The Impact of Earnings Management on Dividend Policy: Empirical Analysis of Kse-100 Index Firms

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Abstract  
For a number of purposes management of firms indulges in earnings manipulations. Moreover, to attract investors firms distribute dividend regularly, however sometimes to do so management can manipulate earnings information. In turn, such activities negatively affect the performance of firms in long run. Hence, in current paper investigated earnings manipulation and dividend policies of a sample of 76KSE-100 index non-financial listed firms of Pakistan stock exchange during 2010-2016. Data are secondary in nature and collected from annual reports of firms. For measurement of earnings manipulation used discretionary accruals of management activities and modified cross sectional Jones model (1995) is used. Moreover, used random effect panel data technique for analysis. The final results revealed that earnings management and dividend payout ratio as proxy of dividend policy are negatively and insignificantly associated. Therefore, concluded that if management involves in manipulation practices then they are unable to pay their obligations as dividend. Moreover, if the governance system is strong then management cannot manipulate true information because according to governance system management should comply and explain the dividend payment procedures.

Keywords: Dividend Policy, Earnings Management, Modified Jones Mode, Self-Finance Ratio, and Capital Structure.

Introduction  
Managers of listed companies in their daily activities are involved in a number of different decisions making process that are relevant to about financial structure of their organizations. Moreover, decisions of dividend announcement are significantly important of financial judgements because it plays role in firm performance. Baker and Powell (1999) revealed that dividend policy (DP) is an indicator of financial strength of any firm. Dividend declarations express policy about firms’ operational position in context of dividend announcement. Declaration of change in dividend payment procedures affect share prices and can negatively affect company value. Earnings of any company generates signals such as companies focus on their future earnings because investors use these signals as imputes in their decisions of investment. In addition, reduction of dividends indicate that firms imagine less earnings and
managers expect to the current earnings will not be sustained. Miller and Rock (1985) reported that:

“the market price of a firm will drop when dividend falls as stockholders vend their stocks in expectancy of difficult times for the firm.”

The circulation plan insists the level of cash to be paid to shareholders such as dividend or stock repurchase and the constancy of that distribution. A dividend distribution therefore occurs when a company offers some sort of reward to its shareholders in excess of the worth of the firm's shares. Companies do this both to reward the loyalty of current shareholders and to attract new investors. It is important to note that companies are in no way obligated to pay dividends, and they may reduce or completely cut them out in times of financial turmoil. As payments are paid to shareholder from the earning after taxes of a company, accord from this the possibility of two approaches may arise to aspect of this staple. First approach is that the firm determine and predict it’s earnings through dividend, dividend can be used as predictor of earnings, while the second approach is that company earnings can also be used as prognosticator of dividends, both approaches are lying on aspects of consistency that determines each other value. The most important aspect that determines the firm value adding service and its signal prediction about future growth is EM.

Although the intention of increasing prominence over reputation of earning of a company, if the firm management play vivacious attention in the way of their earnings are reported it is no matter. While the matter that approaches to intensification in company earnings portrays the proliferation and inclusive worth of a company (Lev, 1989). Predominantly to obscure the fatalities of a firm, earnings are accomplished to show useful information (Hyen, 1995). Some arguments suggest that, regarding performance or growth opportunity of a firm, dividend payout is only the determinant from which the future earning of that firm is characterized. However, Lie and Li (2005) quantified the conclusion is intending that, to rise or fall of dividend announcement is extent to governing rules by the quality and placement of dividend policy in capital market. Moreover, Savov and Weber (2006) reject the proposition and appealed that increase in dividend is for the compensation to share holder for its the poor return, in the occurrence of these results I may concluded that it is not necessary to report Earning in their book by manager to manage high signaling significance of their company. Although dividend announcement or declaration may be effect by various factor as well.

