

The Effect of Board Composition and Ownership Structure on Dividend Policy: Evidence from Jordan

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The objective of this study was to examine the impact of board composition and ownership structure on the dividends pay-out policies employed by a sample of manufacturing companies listed on the Amman Stock Exchange (ASE) for the period of 2013–2015. The study used the size of the board, board independence, gender (percentage of females in the board), and Chief Executive Officer (CEO) duality to represent the board composition. Meanwhile, managerial ownership, institutional ownership, and foreign ownership were used to represent the ownership structure. In addition, several control variables were used, such as Return on Assets (ROA) firm's age, firm's size, and financial leverage. The dividend per share, representing the company's dividends pay-out policy, served as the dependent variable of the study. The results of the multiple regression analysis identified the board size, duality, institutional ownership, and earnings per share to be significantly associated with the variation in dividends per share at, at least, the five per cent level. There was the exception of the duality variable, which had a negative coefficient, contrary to the prediction, and the other variables indicated a positive relationship with the dividends per share. However, among these variables, the earnings per share was found to be the most powerful explanatory variable in the regression model, which was measured by their respective standardized coefficients (Beta) weights.

Keywords: *Board composition, Ownership structure, Dividend policy, Amman Stock Exchange*



Introduction

A great deal of research has been carried out in the field of governance and dividend policy. Although, some researchers have paid attention to factors affecting dividend policy (Abdelsalam et al., 2008; Al-Najjar and Belghitar, 2014; Benjamin and Zain, 2015; Yarram and Dollery, 2015; Mehdi et al., 2017; Elmagrhi et al., 2017), little is known about good governance practices and dividends as monitoring mechanisms, which can be used to alleviate potential agency problems in emerging markets. As a result, the literature on corporate governance is rich, but this literature does not capture the details of the effect of the combined factors on dividend policy, especially in emerging markets, such as board composition, and ownership structure. That is, the dividend policy process in Jordan may be different from the process involved in developed countries.

Normally, the board of directors' concern is related to approving strategic goals and plans of the corporation, setting general policies, guiding corporate affairs, and approving major expenditures. Typically, the board of directors consists of inside, and outside directors. The inside directors may include key corporate executives, and outside directors may include executives from other companies, key stockholders, and national or community leaders (Gitman and Zutter, 2015). The board composition typically concerns issues related to board independence, including the independence of board committees; diversity, including race, gender, and age of board members; and the Chief Executive Officer (CEO) duality. The decision to pay dividends to shareholders is made by the board of directors.

Extensive academic research explored board characteristics that affect dividend pay-out, such as board size, independence, activity, and duality. For example, Mehdi et al., (2017) proposed a panel regression model, which describes the relationship between board governance, ownership structure, and dividend pay-out. Their results showed that during the most recent financial crisis, dividend pay-out decisions were inversely related to duality, board size, and the frequency of board meetings. On the other hand, the ownership structure is a controlling mechanism of corporate governance, which can affect financial performance and shareholders' wealth. The ownership structure is a central theme in the corporate governance literature. In general, the ownership structure concerns issues related to ownership concentration, institutional and individual investors, and managerial ownership.

Several studies focussed on the distribution of stock among shareholders and their effect on the dividend policy of a firm. For instance, Abdelsalam et al., (2008) examined the effect of ownership structure through four variables: managerial ownership ratio, block-holders ownership ratio, institutional ownership ratio, and free float ratio. The results revealed that Egyptian listed companies with a higher block institutional ownership paid higher dividends to attract capital during the transitional period of Egypt.

Considering this issue, the literature is almost silent on the details of the effect of these factors on the payment of dividends. In fact, investment requires a return that is consistent with risk, in order to maintain the purchasing power of invested funds, especially in light of rising inflation rates. Furthermore, the dividends policy aims at maximising shareholders' wealth. The optimum dividends policy is based on the balance between current dividend and future growth, which maximises the stock price. Consequently, we have an incomplete picture of the way dividend decisions are developed in emerging markets. Thus, the focus of this study is on the key factors of ownership and board composition that influence a firm's dividend policy in Jordan. Against this background, this research attempts to answer the research question: is there a significant relationship between corporate dividend decisions of the manufacturing companies listed in the Amman Stock Exchange (ASE), and the board composition and ownership structure? More specifically, this main objective of this research is to examine the impact of board composition and ownership structure upon the dividends pay-out policies of a sample of manufacturing companies listed on the ASE for the period of 2013–2015. We focus on an emerging market in Jordan, where regulation and corporate governance are comparatively weaker when compared to those in the developed markets, such as the United States of America (USA). Furthermore, the majority of the companies are affiliated with business groups and are being run by the family members of the founders. Hence, controlling shareholders are likely to have a considerable say in the decision-making within the firm.

