DIVIDEND POLICY AND ROLE OF CORPORATE GOVERNANCE IN MANUFACTURING SECTOR OF PAKISTAN.

Zubaida Batool & Attiya Y. Javid
Dividend pay-outs are seen as:
- means to reduce the cash flow that managers can use at their discretion.
- Insurance of strengthening position of a firm.
- Sign of financial health of companies.
In some economies these payments are even done by the sources of external financing.

- there are different firm and non-firm specific factors that may effect the payment of dividends.

- the recent literature shows that good corporate governance practices help in better dividend decision making.
This study contributes to the existing literature in three dimensions

1. It takes Lintner model as the base model which is the most important and most cited model.
2. It is the first study in which corporate governance practices are split as governance at the internal level of firms and governance at the external level of firms, which was never done before.
   - Corporate governance is taken in contribution to the base model.
   - Then firm specific variables are added in contribution to the Corporate Governance variables.
Contribution to the existing literature

- Shareholder Rights and Transparency are used for the first time in this study.

It is the first study which Is using the dynamic dividend model to check the effect of corporate governance in the basic Lintner model.
Motivation of the Study

- In this study, I intend to show that good corporate governance practices may significantly increase the dividend payouts.

- Corporate governance mechanisms ensures that shareholders are not at risk concerning their dividend payments. This motivates to test the effect of corporate governance on dividend policy of firms.
In Pakistan dividend payments are not mandatory and minority shareholders are often neglected. Even then people buy shares of companies. This is because “dividends” are less riskier than the capital gains.

After the introduction of Corporate Governance Code in 2002, it is expected that firms’ financial decisions would be more in favor of its owners (shareholders).
Pakistani firms present interesting features for examining dividend policy., such as
- High growth→ high dividend payment
- Voluntary payments→ high principle-agent conflict.

This means that if the management is not controlled in some ways they can exploit the shareholders by not paying them their share and investing in even non profitable Projects for their own benefits.
Miller and Modigliani were the first who studied dividends and presented the famous **Dividend Irrelevance hypothesis** in 1950s which essentially indicates that an issuance of dividends should have little to no impact on stock price. This is why investors are not concerned with a company's dividend policy.
Linter was the first who argued that past dividends and earnings effect the dividend decisions of the firm. So firms follow a smooth dividend pattern and hesitate to change dividends too often.
Second imperfection is agency problem which assumes large-scale retention of earnings by managers encourages behavior that does not maximize shareholder value.

Dividends, then, are a valuable financial tool for these firms because they help avoid asset/capital structures and agency problems that give managers wide discretion to make value-reducing investments.
Third imperfection is information asymmetry and firm tries to signal that it is running smoothly, this indicates that firm has sufficient resources. So, management can distribute dividends to “signal” that the firm is performing good. In this case dividends play a role as a tool of reducing information asymmetry.
Another imperfection is Free cash flow problem which suggests that managers have enough cash left to invest in other projects. But some times managers may not work in best interest of shareholders and may invest in negative NPV projects. So to alleviate this problem dividend payment are best tool by reducing the free cash flow available to managers.
Objectives

1. To test the effect of previous dividends and earnings on dividends as specified in the Lintner model.
2. To examine the role of firm specific factors in determination of dividend policy of firms of Pakistan.
3. To estimate the effect of economic conditions on dividend payout of firms.
4. To examine the role of corporate governance in all the above three models in the determination of dividend policy of firms of Pakistan.
Surveys done by Allen and Micaely (2003) and Leary & Micaely (2008) find that dividend policy is better explained by agency theory than by the signalling theory because agency theory includes managers’ perspective also in setting the target payout and future dividends also whereas signalling theory only signals about the future payments.
It is observed that fiduciary are not solely interested in the benefit of shareholders but usually in their own (Grossman, Hart, 1980; Easterbook 1984; Jenesen 1986). They all conclude that dividends play a role as a right to shareholders by not allowing all the ‘free cashflow’ to the managers. In other words, they suggest that is this way dividends play a role as ‘regulation’ for the right of shareholders.
On the bases of survey through the managers of manufacturing firms Attiya and Haleem (July 2011), find out in one of their studies that all of the firms (manufacturing firms), in Pakistan, follow practices of corporate governance.
Lintner (1955), observed that firms set a target payout ratio according to the earnings consistent with the positive net NPV of the projects. When the earnings of the firms increase or decrease, firms do not immediately increase or decrease their dividend payout, instead, they adjust their payout gradually or partially.
In Pakistan, there are very few studies that investigate the impact of corporate governance on dividend policy. In this study, corporate governance practices are studied in a more broad range i.e. whole manufacturing sector of Pakistani industry.
Corporate Governance

