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## **ASYMMETRIC INFORMATION AND DIVIDEND PAYOUT POLICY: EVIDENCE FROM IRAN STOCK EXCHANGE**

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### **ABSTRACT**

This study aims to investigate impact of asymmetric information on dividend payout policy in context of Iran. An analysis has been made as evidence taking sample (170 firms) of listed non-financial firms from the Tehran Stock Exchange (TSE). The dataset includes Iran listed firms during the period 2009-2011. The results indicate a positive relationship between information asymmetry and dividend payout ratio which confirms the signaling theory in Iran capital market. Other results direct a negative relationship between leverage ratio and dividend payout ratio. Also, there is a significant and positive correlation between firm size and dividend payout ratio. However, no relationship was found between earnings per share and dividend payout ratio.

**Keywords:** *Asymmetric Information, Dividend Payout Policy and Signaling Theory*

### **INTRODUCTION**

The role of asymmetric information in financial markets has caused the issue to subject this topic on considerably exposed to research. The literature offers two basic propositions (1) the internals (management) employ information asymmetry to their benefit, and (2) dividend policy is associated with asymmetric information. The suggestions admit that the dividend policy and earned benefits by directors may be related, because both of them related with level of information asymmetry between managers and investors outside the organization. First proposed in literature arises from the belief that management often using information to increase their wealth, whereas, external investors do not have access to that information. The second proposed are consistent with three theories about the role of dividend policy in financial markets. The first theory "Free Cash Flow" refers to the dividend. Mentioned theory focus on dividend as effective mechanism to reducing agency cost related to conflict of benefits between managers and shareholders (Easterbrook, 1984). Payout of dividends reduces the free cash flow, companies required to disclose more information, and also tried to do the financing. This situation exposes the company to monitor institutional investors, financial analysts and potential investors, and can help in reduction of agency problems and information asymmetry between managers and investors. Thus, the more distribution of dividends is associated with reduced information asymmetry. The second theory is known the "theory of institutional monitoring" that based on the study of Allen (2000). This theory is based on two assumptions; First, institutional investors monitor management more effective than minority investors. Ownership of institutional shareholders is means that by it institutional shareholder can have more incentives and ability to gather and analyze information about the company and also have a greater ability in modulating the actions of managers. The second assumption is that institutional shareholders are willing to pay more dividends. Because of this, most of them belong to the public sector and are exempted from paying taxes on dividends (see Brav & Heaton, 1998). These assumptions indicate that institutional investors by distribution of more dividends reduce agency costs and information asymmetry. High dividends payout will attract more institutional investors. Because institutional investors are more effective than retail investors at gathering and analyzing information about the firms in which they invest, the level of information asymmetry between firm insiders and outsider's investors is lower for firms that pay higher dividends. The third theory is the "information signaling theory" of dividends, based on the argument that the dividend signaling mechanism, which reduces asymmetric information (see Bhattacharya, 1979; Miller and Rock, 1985; John and Williams, 1985; John and Lang, 1991). If the

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directors of a company know more than the company's future prospects than investors outside the organization, then change in dividend, or the fact that dividend do not change, may signal some of that information to outside investors. Dividend increases allows companies with improved outlook to transmit good news to investors in a reliable way. Dividend declines, which are needed by deprived performance, power firms to signal bad news. And no change in dividends signals that a firm's prospects have not materially changed. Thus, dividend signal information and changes in dividend policy in particular are important in reducing information asymmetry (Khang & King, 2002).

### **LITERATURE REVIEW**

Although, issue of information asymmetry arise from agency theory of Jensen and Meckling (1976) and lot of researcher investigated this topic at different latitudinal and temporal domains, but any worthy answer provided regarding this issues.

### **INFORMATIONASYMMETRY**

According to Scott (2007) information asymmetry include adverse selection and moral hazard. Adverse selection defined as a type of asymmetric information that in economic system one or more people in potential contract or transaction have informational advantage compared to other. Moral hazard is a form of asymmetric information from the perspective of one or more parties in contract and potentially transaction that can earn their desire but other cannot.