The study is organised as follows: literature review, introduction of the research hypotheses, description of the methodology employed in the study, the empirical results of the study, and summary of the study and presentation of its main conclusions.

Literature Review

Numerous studies have examined the influence of the board structure, and ownership structure upon the dividend policy in various countries. Abdelsalam et al., (2008) used pooled cross-sectional observations from Egyptian firms and found that there is a significant positive relationship between institutional ownership, and firm performance, and both the dividend decision, and pay-out ratio. Meanwhile, no significant relationship was found between the board composition, and dividend decisions or ratios. This result is in line with the findings of Tahir et al., (2020), where they studied the determinants of the dividend pay-out of 203 Malaysian non-financial firms over the period of 2005–2018. The study had various results; they found a statistically insignificant and positive relationship between board diversity, and dividend pay-out. On the other hand, the study revealed that there is a statistically significant and positive relationship between corporate board size, ROA, and dividend pay-out, while there is a negative and significant effect of financial leverage on dividends policies.

Al-Najjar and Kilincarslan (2016) investigated the impact of ownership structure on the dividend policy of listed firms in Turkey. The study used alternative dividend policy measures,

such as the probability of paying dividends, dividend pay-out ratio, and dividend yield, as well as the logit, and tobit models. The findings revealed that foreign and State ownership are associated with a less likelihood of paying dividends, while other ownership variables, such as family involvement, domestic financial institutions, and minority shareholders, are insignificant in affecting the probability of paying dividends. However, all the ownership variables have a significantly negative impact on the dividend pay-out ratio, and dividend yield.

More recent evidence from Duqi et al., (2020) shows that results may differ between Islamic and conventional financial institutions. Their study examined the effect of the ownership structure upon the dividend policy among Islamic, and conventional financial institutions in 16 countries for the period of 2000–2015. Duqi et al., (2020) concluded that government ownership has negative effects on dividend pay-out in both types of financial institutions, which is consistent with the preference of governments towards bank stability. On the other hand, the results show that family ownership has a negative effect for conventional banks but a positive effect for Islamic ones, which aligns with agency theory. These results are, to some extent, similar in the case of foreign ownership, where it is associated with a higher pay-out policy in Islamic banks but is not significant in conventional banks.

The analyses of both Mehdi et al., (2017) for non-financial listed firms from the East Asian, and Gulf Cooperation Council countries, and Al-Najjar and Belghitar (2014) for the United Kingdom (UK) firms, revealed that dividend pay-out decision increased with the institutional ownership in those countries. The study by Al-Najjar and Belghitar (2014) also revealed that there is limited evidence that independent directors affect the cash dividends. Their results agree with the study of Elmagrhi et al., (2017), who examined the extent to which corporate board characteristics effect the level of the dividend pay-out ratio by using a sample of UK small, and medium enterprises (SMEs), and found that board independence, and CEO role duality do not have any significant effect on the level of dividend pay-out.

On the one hand, Yarram and Dollery (2015) studied the influence of board structure on the dividend policy of Australian corporate firms for the period of 2004–2009. The results showed that board independence has a significant positive influence on the dividend pay-out of Australian firms. The results also revealed that size has a significant positive influence on the dividend pay-out of Australian firms. On the other hand, Juhmani (2020) investigated the effect of corporate board characteristics, and ownership structure on the dividend pay-out decisions in Bahraini listed companies, where the study used the ordinary least-squares regression. Juhmani concluded that board independence has a significant negative association with the dividend pay-out decision, while board size has a significant positive association with the dividend pay-out decision. Moreover, the study also concluded that the frequency of board meetings, blockholder ownership, institutional ownership, and managerial ownership have insignificant effects on the dividend pay-out decisions.

Moreover, Ahmad et al., (2019) found that corporate governance has a significant effect on the dividend pay-out decision. Ahmad et al., (2019) focussed on the influence of board composition, and ownership structure upon the dividend pay-out policy by using the ordinary least square, and logistic regression models, which were applied to test the estimation in Pakistani 100-index firms for the period of 2005–2014. In addition, the results concluded that firms with higher profits provide a sign to the market to pay higher dividends in Pakistani companies and aimed to resolve the agency problem issues. These results do not match the earlier findings of Mehdi et al., (2017), who found that during the recent financial crisis, dividend decision is inversely related to board duality, board size, and the frequency of board meetings. This result supports the observations of Elmagrhi et al., (2017), and Benjamin and Mat Zain (2015), where they found that the frequency of board meetings has a significant negative relationship with the level of dividend pay-out.