**Internal governance:** consist of board composition and effectiveness and transparency.

**External governance:** consist of audit quality, shareholder rights.
## Internal Mechanisms

<table>
<thead>
<tr>
<th>Variable</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board size</td>
<td>if sufficient may be best tool for making decisions that are best for company and shareholders.</td>
</tr>
<tr>
<td>Independent board</td>
<td>can keep an eye on management by not letting them send a false signal or asymmetric information to its shareholders.</td>
</tr>
<tr>
<td>CEO duality</td>
<td>Owning dual position in firm i.e. chairman and chief executive officer may influence the dividend policy.</td>
</tr>
<tr>
<td>Ownership</td>
<td>Block holders are monitors and do not allow the misallocation of resources and prefer the free cash to be distributed in form of dividends</td>
</tr>
<tr>
<td>Transparency</td>
<td>increases the firm value and influences dividends. Because management feels that they have declared information already.</td>
</tr>
</tbody>
</table>
## External Mechanisms

<table>
<thead>
<tr>
<th>Variable</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Audit Quality</td>
<td>• as not the part of firm, performs an audit in accordance with specific laws or rules on the financial statements.</td>
</tr>
<tr>
<td></td>
<td>• plays an important role in improving the credibility of financial information as well as decision making.</td>
</tr>
<tr>
<td>Shareholder Rights</td>
<td>The firms where shareholder rights are weak the management will be likely to retain cash instead of distributing it.</td>
</tr>
</tbody>
</table>
Factors affecting dividend policy

Firm Specific Factors
<table>
<thead>
<tr>
<th>Variable</th>
<th>Effectiveness</th>
</tr>
</thead>
</table>
| Leverage                 | • captures the agency problem  
• The firms with higher leverage pay lower dividends in order to dodge the cost of raising external capital of the firm.  
• If firms are debt holder then the debt providers also play role of monitors. |
| Profit, Size & Growth    | • most important determinant of dividend is its earnings  
• a firm earning more can issue higher dividends.  
• A larger firm can give more dividends.                                                      |
| Liquidity                | Dividend payer firms have lesser liquid assets in the market.                                                                                   |
| Stock Price              | when dividends of a company are lower it is usually due to higher share price.                                                                  |
| Tobin’s Q                | New investment opportunities can influence the existing dividend decisions.                                                                     |
Factors affecting dividend policy

Business Conditions
<table>
<thead>
<tr>
<th>Variable</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP GAP</td>
<td>As this gap increases, economic condition deteriorates which means lower investment by the firms, lower earnings and hence lower level of dividend</td>
</tr>
<tr>
<td>Inflation</td>
<td>Inflation effects dividend payout because on one hand it raises the nominal value of firms dividends, but, on the other hand it also increases the cost of investment.</td>
</tr>
</tbody>
</table>
Data on 100 manufacturing companies of Pakistan has been used in this study from 2003 to 2011. This time frame best reflects the situation of dividends and corporate governance laws in Pakistan.
Lintner model is used in this study. This model was developed by John Lintner in 1955. The model was based on the observation that firms set a target payout ratio according to the earnings consistent with the positive net NPV of the projects. When the earnings of the firms increase or decrease, firms do not immediately increase or decrease their dividend payout; instead, they adjust their payout gradually or partially.
Basic Lintner Model

\[ D_t - D_{t-1} = \alpha_0 + K(rP_t - D_{t-1}) + u_t \]
Extended Version of Lintner Model

- After simplification, the model becomes:
  \[ D_{it} = \alpha + K D_{i}*t + D_{it-1}(1-K) \] \[ 1.1 \]