Earnings management (EM) is hypothetical to be condensed and augmented accurately by the actual practices of and maintenance of corporate governance code’s in Pakistan. Corporate governance (CG) is not performed or implemented in is actual sense and (because of family own businesses, and alteration of high concentration in share) rehearsal of EM is supposed to be high. Dividends are supposed to be a way to moderate the principle and agent problem by giving shares to shareholders. More ever announcement of dividend argued and portray a good indicator of company regards their future growth. This study is concern on to focus and to investigate the trend of business in Pakistan, as they are operated in different dynamic surroundings. The results findings might help and insist to policy makers to find the coil hovels and expertise about the healthier dogma for the future. Surprisingly if such study concluded that earnings manipulation negatively affects the level of dividend and alternatively, it can increase self-assurance level of shareholder.
Research Problem
The aim of current paper is to investigate EM and DP of KSE-index listed firms in perspective of Pakistan which has developing economy. In different economies the practices of EM and policies of dividend are different. Moreover, observed that a number of business like West management, Enron and WorldCom are failed due to EM. Hence, in this context EM and DP are become an attractive area for empirical investigation in the context of Pakistan. In addition, Shah and Yuan (2007) investigate and conclude that EM cannot affect the DP of Pakistani listed firms during 2003-2007. Similarly, Saleem and Alifiah find that EM and DP are insignificantly related in Pakistani sample firms during 2008-2015. Hence, in this study attempt to investigate the EM and DP of sample firms of KSE-100 index because earnings manipulation practices of management and dividend payments of these firms affect market performance to a great extent. These firms’ behaviors can affect the confidence level of investors.

Objective of the Study
The prime objective of this study is to investigate the impact of EM on DP. Moreover, earning management and dividend announcement plays an important role in company operation. Some time when earning manipulation occurred in firm accounting book by company manager either to mislead the interest of shareholder or make a prior decision that elaborate significant interest of shareholders. Sometimes due to weak corporate governance practices in a firm capture the occurrence of earning management. As discussed majority of business in Pakistan is family owned businesses. The main endeavor of this revision is to check the impact of EM on DP with ever it is positively or negatively related to each other.

Literature Review
EM is the “lowermost lines of the firm in earning scenario” or the “Earning after taxes” is the most important items in the financial statement of any firm. The financial statement of any particular company clearly indicates and shows the real extent of their involvement and operated in their value adding activities. It is most important and generates a signal in the market. Furthermore, it helps and direct resources in the capital market. In fact, the theoretical framework of any firm to present its stocks current value and determined its future earnings based on current company operation and to build reputational image to attract investors. Increased in company earning tends to signifies the increased in its value in the future, while decreased in earning indicates a decrease in the value.

Healy and Wahlen (1999) defined EM such as:
“earnings management practices happens in a firm when company operator use manipulation in their financial statement and accounting number or in their organizing transactions to change financial reports or to deceive some shareholders regarding their essential economic presentation in the company or to show some prescribed results that become contingent in reporting and show in excess the real worth of company performance.”p.368.

DP is the actual and persistent practice that followed by management of a firm to makes the sound decision about the dividend payment and cash distribution to the shareholder. Moreover, reported that dividend of a firm should be in an enormous size and also in attractive pattern that further helps policy maker and potential investor. Moreover, DP is about a complete guideline and policy that is followed by the management of any firm for the purpose of declaring and announcement of dividend. Furthermore, conclude that company annual statement reports the major portion of retain earnings and earnings after taxes which are based on the company
management DP. The most important source of any firm to finance its business is the internal source and this is the long term growth in retained earnings.