Developing the Hypotheses

The following section develops the research hypotheses and provides the rationale for each hypothesis.

Board Composition

1. Board Size

The board size might be a factor that affects the quality of management control. The analysis of previous studies shows mixed results about the influence of board size upon dividend policy. There are two competing views in the literature about the effect of board size. One view is that large boards allow directors to specialise. Greater specialisation can lead to more effective monitoring (Klein, 2002). This may result in improving governance practices by increasing managerial monitoring, and persuading managers to follow wealth maximising policies, including paying shareholders larger cash dividends. For this reason, large dividends are expected. The other view is that large boards are less effective than small boards, due to the difficulties of coordinating large groups (Jensen, 1993). Chen et al., (2005), and Bokpin (2011) examined the effect of board size on dividend policy and found a significant and positive relationship between them. Thus, consistent with Bokpin (2011), we propose the following hypothesis:

H1: there is a positive relationship between board size and the cash dividends payment.

2. Board Independence

According to Gregory (2000), an independent director is an essential component of the internal control and the monitoring mechanism of the firm. An independent board director plays an important role to ensure the reliability of financial statement disclosures and to guarantee

appropriate internal controls in the company. The outcome hypothesis suggests that the presence of outside directors has an important influence on board effectiveness, since they have more power to protect shareholder wealth in the form of the dividend pay-out (Al-Najjar and Hussainey, 2009; Hu and Kumar, 2004; Ntim, 2011). Additionally, outside directors are suggested to have strong incentive to monitor and control managers' opportunistic behaviour to enhance their reputation and image in the labour market (Borokhovich et al., 2005). Based on this argument, we propose the following hypothesis:

H2: there is a positive relationship between board independence and the cash dividends payment.

3. Duality

The several studies which have examined the effect of CEO duality upon the dividend policy show inconclusive results. Independent directors are desirable because of their breadth of knowledge and experience, as well as their independence from corporate management (Farinha, 2003). Several studies discussed the fact that combining the chairman of the board of directors and CEO positions in emerging markets cannot be considered an effective tool to mitigate expropriation risk. Therefore, to resolve free cash flow problems, shareholders require a higher dividend pay-out (Baliga et al., 1996; Mehdi et al., 2017). Mehdi et al., (2017) argue that firms with CEO and chairman positions that are held by the same person, tend to pursue a low dividend pay-out policy. Fama (1980) argues that the viability of the board might be enhanced by the inclusion of outside directors, and the separation between the roles of chairman and CEO. Moreover, Jensen (1993) suggests that when the same person is the CEO and chairman of the board, the board of the directors cannot perform its key function. In this case, the internal control system would be very weak, and the CEO obtains more power to control the board of directors. Thus, the independence of the board of directors is impacted, and it would be more possible for the CEO to pursue his or her own interests, but not all shareholders' interests. Thus, the following hypothesis is proposed:

H3: there is a negative relationship between CFO duality upon the cash dividends payment.

4. Gender

Gender diverse boards provide better monitoring over managers, and improve firm performance and dividend pay-out (Ntim, 2015). In their study, Elmagrhi et al., (2017) found a negative effect of gender diversity and dividend pay-out. This result supports the suggestion of the substitute hypothesis, that board gender diversity may not be considered an effective governance mechanism because it can increase conflict among board members. Thus, firms need to create a positive reputation with investors, either by pursuing good governance performs or by dividing more cash flows to raise external funds in the future. Therefore, having more women on the firms' boards, may lead to a higher expectation for larger dividends to

substitute for weaker governance (Elmagrhi et al., 2017). Thus, the following hypothesis is proposed:

H4: there is a relationship between the presence of women on the board and the cash dividends payment.

Ownership Structure

1. Institutional Ownership

Greater attention has been paid to the monitoring role of institutional investors in the dividend policy literature. Several studies investigated the impact of institutional investors on the dividend policies of firms listed in emerging markets. In their study, Eckbo and Verma (1994) conclude that institutional investors would prefer to distribute dividends, rather than reinvest free cash flow internally. Eckbo and Verma (1994) show that firms have a high-dividends yield when they have large institutional shareholders. They stated that as institutional shareholders prefer high cash dividends, it is unlikely to participate in tax-induced trading over the ex-dividend day. Farinha (2003) concludes that institutions may lead companies to pay higher dividends to enhance managerial monitoring by capital markets, mostly when they think that their own direct monitoring efforts are inefficient or too costly. This leads us to the following hypothesis:

H5: there is a positive relationship between institutional ownership and the cash dividends payment.