Model With corporate governance Factors model is extended to multifactor model by including corporate governance variables. The variables justified by the theory are Introduced and the model becomes

- \[ D_{it} = \alpha + K D_{i}*t + D_{it-1}(1-K) + \beta_1 ICG + \beta_2 ECG + u_{it} \] \[ 1.2 \]
Inclusion of firm specific factors with Corporate Governance in Extended Lintner model

Here, the model is estimated by including Corporate governance variables along with firm specific variables in the Lintner dynamic dividend model

\[ D_{it} = \alpha_1 + K D_{it-1} + K (1-K) + \beta_1 ICG + \beta_2 ECG + \alpha_2 \text{stock price} + \alpha_3 \text{liquidity} + \alpha_4 \text{size} + \alpha_5 \text{growth} + \alpha_6 \text{profitability} + \alpha_7 \text{leverage} + \epsilon_{it-1} \]

\[ --(1.3) \]
Model With Business Conditions

finally the model is estimated by including economic or business conditions with corporate governance

\[ D_{it} = \alpha_1 + K D_{i\ast t} + D_{i-1}(1-K) + \beta_1 ICG + \beta_2 ECG + \lambda_1 GDP\_GAP + \lambda_2 Inflation + uit \] ----(1.4)
To test the robustness of the model all determinants are included in the model and are tested with corporate governance variables.

\[ D_{it} = \alpha_1 + K D_i t + D_{it-1}(1-K) + \beta_1 ICG + \beta_2 ECG + \alpha_2 \text{stock price} + \alpha_3 \text{liquidity} + \alpha_4 \text{size} + \alpha_5 \text{growth} + \alpha_6 \text{profitability} + \alpha_7 \text{leverage} + \lambda_1 \text{GDP\_GAP} + \lambda_2 \text{Inflation} + \varepsilon_{it} \]
For estimating the dividend models panel data estimation techniques is applied as it is more suitable for the analysis. For 100 firms and from the period 2003-2011, GMM technique is used to deal with problems like endogenity.
Continued...

- GMM Common Effect Model
- GMM Fixed Effect Model
- GMM Random Effect Model
All else equal corporate governance has significant role in determination of dividend policy in all models.
## RESULTS

### Lintner model

<table>
<thead>
<tr>
<th>regressors</th>
<th>GMM CEM</th>
<th>GMM FEM</th>
<th>GMM REM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyt-1</td>
<td>0.41***</td>
<td>0.32***</td>
<td>0.39***</td>
</tr>
<tr>
<td></td>
<td>(4.63)</td>
<td>(3.39)</td>
<td>(6.94)</td>
</tr>
<tr>
<td>EAT</td>
<td>0.12**</td>
<td>0.1</td>
<td>0.1***</td>
</tr>
<tr>
<td></td>
<td>(2.2)</td>
<td>(0.52)</td>
<td>(3.09)</td>
</tr>
<tr>
<td>C</td>
<td>0.001</td>
<td>0.011</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>(0.43)</td>
<td>(1.02)</td>
<td>(0.25)</td>
</tr>
<tr>
<td>Hausman test</td>
<td></td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>Sargan test</td>
<td>0.09</td>
<td>0.11</td>
<td>0.10</td>
</tr>
<tr>
<td>DW stats</td>
<td>1.98</td>
<td>2.02</td>
<td>1.99</td>
</tr>
<tr>
<td>Speed of adjustment</td>
<td>59%</td>
<td>68%</td>
<td>61%</td>
</tr>
<tr>
<td>Target payout ratio</td>
<td>20.3%</td>
<td>14.7%</td>
<td>16.4%</td>
</tr>
</tbody>
</table>
# Lintner Model with Corporate Governance