### **SIGNALING HYPOTHESIS**

The signaling hypothesis introduced at first by Akerlof & Arrow (1970) and later was developed by Spence (1973). They stated that a good firm has ability to communicate a reliable signal about its quality in capital market for create a dissimilar among itself and bad firm. When bad company does not ability to send the same message the communicated signal by good company is believable. Ross (1977) showed that the debt could be as great signal to separate the good companies from bad companies. Signals are a key to obtaining financing under asymmetric information between management and investors. Ross (1977) assumes that managers have more information than outside investors about distribution of benefits. When management communicate high debt suggests a positive future about firm, and firms with high quality always use more debt, whereas firms with low quality practice less debt.

### **DIVIDEND PAYMENT POLICY**

The issues of agency conflict and information asymmetry lead dividend policy relevant to corporate governance. In a country where ownership is diffused and managers holds very little equity stake, higher dividend payout is a means through which agency cost of managerial misdeed can be minimized. However, once manager accumulates a large stake of equity, it is expected that managerial interest will align with that of the outsider and hence the role of dividend as an agency cost mitigating mechanism will assume less important. On the contrary, if the entrenchment effect dominates then dividend payout could turn out to be a monitoring device. Laporta et al (2000) argues that the controlling block holders can effectively monitor manager (as managers may typically come from controlling family), and thus reduce the problem of managerial control and agency. Even then, the controlling shareholders can implement policies that can benefit themselves at the cost of minority shareholders. In order to improve the image of controlling block holders that the minority shareholders are not being expropriated by them, managers pay more dividends (see Imam and Malik, 2007).

### **BACKGROUND RESEARCH**

In 1970, three scientists named Spence, Akerlof and Stiglitz (winners of the Nobel Prize in Economics in 2001) founded a theory in information economics that known as information asymmetry. Akerlof suggested that information asymmetry cause to adverse selection for individual in market which occurs

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before transaction. Spence notes that inform brokers increase their market benefit through communicate secret information to uninformed broker. Akerlof illustrates the kind of market where the seller has more information than the buyer. Obviously, accountants have adopted full disclosure policy to reduce adverse selection (see Akerlof et al, 1970). Miller & Rock, (1985) believe that the information content has an effect on the ratio of dividend payments. Dividend signaling is lack of future information about a business. According to signaling theory provided by Bhattacharya (1979) they argue that dividends through signaling information about the company's prospects may reduce information asymmetry between managers and shareholders. Jensen et al., (1992) discuss that may exist a strong interactions between financial policies(payment of dividends and financial leverage) and managerial ownership because of information asymmetry among investors inside and outside. Their research shows that financial decisions have a strong relationship with managerial ownership. Redding (1997) believes that the firm size and liquidity carefully explained dividend payment. Although exist of factors such as monitoring and signaling more accurately show level of dividend payout. Khang & King(2002) believe that the payment of dividends reduces the free cash flow and will force businesses to disclose more information, and they attempt to financing. This case subjects the company to monitor institutional investors, financial analysts and potential investors, and may help to reduce agency problems and information asymmetry between managers and investors. Thus, the distribution of high dividends is associated with reduced information asymmetry. Li & Zhao (2008) argue that firms with high information asymmetry are less likely to pay dividends. In their study, signaling theory does not protect, because there is a negative relationship between information asymmetry and dividend payout ratio. Al-kuwari (2009) shows that state ownership, firm size and profitability have positive relationship with dividend payout ratio and leverage. Asif et al (2011) indicate there is a negative relationship between leverage and dividend payout policy. Other results refer to absence of relative among earnings per share and dividend payout ratio. In okpara (2010) study results confirms to signaling theory and he argues there is a positive relationship between information asymmetry and dividend. Vojtech (2012) argues that firms that pay dividends likely are less act of earnings management. Furthermore, non-dividend payers changed earnings announcement behavior more than dividend payers following the Sarbanes-Oxley Act, a law that increased financial disclosures.

## **METHODOLOGY**

### **Sample selection**

In this study the Statistical population is all listed firms which are in Tehran Stock Exchange during the period of 2009 to 2011 (three-year period).We selected a sample contain 170 firms according to some conditions such as:

1. End of firm fiscal year should be at end of hegira year which matches with March.
2. The firm should not change on fiscal during years of desire (2009 to 2011).
3. This firm is active during research and its shares are traded and book value of equity is not negative in any year.
4. The financial information required for conducting the research in the period of 2009 to 2011 which is fully provided and by the firm that should not be a financial or investment one and be profitable.

### **Methodology and variables**

In this study we used the quasi-experimental research method for investigate the effect of information asymmetry on dividend policy. We included 3 groups of independent, dependent and control variables in

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this study. Independent variables are information asymmetry, dependent variables which are dividend policy and third group of variables is control variables which are firm size, leverage and EPS.