2. Managerial Ownership

Managerial ownership aligns the interests of managers with those of shareholders, as managers are less likely to engage in actions which are not in the interest of shareholders. Chen and Steiner (2005) argued that managerial ownership helps to resolve the agency conflicts between external stockholders and managers, but at the expense of exacerbating the agency conflict between stockholders and bondholders. Eckbo and Verma (1994) report that firms paid out lower dividends when they had a higher managerial ownership. They explain that this is due to the absolute voting power carried by managers. This is in line with the results of the study by Chen et al., (2005). Their results reveal that there is a negative relationship between managerial ownership and dividend policy and show that managerial ownership is negatively associated with firm performance. In addition, Mehdi et al., (2017) conclude that managerial ownership has a significant negative effect on dividend pay-out, when interacted with the crisis variable for firms.

H6: there is a negative relationship between managerial ownership and the cash dividends payment.

3. Foreign Ownership

A review of the literature relevant to this topic reveals that foreign ownership is associated with lower dividend payments. According to Al-Najjar and Kilincarslan (2016), because of their expertise and exposure to better global practices, foreign investors are expected to be efficient in monitoring their investments in emerging markets. In addition, foreign ownership is expected to increase the interest of analysts in the investee companies, resulting in pressuring these companies to adopt better disclosure policies that allow for better monitoring of management opportunistic behaviour, and in effect, a reduced need for a dividend-induced monitoring device. Glen et al., (1995) indicated that most industrial foreign investors often invest in stocks in emerging markets for their long-run growth prospective, not for a short-term cash dividend. This suggests a negative relationship between foreign ownership and dividend pay-out policy. Thus, the following hypothesis is proposed:

H7: there is a negative relationship between foreign ownership and the cash dividends payment.

Methodology

Population and Sample

The population of the study includes all manufacturing companies listed on the ASE for the period spanning from 2013–2015, while the sample includes companies of which all required information is available. Of the 72 listed manufacturing companies, annual reports for 58 companies were available and useable, giving 174 company year observations. This number represents 80.55 per cent of the listed companies on the ASE during the period covered by the study. The sample includes companies that paid cash dividends, as well as companies that did not pay cash dividends during the period under investigation.

Sources of Information and Variables Measurements

The information on the variables of the study was obtained through two sources. The first was the ASE publications, while the second source was the annual reports of listed companies. Information relating to the dividends per share, earnings per share, total assets, debt ratio, company age, foreign ownership ratio, and institutional ownership ratio were obtained from the Jordanian Shareholding Companies Guide for 2013, 2014, and 2015, which is published by the ASE. Information relating to board composition, and other variables, was hand-collected from the companies' annual reports. The Table 1 provides information about the variables included in the study, and their measurement.

Table 1: Variables and their Measurements

Variable	Code	Measurement
Dividends per share	DPS	Cash dividends divided by number of shares outstanding.
Board size	BS	The total number of members of board.
Board independence	BI	Percentage of non-executive directors to board size.
Gender	GEN	Percentage of female directors to the total number of directors on the board.
Duality	DUA	Dummy variable, given '1' if there is duality, and '0' otherwise.
Managerial ownership ratio	MOR	Proportion of shares held by board members.
Institutional ownership ratio	IOR	Proportion of shares held by institutional investors.
Foreign ownership ratio	FOR	Percentage of shares outstanding held by non-Jordanian shareholders.
Earnings per share	EPS	Percentage of net income to number of shares outstanding.
Firm age	AGE	Number of years since firm's inception as a listed corporation.
Firm size	SIZE	Natural logarithm of total assets.
Firm financial leverage	LEV	The total debt to total asset at the end of the year.

The Model

To investigate the effect of the board composition, and ownership structure upon the dividend policy in Jordan, the study uses a panel model analysis for 53 manufacturing companies listed on the ASE over the period of 2013–2015. Before estimation, a number of tests were performed, which help in the model selection and accuracy of the estimated parameters. The first concerns descriptive statistics analysis followed by the test for correlation among the explanatory variables. The following multiple linear regression model is estimated:

$$\begin{aligned}
 \text{DPS}_{it} = & \beta_0 + \beta_1 \text{BS}_{it} + \beta_2 \text{BIND}_{it} + \beta_3 \text{GEN}_{it} + \beta_4 \text{DUA}_{it} + \beta_5 \text{MOR}_{it} + \beta_6 \text{IOR}_{it} + \beta_7 \text{FOR}_{it} \\
 & + \beta_8 \text{EPS}_{it} + \beta_9 \text{AGE}_{it} + \beta_{10} \text{LEV}_{it} + \beta_{11} \text{SIZE}_{it} + u_{it} \\
 & \dots\dots\dots(1)
 \end{aligned}$$

Where DPS is the main dependent variable, BS, BI, GEN, DUA, MOR, IOR, and FOR are our main independent board characteristics variables; and EPS, AGE, LEV, and SIZE refer to the control variables (see Table 1).