<table>
<thead>
<tr>
<th>regressors</th>
<th>GMM CEM</th>
<th>GMM FEM</th>
<th>GMM REM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyt-1</td>
<td>0.46***</td>
<td>0.43***</td>
<td>0.50**</td>
</tr>
<tr>
<td></td>
<td>(7.03)</td>
<td>(4.79)</td>
<td>(2.58)</td>
</tr>
<tr>
<td>EAT</td>
<td>0.23***</td>
<td>0.20***</td>
<td>0.25**</td>
</tr>
<tr>
<td></td>
<td>(3.16)</td>
<td>(3.74)</td>
<td>(2.81)</td>
</tr>
<tr>
<td>CEO duality</td>
<td>0.0025*</td>
<td>0.0018**</td>
<td>0.028***</td>
</tr>
<tr>
<td></td>
<td>(1.62)</td>
<td>(2.2)</td>
<td>(4.44)</td>
</tr>
<tr>
<td>Board Independence</td>
<td>0.0012</td>
<td>0.009</td>
<td>0.024</td>
</tr>
<tr>
<td></td>
<td>(0.71)</td>
<td>(0.16)</td>
<td>(1.44)</td>
</tr>
<tr>
<td>Board Size</td>
<td>-0.005***</td>
<td>-0.002**</td>
<td>-0.016***</td>
</tr>
<tr>
<td></td>
<td>(-3.10)</td>
<td>(-2.5)</td>
<td>(-5.19)</td>
</tr>
<tr>
<td>Ownership</td>
<td>0.003*</td>
<td>0.003**</td>
<td>0.002**</td>
</tr>
<tr>
<td></td>
<td>(1.6)</td>
<td>(2.46)</td>
<td>(2.35)</td>
</tr>
<tr>
<td>Transparency</td>
<td>-0.002**</td>
<td>0.005**</td>
<td>-0.044***</td>
</tr>
<tr>
<td></td>
<td>(-1.77)</td>
<td>(-2.47)</td>
<td>(-4.84)</td>
</tr>
<tr>
<td>Audit quality</td>
<td>0.0018**</td>
<td>0.61*</td>
<td>0.018**</td>
</tr>
<tr>
<td></td>
<td>(2.86)</td>
<td>(1.7)</td>
<td>(2.11)</td>
</tr>
</tbody>
</table>
## Corporate governance with Firm Specific variables

<table>
<thead>
<tr>
<th>regressors</th>
<th>GMM CEM</th>
<th>GMM FEM</th>
<th>GMM REM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyt-1</td>
<td>0.25***</td>
<td>0.29*</td>
<td>0.25***</td>
</tr>
<tr>
<td></td>
<td>(7.12)</td>
<td>(1.68)</td>
<td>(7.42)</td>
</tr>
<tr>
<td>EAT</td>
<td>0.11**</td>
<td>0.09**</td>
<td>0.16**</td>
</tr>
<tr>
<td></td>
<td>(1.95)</td>
<td>(2.22)</td>
<td>(2.94)</td>
</tr>
<tr>
<td>profitability</td>
<td>0.007*</td>
<td>0.013**</td>
<td>0.0069**</td>
</tr>
<tr>
<td></td>
<td>(1.66)</td>
<td>(1.99)</td>
<td>(2.79)</td>
</tr>
<tr>
<td>Leverage</td>
<td>-0.009*</td>
<td>-0.0032***</td>
<td>-0.0094**</td>
</tr>
<tr>
<td></td>
<td>(.87)</td>
<td>(-4.53)</td>
<td>(-2.14)</td>
</tr>
<tr>
<td>Liquidity</td>
<td>-0.006**</td>
<td>-0.002**</td>
<td>-0.006**</td>
</tr>
<tr>
<td></td>
<td>(-2.01)</td>
<td>(-1.84)</td>
<td>(-2.38)</td>
</tr>
<tr>
<td>Growth</td>
<td>1.28**</td>
<td>2.27*</td>
<td>1.29**</td>
</tr>
<tr>
<td></td>
<td>(2.54)</td>
<td>(1.8)</td>
<td>(2.94)</td>
</tr>
<tr>
<td>Share price</td>
<td>-0.002*</td>
<td>-0.007*</td>
<td>-0.015**</td>
</tr>
<tr>
<td></td>
<td>(-1.69)</td>
<td>(-1.64)</td>
<td>(-2.13)</td>
</tr>
<tr>
<td>Size</td>
<td>0.002*</td>
<td>0.007*</td>
<td>0.0013**</td>
</tr>
<tr>
<td></td>
<td>(1.64)</td>
<td>(1.75)</td>
<td>(2.24)</td>
</tr>
</tbody>
</table>

