindia.org/wshop2526july/paper18.pdf).
- Jensen, M., & W. Meckling. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3: 305–360.
- Kordestani, Gh., & Rahimi, M. (2011). Study of determinant factors in selecting financial reporting quality and economic effects on capital market, *Empirical Research Journal of Financial Accounting*, 1(10), 62-92.
- Lintner, J. (1956). Distribution of incomes of corporations among dividends, retained earnings, and taxes. *The American Economic Review*, 46: 97–113
- Lang, L., & R. Litzenberger. (1989). Dividend announcements: Cash-flow signaling vs. free cash flow hypothesis? *Journal of Financial Economics*, 24: 181–191.
- Lee, Ch. , Hsieh, T. , & Cheng, Li, (2010). Financial Reporting Quality and Speed of Price Adjustment. *International Research Journal of Finance and Economics*, 53, 134-143.
- Mahmoud Abadi, H., Rezai, Gh., & Gorgani, A. (2013). The study of mental capital effect on financial reporting quality improvement, *Journal of Accounting Developments*, Shiraz University, 5, 75-99.
- Mehrani, K. (2004). Relationship between dividend and investment, PhD Dissertation, Management college of Tehran university.
- Miller, M. H., & F. Modigliani. (1961). Dividend policy, growth, and the valuation of shares. *Journal of Business*, 34 (4): 411–433.
- Modares, A. & Hesarzade, R. (2008). The study of the relationship between financial reporting quality and investment revenue. *Journal of Stock*, 1 (2), 82-116.
- Myers, S., & N. Majluf. (1984). Corporate investment and financing policies when firms have information that investors do not have. *Journal of Financial Economics*, 13: 187–222.
- Pour Zamani, Z., & Ghamari, M. (2014). The study of the relationship between financial reporting quality and speed of stock price adjustment. *Financial Accounting and Audit Research*, 6 (21), 91-116.
- Rahmani, A. (2003). Evaluating financial reporting quality, *Journal of Auditing*, , 4 (17), 52-57.
- Tehrani, R., & Zakeri, H. (2009). Study of the relationship between earning quality and dividend, *Journal of the stock Exchange*, 2 (5), 39-55.