The independent variables include one categorical variable; this is represented by dummy variables in regression. There are four variables representing the board composition. These variables are board size (BS), board independence (BI), percent of female members in the board (GEN), and duality (DUL). In addition, three variables represent ownership structure. These variables are board ownership ratio (BOR), institutional ownership ratio (IOR), and foreign ownership ratio (FOR). Finally, four variables represent the control variables. These variables are earnings per share (EPS), firm age (AGE), firm size (SIZE), and financial leverage (FL).

Results

Descriptive Statistics

The Table 2 shows the descriptive statistics for the variables used in the study. As seen from the table, on average, the firm paid cash dividends per share of 0.07, with a standard deviation of 0.19, suggesting that there are considerable variations between the sample companies and/or years in the payment of cash dividends. It can also be noted that the average DPS is higher than the EPS. This is because the EPS includes positive (reports profits) and negative (reports losses) numbers, while the DPS includes positive, if the company paid dividends, and negative, if the company did not pay dividends. As for the gender, it can be seen that the boards of directors in Jordan are overwhelmingly dominated by male members. Only two per cent of the directors of the sample companies are female, with a maximum of 27 per cent. The information in the table also reveals that boards of directors enjoy a high level of independence, where, on average, 90 per cent of the boards are non-executive directors. As for the ownership structure, 52 per cent, 23 per cent, and 52 per cent of the sample companies' shares are controlled by institutional investors, non-Jordanians, and directors of the boards, respectively. This diversity in the ownership structure provides a good basis to examine its impact on cash dividends.

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
DPS	174	0.00	1.20	0.07	0.19
Board Size	174	3.00	13.00	7.52	2.22
Board Independence	174	0.40	1.00	0.89	0.13
Board Duality	174	0.00	1.00	0.18	0.39
Proportion of Females in the	174	0.00	0.29	0.02	0.06
Board Ownership Ratio	174	0.00	0.99	0.52	0.28
Institutional Ownership Ratio	174	0.00	1.00	0.52	0.29
Foreign Ownership Ratio	169	0.00	1.00	0.23	0.28
Total Assets	174	725789	1211466000	64269214	191200000
Firm Age	174	3.00	64.00	24.95	15.63
Firm's Financial Leverage	174	0.00	0.95	0.36	0.22
EPS	174	-0.457-	1.57	0.07	0.29

Regression Analysis

Multivariate Regression Analyses

Before conducting the analysis, the regression model was checked for the presence of a multicollinearity problem between the independent variables. According to Mendenhall et al., (1986), multicollinearity does not represent a problem if one is interested in predicting the dependent variable from several independent variables. However, it does present a problem when interpreting the individual influence of each independent variable. Moreover, the latter is one of the major concerns of this investigation. A popular technique for detecting multicollinearity is by using a correlation matrix. A high correlation between any pair of independent variables may indicate the presence of multicollinearity. Anderson et al., (1993) consider an absolute correlation coefficient high if it exceeds 0.7, for any two of the independent variables. To assess the extent of this problem with respect to the current regression model, a complete correlation matrix incorporating all the variables was run (see Table 3). As seen from the table, no high level of correlation is found between any two of the independent variables, suggesting the absence of a multicollinearity problem.

Table 3: Correlation matrix

	BS	BI	DU	GEN	BOR	IOR	FOR	AGE	LEV	EPS	TA
BS	1	-	-	-	-	-	-	-	-	-	-
BI	0.319**	1	-	-	-	-	-	-	-	-	-
DU	-0.098-	-.373-**	1	-	-	-	-	-	-	-	-
GEN	0.037	-0.091-	0.279**	1	-	-	-	-	-	-	-
BOR	-0.111-	0.02	-0.113-	0.06	1	-	-	-	-	-	-
IOR	0.012	0.186*	-0.139-	-0.181-*	0.461**	1	-	-	-	-	-
FOR	-0.018-	0.00	0.02	-0.140-	0.377**	0.533**	1	-	-	-	-
AGE	0.178*	-0.048-	-0.090-	-0.123-	0.228-**	0.133	-0.018-	1	-	-	-
FL	-0.214-**	-0.114-	0.203**	-0.204-**	-0.099-	0.101	-0.142-	0.00	1	-	-
EPS	0.226**	0.08	0.05	0.07	0.14	0.253**	0.353**	0.172*	-0.293-**	1	-
TA	0.325**	0.139	0.022	0.047	0.069	0.496**	0.501**	0.249**	0.098	0.438**	1

** Correlation is significant at the 0.01 level.

* Correlation is significant at the 0.05 level.