**Dividend Policy and Earnings Management**

Studies argued that agency problems can be control through appropriate DP because corporate insiders and outsiders this problem is generated due to self-centered interest. The main concern of outsiders is retained earnings of firms because they always prefer dividend payment. Hence, this is necessary for insiders to avoid the use of retain earnings for their personal benefits to minimize the issues of agency relationship (Gomes, 1998; Zwiebel, 1996). Moreover, reported that when management issue bonus shares then DP become debatable issues for authorities. Surprisingly he argued that, bonus issuing firms generate greater return on shareholders’ investments. Also reported that the main lying approach is to sustain the steady increase in dividend rate (Mohanty, 1999). Kesuuke and Neitta (2006) conduct the study that examine, stakeholder’s worth could be intentionally rise by constructing dividend dogma in association with seizure ramparts. The consequence results show that dividend jumps and repurchasing of shares enhances share price. Although the importance is given to dividend that they confronted the management and shareholder problem that raise between corporate internal and external parties. As Gomes (1998) and Zwiebel (1996) find that about retain earnings outsiders always argued the dividend payment. Based on the aim that they intended about retained earning that it might be used by the insider for the sake of their own benefit rather than for the outsiders’ benefits. Moreover, Savov (2006) examined that EM is about to retrieve the association that aimed the reportage activities of corporation and their speculation and dividend declaration. Based from his study he takes a sample of a German firm and concluded that “Those firm whose investment is in high portion as compared to low investment firms are tend to report or record more in discretionary accruals in their earning rather than tend to record it is small and low investment firm. Moreover, concluded that dividend disbursement was found to be negatively related to both of these high and low investment firm. Although he found that if the value determination of any firm overvalued, there is a chance to increase the sensitivity of their EM to everlasting earnings. However, Hafeez and Atia (2009) investigate the effect of firm structure ownership and their association with DP during 2002-2006 of firms listed in Pakistan. Concluded that corporate ownership is tending to increase in sample firms. In addition, Shah, Yuan and Nousheen (2009) study the impact of EM on DP in sample firms of Pakistan and China. They concluded that EM cannot affect the level of dividend payment policy in these economies. In the similar vein, Cheng and Leung (2010) examined the relationship of insiders and outsiders and they surprisingly argued that insiders are more tend to homogeneous information regarding any type of announcement made by management and get positive advantage or approval of stocks that trading on the potential markets. Further, investigated that there is robust association between inhibit and traders that are simultaneously engaged in such type of activities which arouse the strong intense of positivity for net-insiders in order of buying any activities or even announcement of any sound news that regards significant and negative intact for traders that are involved in such types of activities, even before any unsought news announced regards of losing interest or shows abnormality of return.

Haider et al. (2012) investigated the effect of discretionary accruals on DP during 2005-2009 in a sample of Pakistani listed firms. They revealed weak association between these variables. In the similar vein, Aurangzeb and Dilawer (2012) studied the relationship of discretionary accrualsand DP in a sample of textile sectors firms of Pakistan and they revealed negatively.
significant relationship between EM and DP. However, Moghri and Galogah (2013) investigated the effect of EM on DP. Used sample of 140 companies listed at Tehran stock exchange during 2006-2011. They concluded that positive and significant relationship, moreover find that such companies engage in discretionary accruals because their management intended to announce more dividend as compared to other firms. Moreover, Monsuru and Adetunji (2014) investigated the association of discretionary accruals and DP in sample firms of Nigerian market. They demonstrated that discretionary accrual negatively related with DP. Furthermore, reported that announcement of dividend of individual firms is not significantly associated with EM. They further concluded that the outcome may be due to the result of good CG mechanisms put in their observed rules. If management tires to manipulate the accounting standard of company, they will not have announced more dividend. Similarly, Srikanth and Prasad (2015) examined the impact of EM on DP in sample of 143 non-financial and non-financial firms of India during 2009-2014. The results show that EM negatively and significantly affect DP. Some studies reported different results such as Ibrahim, Hussain and Jamila (2015) examined sample of 86 non-financial companies in Nigeria. They concluded that EM not significantly affect DP, however managers have other reasons for managing accruals. Moreover, rated that determinants of cash dividends are leverage and size of the firms. In the similar vein, Faiza and Alifiaah (2017) studied oil and gas sector sample firms of Pakistan during 2008-2015. They concluded insignificant relationship between EM and dividend. They argued that such relationship is due to financial crisis around the globe and economic decline. Hence, managers indulge in manipulation of earnings and alternatively firms declared dividend announcements.