**Research models and definition of variable**

In order to provide suggestion for effects of information asymmetry on dividend payout policy, regression

$$DIV - PAYOUT_{it} = \alpha + \beta_1 As - In_{it} + \delta_1 SIZE_{it}$$

model have been estimated which as follows:  $+ \delta_2 LEVERAGE_{it} + \delta_3 EPS_{it} + \epsilon_{it}$

*DIV - PAYOUT* =refers to volume of dividend that a firm pays to stockholders. The formula to calculate this ratio is follows:

$$Dividend\ payout = \frac{DPS}{EPS}$$

*DPS* = refers to dividend that firm pays to stockholders for one share.

*EPS* = refers to dividend that firm report to stockholders for one share.

*As - In* =refers to information asymmetry that calculate as follows:

$$SPREAD = \frac{AP - BP}{\frac{AP + BP}{2}} \times 100$$

*SPREAD*=(The difference between purchase and sale price) is used to estimate the asymmetry in the market.

*AP* (Ask Price) = is the mean price to sell the i firm shares during t time.

*BP* (Bid Price) = is the mean price to buy the i firm shares during t time.

*SIZE* = is the natural logarithm of total assets of the firm.

*LEVERAGE* =is the ratio of long term and short term debt to total asset.

**Test of model Significant**

In order to explore relations between dividend payout ratio and four independent variables (information asymmetry, leverage, firm size and EPS) a regression model has been used. In this study we use Durbin-Watson test for investigate errors independent from each other that Durbin-Watson test statistic is equal to 2/088 among 1/5 and 2/5. Thus, we apply the lack assumption of associate exist between errors because of we can use regression. Results of research model test indicate that model sig is 0/001, namely that support linear relation among variable. Consequently, the final results showed as follows in Table (1) and (2).

**Table (1) Model Statistic Results**

| ANOVA      |                |     |             |       |       |               |  |
|------------|----------------|-----|-------------|-------|-------|---------------|--|
| Model      | Sum of squares | d.f | Mean square | F     | Sig   | Durbin-Watson |  |
| Regression | 1/746          | 4   | 0/436       | 4/759 | 0/001 | 2/088         |  |
| Residuals  | 15/131         | 165 | 0/092       |       |       |               |  |
| Total      | 16/876         | 169 |             |       |       |               |  |

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**Table (2) Model Coefficients**

| Model              |                      | Unstandardized Coefficients |            | Standardized Coefficients | T      | Sig   |
|--------------------|----------------------|-----------------------------|------------|---------------------------|--------|-------|
| Dependent Variable | Independent Variable | B                           | Std. Error | Beta                      |        |       |
| Dividend Payout    | Constant             | 0/528                       | 0/212      |                           | 2/485  | 0/014 |
|                    | As-In                | 4/390E-5                    | 0/000      | 0/147                     | 1/985  | 0/049 |
|                    | Leverage             | 0/030                       | 0/009      | -0/248                    | -3/364 | 0/001 |
|                    | Eps                  | -2/304E-6                   | 0/000      | -0/007                    | -0/093 | 0/926 |
|                    | Size                 | 0/066                       | 0/035      | 0/138                     | 1/857  | 0/065 |

**Conclusions**

This paper has examined the effect of asymmetric information on dividend payout policy in the context of Iran. Our findings indicate there is positive relation between information asymmetry and dividend policy. The research model has also been confirmed statistically. Attention to the significant positive relationship between information asymmetry and dividend policy, we can state that signaling theory in Iran capital market has been adopted. Therefore, when level of information asymmetry is high, firms employ dividend policy to reduce information asymmetry. These results are consistent with Bhattacharya (1979), John et al (1985) and Okpara (2010). Other results of research show that relation between leverage and dividend policy is negative. In other words, the companies that have the greatest financed through debt, paid less dividend. The results of this study are consistent with Al-kuwari (2009) and Asif (2011). A finding shows a positive relationship between firm size and the ratio of dividend payout. In other words, big firms pay high dividends among stockholders. The reason for these results may be due to the large companies, prefer the good news to bad news. The results are consistent to Redding (1997), Al-Malkawi (2007) and Al-kuwari (2009). Other findings refer to lack of relationship between earnings per share and dividend payout ratio.

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