The model is also checked for normality. The variables which deviate significantly from normality were transformed by using the log function. This can “achieve normality, or linearize a relationship” (Norusis, 1988, p. 163). The regression model was also checked for the presence of outliers, and these were subsequently removed from the analysis.

The Table 4 provides the summary results of the regression model. As seen from the table, the model is highly significant ($F = 34.215$, $p = 0.0000$), with an adjusted R^2 of 0.692. Therefore, approximately 69 per cent of the variation in cash dividends per share between the companies can be explained by the eleven independent variables included in this model.

As for the individual variables, particularly the board composition variables, as seen from the table, the board size is significant at the one per cent level, with a positive coefficient ($t = 3.681$, $p = 0.0000$), indicating the larger the company’s board of directors, the larger the cash dividends per share paid by the company. This result provides support to hypothesis one, and is consistent with Chen et al., (2005), and Bokpin (2011), who examined the effect of board size on dividend policy and found a significant and positive relationship between them. As explained earlier, larger boards enjoy several advantages, such as having more experienced and talented directors (Ntim et al., 2015). This can cause improvement in governance practices, and encourage managers to follow wealth maximising policies, including paying shareholders larger cash dividends.

Also, the board duality was found significant at the five per cent level, though with a positive coefficient ($t = 2.211$, $p = 0.029$). This finding is not aligned with the hypothesis two, which predicts a negative impact of duality upon the dividend payment. A possible explanation of this finding is suggested by Mehdi et al., (2017), who indicated that in emerging markets, the nature of the composition of the board should have a negative effect on board performance, and as a result this leads to an increase in agency costs. Thus, to limit managers' expropriation of cash flow, shareholders require a higher dividend pay-out. Other variables representing board composition, such as gender, and board independence, were found to be insignificant.

As for the variables representing the ownership structure, it can be seen from Table 4 that the only variable that showed significant impact upon the dividends per share is the institutional ownership ratio (IOR), with a positive coefficient ($t = 2.587$, $p = 0.011$). The fact that the coefficient of this variable is significant and positive indicates that companies with a higher institutional ownership ratio tend to distribute more cash dividends per share than other companies do. This is consistent with the results reported by Farinha (2003), who concluded that institution investors may prefer to pay higher dividends to enhance managerial monitoring by capital markets, mostly when they think that their own direct monitoring efforts are inefficient or too costly.

Table 4: Summary results of the regression analysis

Model Summary:				
R^2	0.713			
R^2 (Adj.)	0.692			
F	34.215		Sig. F = 0.0000	
Variables in Equation				
Variable	β	<i>Beta</i>	t-value	Sig. t
(Constant)	-0.034-		-0.235-	0.814
Board Size	0.017	0.181	3.681	0.000
Board Independence	0.000	-0.033-	-0.685-	0.494
Gender	-0.232-	-0.068-	-1.297-	0.197
Duality	0.059	0.113	2.211	0.029
BOR	0.038	0.055	0.985	0.326
IOR	0.109	0.165	2.587	0.011
FOR	-0.015-	-0.022-	-0.342-	0.733
EPS	0.520	0.745	14.162	0.000
Firm Age	0.001	0.063	1.295	0.197
TAllog	-0.014-	-0.044-	-0.699-	0.486
Financial Leverage	-0.006-	-0.007-	-0.127-	0.899

For the control variables included in the model — EPS, firm's age, financial leverage, and firm's size — it can be seen from the above table that the profitability of the company represented by the earnings per share (EPS) is highly significant ($t = 14.162$, $p = 0.000$). It is clear from the Beta statistics that the dominant variable in explaining the variations in the dividend pay-out policy among the manufacturing companies listed on the ASE is the company's profitability, as measured by EPS.

In conclusion, based on the statistical significance (t-statistic) of the independent variables examined in the regression models, the research hypotheses which were supported are: the board size hypothesis (H1), and the institutional ownership ratio (H6). Thus, the hypotheses associated with these variables cannot be rejected at, at least, the five per cent level of significance. As for the duality hypothesis (H4), which was found significant at the five per cent level, the coefficient was in the opposite direction to that hypothesised. As for the control variables, the return on equity was found to be highly significant, suggesting that the dividends pay-out policies of manufacturing companies listed on the ASE are driven by profitability.