Singling Theory
This theory shows that information asymmetry exists between managers and owners such as managers having more information than shareholders. Thus, they declared dividend in order to generate signals that shows to investors that the firm is performing well. The signaling dividend payout policy suggests that DP can be used as an indicator of the current performance as well for the future forecasting (Fairchil, 2010). However, sometime dividend announcements having latent information consent during information asymmetry such as Bhattacharya (1979) and Litzenberger and Ramaswamy (1979) find that sometime companies management use costly DP to signal expected cash flow rather than to hide the actual picture.

Research Hypothesis
H1. There exist insignificant relationship between earning management and dividend policy.  
H2. Size of the firm has significant effect on Dividend Policy. 
H3. Return on equity has positive effect on Dividend Policy. 
H4. Self-finance ratio has impact on Dividend Policy. 
H5. Financial leverage has impact on Dividend Policy.

Research Methodology
The current study issued secondary data and collected data from annual reports of sample firms. KSE-100 index firms are targeted population of the study, however selected sample of 76 from 29 different sectors during 2010-2016. Moreover, from targeted population of this paper financial listed firms are excluded due to their nature differences such as capital structure and profit scenario. The aim of this study is to check the impact of EM on DP.

Variables of the Study
Table 1 explains the variables used in the study for the purpose of analyzing the relationship between DP and EM.
Table 1: Variables Explanations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Variables Symbols</th>
<th>Descriptions of Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend Payout Ratio</td>
<td>DPO</td>
<td>Ratio of Dividend to Net</td>
</tr>
<tr>
<td></td>
<td></td>
<td>profit</td>
</tr>
<tr>
<td><strong>Independent Variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earning Management</td>
<td>EM</td>
<td>Modified Jones model (1995)</td>
</tr>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on Equity</td>
<td>ROE</td>
<td>Ratio of Net profit to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>equity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Log of total assets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scott and Martin (1975)</td>
</tr>
<tr>
<td>Size of the Firm</td>
<td>Size</td>
<td>Ratio of retained earnings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>change in capital employed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ahmad and Attiya (2009).</td>
</tr>
<tr>
<td>Self-Finance Ratio</td>
<td>SFR</td>
<td></td>
</tr>
<tr>
<td>Financial Leverage</td>
<td>Lev</td>
<td>Ratio of average assets to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>equity</td>
</tr>
</tbody>
</table>

**Earnings Management Estimation**

Discretionary accruals are used to measure EM. Moreover, it is measured as the difference of total and non-discretionary accruals. Two approaches are using for its measurement such as Balance Sheet and Cash Flow Approaches. The most prominent and an authentic approach is the cash flow approach for total accruals, moreover literature reveals that the cash flow approach is less biased. Thus, in this study used the cash flow approach of total accruals measurement.

Total\(\text{Acc}_{it}\) = \(\text{Net-Inc}_{it}-\text{Cash-Flow}_{it}\)

Total\(\text{Acc}_{it}\) is the total accruals, \(\text{Net-Inc}_{it}\) the net income and Cash-Flow\(\text{it}\) the cash flow from operating activities for firm \(i\) in \(t\).

Collins and Hriber (1999) find that cash flow approach of total accruals measurement is more appropriate.

**Discretionary Accruals**

In step one calculate the non-discretionary accruals:

\[
\text{Non-Dis}_{it} = \beta_0(1/\text{Assets}_{Lagged}) + \beta_1(\text{change in Receivables}_{it} - \text{change in AccRec}_{it}/\text{Assets}_{Lagged}) + \beta_2(\text{Property Plant}_{it}/\text{Assets}_{Lagged})
\]

Non-Dis\(i\) is the non-discretionary component of total accruals, change in Receivables\(i\) is sales change, change in AccRec\(i\) is the change in account receivables, Assets\(i\)\(_{Lagged}\) is lagged of assets, Property Plant\(i\)\(_{Lagged}\) is property plant and equipment.

Moreover, discretionary accrual is measured as follows:

\[
\text{DisAcc}_{it} = (\text{TA}_{it}/\text{Assets}_{Lagged}) - \text{Non-Dis}_{it}
\]
DisAcc\_it is discretionary accruals and it is obtained as residual of regression of non-discretionary model.