**Note:** The table shows the coefficients and their t-values for various regressors in GMM CEM, GMM FEM, and GMM REM models.
# Corporate Governance with Business Conditions

<table>
<thead>
<tr>
<th>Regressors</th>
<th>GMM CEM</th>
<th>GMM fEM</th>
<th>GMM REM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyt-1</td>
<td>0.38*** (3.17)</td>
<td>0.32** (2.24)</td>
<td>0.37*** (7.82)</td>
</tr>
<tr>
<td>EAT</td>
<td>0.11* (1.76)</td>
<td>0.14* (1.65)</td>
<td>0.15* (1.62)</td>
</tr>
<tr>
<td>GDP GAP</td>
<td>-0.009** (-2.6)</td>
<td>-0.003** (-2.27)</td>
<td>-0.0086*** (-6.42)</td>
</tr>
<tr>
<td>Inflation</td>
<td>0.002** (2.67)</td>
<td>0.005** (2.41)</td>
<td>0.002*** (6.6)</td>
</tr>
<tr>
<td>Audit quality</td>
<td>0.004* (1.81)</td>
<td>0.002* (1.67)</td>
<td>0.005* (2.01)</td>
</tr>
<tr>
<td>Shareholder rights</td>
<td>-0.009** (-1.94)</td>
<td>-0.003** (-2.02)</td>
<td>-0.009** (-2.33)</td>
</tr>
<tr>
<td>Ownership</td>
<td>0.003* (1.67)</td>
<td>0.009* (1.76)</td>
<td>0.003 (1.65)</td>
</tr>
<tr>
<td>Transparency</td>
<td>-0.005* (-1.66)</td>
<td>-0.005* (-1.8)</td>
<td>-0.004* (-1.62)</td>
</tr>
</tbody>
</table>
## Corporate Governance with all Variables

<table>
<thead>
<tr>
<th>Regressors</th>
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<th>GMM FEM</th>
<th>GMM REM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyt-1</td>
<td>0.25*** (7.12)</td>
<td>0.29* (1.68)</td>
<td>0.25*** (7.42)</td>
</tr>
<tr>
<td>EAT</td>
<td>0.11** (1.95)</td>
<td>0.09** (2.22)</td>
<td>0.16** (2.94)</td>
</tr>
<tr>
<td>Profitability</td>
<td>0.007* (1.66)</td>
<td>0.013** (1.99)</td>
<td>0.007** (2.79)</td>
</tr>
<tr>
<td>Leverage</td>
<td>-0.01* (1.87)</td>
<td>-0.003*** (-4.5)</td>
<td>-0.01** (-2.14)</td>
</tr>
<tr>
<td>Liquidity</td>
<td>-0.006** (-2.01)</td>
<td>-0.002* (-1.84)</td>
<td>-0.006** (-2.38)</td>
</tr>
<tr>
<td>growth</td>
<td>1.28** (2.54)</td>
<td>2.27* (1.8)</td>
<td>1.29** (2.94)</td>
</tr>
<tr>
<td>Share price</td>
<td>-0.0015* (-1.69)</td>
<td>-0.0074* (-1.64)</td>
<td>-0.015** (-2.13)</td>
</tr>
<tr>
<td>Size</td>
<td>0.002</td>
<td>0.007*</td>
<td>0.0013**</td>
</tr>
</tbody>
</table>
Conclusion

- Dividend smoothening.
- Instable dividends.
- Profitability, growth, and size have positive impact on dividends when added along with governance indicators in the model.
- Good governance practices insure better dividend policy.
- Economic conditions do impact dividend policy; increased GDP Gap reduces dividend payments and inflation increases these payments.
- Throughout our all 4 model corporate governance has same significant impact on dividend policy.
Authorities can consider making dividends mandatory to some extent. So that the firms will choose to pay more dividend. Even in revised code of corporate governance 2013 dividends are voluntary.

Now firms are getting investment from small shareholder because they have no alternate, if more dividend is paid they can cater more investment.

Data on some variables is not available e.g. capital gains, double digit taxes. So, future studies can be done with these variables.
***THANK YOU***