Summary and Conclusions

The objective of this study was to examine the impact of board composition, and ownership structure upon the dividends pay-out policies employed by a sample of manufacturing companies listed on the ASE for the period of 2013–2015. The study used the size of the board, board independence, gender (percentage of females in the board), and duality to represent board composition. Meanwhile, managerial ownership, institutional ownership, and foreign ownership were used to represent the ownership structure. In addition, several control variables were used, such as ROA, firm's age, firm's size, and financial leverage. The dividend per share, representing the company's dividends pay-out policy, served as the dependent variable of the study. The results of the multiple regression analysis identified the board size, duality, institutional ownership, and earnings per share to be significantly associated with a variation in the dividends per share at, at least, the five per cent level. There was an exception in terms of the duality variable, which had a negative coefficient, contrary to the prediction, and the other variables indicated a positive relationship with the dividends per share. However, among these variables, the earnings per share was found to be the most powerful explanatory variable in the regression model, which was measured by their respective *Beta* weights.

The above findings concerning board composition, and ownership structure suggest that shareholders of companies with a large board size, and high institution ownership ratio are better able to force managers to distribute more cash as dividends, thus lessening the possibility of expropriation by opportunistic managers. In this regard, an efficient corporate governance mechanism tends to reduce the agency conflicts of interests between managers and shareholders, and limits managers' opportunistic behaviour in deciding the dividend policy.

One of the findings of this study is that there was a significant positive relationship between



duality, and the dividends pay-out policy, which is in the opposite direction of the hypothesized relationship. This may imply that managers of such companies, in which there is duality, may be obligated to pay cash dividends to compensate for the poor governance within the company. On the other hand, companies with a strong governance system may not pay or pay less dividends, so that they can retain the profit and cash for future profitable projects and without the need to go to expensive external sources. This finding also has implications for regulatory authorities, and the ASE, specifically that several companies still do not comply with initiatives of corporate governance best practices, which require listed companies to separate between the positions of the chief executive officer and the chairman of the board.

REFERENCES

- Abdelsalam, O., El-Masry A., Elsegini S. (2008), "Board composition, ownership structure and dividend policies in an emerging market: Further evidence from CASE 50", *Managerial Finance*, Vol. 34 No. 12, pp. 953-964.
- Ahmad, M. N., Khan, F. U., and Khan, Y. (2019) "Board Composition, Ownership Structure and Dividend Payout Policy: Evidence from PSX-100 Index of Pakistan". *Journal of Business and Tourism*. Vol. 5, NO. 1.
- Aidong, H. and Praveen, K. (2004), "Managerial Entrenchment and Payout Policy", *Journal of Financial and Quantitative Analysis*, Vol. 39 No.4, pp. 759-790.
- Al-Najjar, B. and Belghitar Y. (2014), "Do corporate governance mechanisms affect cash dividends? An empirical investigation of UK firms", *International Review of Applied Economics*, Vol. 28 No.4, pp. 524-538.
- Al-Najjar, B., and Erhan K. (2016), "The effect of ownership structure on dividend policy: Evidence from Turkey", *Corporate Governance International Journal of Business in Society*, Vol. 16 No.1, DOI: [10.1108/CG-09-2015-0129](https://doi.org/10.1108/CG-09-2015-0129).
- Al-Najjar, B., and Hussainey K. (2009), "The association between dividend payout and outside directorships", *Journal of Applied Accounting Research* Vol. 10 No. 1, pp. 4-19.
- Anderson, D. R., Sweeney, D. R. and Williams, T. A. (1993), "Statistics for Business and Economics", Fifth Edition, *West Publishing Company*, St. Paul, MN.
- Baliga, R. B., Moyer, C. R., and Rao, R. S. (1996), "CEO Duality and Firm Performance: What's the Fuss?", *strategic management journal*, Vol 17, No. 1, pp. 41-53.
- Benjamin, S. J., Zain, M. M. (2015) "Corporate governance and dividends payout: are they substitutes or complementary?", *Journal of Asia Business Studies*, Vol. 9 No. 2, pp.177-194.
- Bokpin, G.A. (2011), "Ownership structure, corporate governance and dividend performance on the Ghana Stock Exchange", *Journal of Applied Accounting Research*, Vol. 12 No. 1, pp. 61-73.
- Borokhovich, K., Brunarski, K., Harman, Y. and Kehr, J. (2005), "Dividends, Corporate Monitors and Agency Costs", *The Financial Review*, Vol. 40, pp. 37-65.
- Chen, C. R., Steiner, T. L. (2005), "Managerial Ownership and Agency Conflicts: A Nonlinear Simultaneous Equation Analysis of Managerial Ownership, Risk Taking, Debt Policy, and Dividend Policy". *The Financial Review*, Volume 34, No. 1, pp. 19-136.