**Regression analysis**

In order to test the research hypothesis, based from data analysis procedure. The following model is prescribed for regression assumption.

\[ DP_{it} = \alpha_0 + \beta_1 (DA_{it}) + \beta_2 (SFR_{it}) + \beta_3 (ROE_{it}) + \beta_4 (\text{Size of the Firm}_{it}) + \beta_5 (\text{LEV}_{it}) + \epsilon_{it} \]

In this model:

- \( DP_{it} \) is Dividend payout ratio, \( DA_{it} \) is discretionary accruals (EM), \( SFR_{it} \) is Self-finance ratio, \( \text{SIZE}_{it} \) is firm size, \( \text{ROE}_{it} \) is firm performance, \( \text{LEV}_{it} \) is capital structure of firm \( i \) in year \( t \).

**Results and Discussion**

**Descriptive Statistics**

Table 2 presents the descriptive statistics such as mean, median, standard deviation, maximum, and minimum value of the data.

<table>
<thead>
<tr>
<th></th>
<th>DPO</th>
<th>EM</th>
<th>SIZE</th>
<th>SFR</th>
<th>ROE</th>
<th>LEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.703486</td>
<td>4.278328</td>
<td>7.826208</td>
<td>-2.417596</td>
<td>13.05083</td>
<td>1.944225</td>
</tr>
<tr>
<td>Median</td>
<td>-0.643215</td>
<td>4.394537</td>
<td>7.547256</td>
<td>-1.792536</td>
<td>0.386400</td>
<td>1.409520</td>
</tr>
<tr>
<td>Std dev</td>
<td>4.930505</td>
<td>1.563092</td>
<td>1.117533</td>
<td>3.024409</td>
<td>22.40457</td>
<td>3.539117</td>
</tr>
</tbody>
</table>

Table 2 presents the descriptive statistics such as Mean, Median, Standard deviation, maximum, and minimum value of the data. Mean value of DPO (dividend payout) is 0.703486 which shows the average payment of dividend level, while the standard deviation of dividend payout is 4.9305 which shows deviation of dividend from its mean value. The maximum value of dividend payout is 11.00121, and the minimum value of dividend payout is -13.8155. EM mean value is far high as compared to dividend payout. The value of mean is 4.278328 and standard deviation of it is 1.563092. Which is so high and tend to show high mean value mean and high fluctuation.

**Correlations**

Table 3 Correlations Results

<table>
<thead>
<tr>
<th></th>
<th>DPO</th>
<th>EM</th>
<th>SIZE</th>
<th>ROE</th>
<th>SFR</th>
<th>LEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPO</td>
<td></td>
<td>0.049</td>
<td>-0.108</td>
<td>0.018</td>
<td>-0.001</td>
<td>0.042</td>
</tr>
<tr>
<td>EM</td>
<td>-0.108</td>
<td></td>
<td>-0.176</td>
<td>0.347</td>
<td>0.021</td>
<td>0.066</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.018</td>
<td>-0.176</td>
<td></td>
<td>-0.161</td>
<td>0.039</td>
<td>0.023</td>
</tr>
<tr>
<td>ROE</td>
<td>-0.001</td>
<td>0.347</td>
<td>0.039</td>
<td></td>
<td>-0.015</td>
<td>0.014</td>
</tr>
<tr>
<td>SFR</td>
<td>0.042</td>
<td>0.021</td>
<td>0.039</td>
<td>-0.015</td>
<td></td>
<td>-0.664</td>
</tr>
</tbody>
</table>

Table 3 reports the correlation matrix of the study such as SFR (Self finance ratio) is negatively related with DPO which means that increase in SFR will occur catalytic decrease in DP. As indicated that size of the firm negatively correlated with DPO of sample firms. Moreover, ROE is positively correlated with DP. Although based form the above table no other independent variable is statistical significantly correlated with DP. Moreover, in table 3 the correlation matrix shows that there is no serious issue of high correlation because the value of all variables is less than...
0.80, VIF test were also performed for multicollinearity among the variables which gives the value less than 10.