- Chen, Z., Cheung, Y-L. Stouraitis, A., and Wong, A.W.S. (2005) "Ownership concentration, firm performance, and dividend policy in Hong Kong", *Pacific-Basin Finance Journal*, Vol 13, No. 4, pp. 431-449.
- Duqi, A., Jaafar, A., Warsame, M. H., (2020), "Payout policy and ownership structure: The case of Islamic and conventional banks". *The British Accounting Review*, Vol. 52, No. 1, [DOI.org/10.1016/j.bar.2019.03.001](https://doi.org/10.1016/j.bar.2019.03.001).
- Eckbo B.E., and Verma, S., (1994), "Managerial shareownership, voting power, and cash dividend policy", *Journal of Corporate Finance*, Vol 1, No. 1, pp. 33-62.
- Elmagrhi, M., Ntim, C., Crossley, R., Malagila, J., Fosu, S., and Vu, T. (2017), Corporate governance and dividend pay-out policy in UK listed SMEs The effects of corporate board characteristics, *International Journal of Accounting and Information Management*, Vol. 25 No. 4, pp. 459-483.
- Fama, E. F. (1980), "Agency Problems and the Theory of the Firm", *Journal of Political Economy*, Vol. 88, pp. 288-307.
- Farinha, J. (2004) "Dividend Policy, Corporate Governance and the Managerial Entrenchment Hypothesis: An Empirical Analysis", *Journal of business Finance and Accounting*, Vol 30, pp. 9-10.
- Gitman, L. J., and Zutter, C. J. (2015). "Principles of managerial finance", 14th Edition, *Pearson*.
- Glen, J.D., Karmokolias, Y., Miller, R.R. and Shah, S. (1995), "Dividend policy and behaviour in emerging markets: to pay or not to pay", IFC Discussion Paper 26, International Finance Corporation, Washington, DC.
- Hu, A. and Kumar, P. (2004), "Managerial Enrichment and Payout Policy", *Journal of Financial and Quantitative Analysis*, Vol. 39, No. 4, pp. 759-790.
- Jensen, M. (1983), "Separation of Ownership and Control", *Journal of Law and Economics*, Vol. 26, pp. 327-349.
- Jeon, J.Q., Lee, C. and Moffett, C.M. (2011), "Effects of foreign ownership on payout policy: evidence from the Korean Market", *Journal of Financial Markets*, Vol. 14 No. 2, pp. 344-375.
- Juhmani, O. I. (2020), "Corporate Boards, Ownership Structure and Dividend Payout: Evidence from Bahrain". *Journal of Critical Reviews*, Vol 7, No. 12, pp. 37-43.



- Klein, A. (2002) "Audit committee, board of director characteristics and earnings management", *J. Account. Econ.*, Vol. 33, pp. 375- 400.
- Le, T. V., and Le, T. H. (2017), "Ownership and identities of the largest shareholders and dividend policy: Evidence from Vietnam", *Organizations and Markets in Emerging Economies*, Vol. 8 No.1, pp. 86-104.
- Mehdi, M., Sahut, J.-M. and Teulon, F. (2017), "Do corporate governance and ownership structure impact dividend policy in emerging market during financial crisis?", *Journal of Applied Accounting Research*, Vol. 18 No. 3, pp. 274-297.
- Mendenhall, W., Reinmuth, J., Beaver R., and Dunhan, D. (1986), "Statistics for Management and Economics", Fifth Edition, Duxbury Press, Boston.
- Ntim, C. G. (2011) "The King Reports, independent non-executive directors and firm valuation on the Johannesburg Stock Exchange". *Corporate Ownership and Control*, Vol. 9, pp. 428–440.
- Ntim, C.G. (2015), "Board diversity and organizational valuation: unravelling the effects of ethnicity and gender", *Journal of Management and Governance*, Vol. 19 No. 1, pp. 167-195.
- Ntim, C.G., Opong, K.K. and Danbolt, J. (2015), "Board size, corporate regulations and firm valuation in an emerging market: a simultaneous equation approach", *International Review of Applied Economics*, Vol. 29 No. 2, pp. 194-220.
- Obaidat, A. (2018) "Ownership Structure and Dividends Policy: Emerging Market Evidence", *International Business Research*; Vol. 11, No. 6, pp. 65-72.
- Tahir, H., Masri, R., and Rahman, M. (2020), "Determinants of Dividend Pay-Out Policy of Listed Non-financial Firms in Malaysia", *International Journal of Financial Research*, Vol. 11, No. 2, pp. 68-76.
- Yarram, S. R., Dollery, B. (2015) "Corporate governance and financial policies: Influence of board characteristics on the dividend policy of Australian firms", *Managerial Finance*, Vol. 41 No. 3, pp.267-285.