**Final Results of the Study**

Table 4 represent the random effect model the Hausman test value shows the validity of the model and the random effect model shows the positive and negative relation between dependent and independent variable.

**Table: 4 Random Effect Model**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Co-eff</th>
<th>Std error</th>
<th>t-statistics</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-3.794</td>
<td>2.035</td>
<td>-1.863</td>
<td>0.063</td>
</tr>
<tr>
<td>EM</td>
<td>-0.030</td>
<td>0.063</td>
<td>-0.474</td>
<td>0.635</td>
</tr>
<tr>
<td>SFR</td>
<td>-0.102</td>
<td>0.076</td>
<td>-1.332</td>
<td>0.183</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.503</td>
<td>0.248</td>
<td>2.031</td>
<td>0.043</td>
</tr>
<tr>
<td>ROE</td>
<td>0.023</td>
<td>0.008</td>
<td>2.672</td>
<td>0.008</td>
</tr>
<tr>
<td>LEV</td>
<td>-0.056</td>
<td>0.051</td>
<td>-1.107</td>
<td>0.269</td>
</tr>
</tbody>
</table>

Adjusted R-square 0.022

P-value 0.044

Table 4 shows that discretionary accruals negatively but insignificantly affect the level of DPO. If the level of earnings manipulation increases, then DPR is declining because manipulated results cannot show true picture of the firm performance. This statistical outcome is similar with the result of Faiza and Alifiah (2017) they concluded that there exists insignificant relationship between discretionary accruals and dividend payout policy. However, this outcome might be due to the fear of financial crises and strong practices of CG in their observed rules as per the maintenance instruction of CG code 2002. On the basis of these outcomes I accepted first hypothesis, that discretionary accruals have negative impact on dividend payout.

Coefficient of discretionary accruals shows that EM negatively but insignificantly affect DP, it shows that companies indulge in manipulation their level of dividend declining. However, from that if we look to SFR it signifies negative relationship with dividend payout which looks rational and portrays a message, that if a firm decide to declare or announced more dividend, alternatively it convey a message that the companies will not finance their operation from integrated sources.

Although Size is tending to positively related with dividend payout which is elaborate the relation of statistically significant, due to this relationship its signifies that big companies announce more dividends as compared to small companies.

Moreover, ROE is positively related with DPO which signal that increase in ROE results in high level dividends announcement. Moreover, t-statistics shows that control variables significantly affect the DPO.

Leverage is negatively related with dividend payout which is statistically insignificant. It is may be because of company who want continue its spending on capital expenditure rather than to paying dividend.

R square of my study is I-e 4% which is very low. It is an acceptable range. But due to consistency of data selection method, the method of my research is consisted of time series and cross-sectional data.

On the basis of recommendation of Hausman test random effect model is used for analysis of the current study.
Table 5: Hausman Test Results

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>10.337384</td>
<td>5</td>
<td>0.0662</td>
</tr>
</tbody>
</table>

The value of Hausman test recommended that the appropriate model is random effect model such as 0.066 is greater than significant level of the test.

**Conclusion**

In the current study investigated the impact of EM on DP. EM is proxied through discretionary accruals and DP is measured through dividend payout ratio. Used sample of 76 KSE-100 index companies listed on Pakistan stock exchange during 2010-2016. Other variables such as self-financeratio (SFR), Size of the Firm, Return On Equity (ROE) and Leverage (Lev) are used as control variables. For analysis used random effect model and the results demonstrated that EM negatively but insignificantly affect dividend payout ratio of sample firms. Hence, concluded that if management indulges in earnings manipulation then they not having to pay dividends and trust of investors are decreasing. Moreover, good governance controls the management behavior of manipulation practices. Finally, concluded that governance system is need to be transparent to identify management such behavior and to maintain confidence of investors on reported information.

**Future Research**

This is recommended that future research can increase sample size and used the latest models of EM.

**References**


