The Effect of Ownership Structure on Dividend Payout Policy: Evidence from Jordanian Context

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Abstract

This research examines the possible association between ownership structure and Jordanian industrial public shareholding companies' dividend payout policy. The present study examines the payout behavior of dividends for Jordanian industrial public shareholding companies over the period 2005-2007. The results consistently support that there is positive and significant relation between foreign ownership structure and the dividends payout policy through Tobin's Q. However, the results document significant relationship between foreign ownership structure, company size and debt ratio and dividends policy measured by return on assets (ROA).

Keywords: Dividend Payout Policy, Ownership structure, Amman Stock Exchange (ASE)

1. Introduction

In many countries, family business groups contribute significantly to economic activity. More than 30% of large public firms worldwide belong to family business groups and the firms in such groups are usually controlled by a few founding families using stock pyramid, dual-class share and cross-shareholding ties to consolidate corporate control (La Porta et al.,1999). These equity-based control enhancing mechanisms enable a controlling family to exercise control influence over group firms with minimal cash flow rights in the firms, which, in turn, drives a substantial wedge between ownership and control. For example where a family uses stock pyramid such that the family directly owns 50% of a firm, which in turn owns 50% of another firm, the family achieves control of the latter with a cash flow right of only 25%.

The separation between ownership and management rights incurs agency problem (Jensen and Meckling, 1976), and the incurred agency cost can be extreme, especially when investor protection rights are weak. The extreme agency cost under a weak protection for minorities is well-documented in law and finance literature (La Porta et al., 2002,

Faccio et al., 2002, and Claessens et al., 2000). Nenova (2003) and Dyck and Zingales (2004) document evidence that Private control benefit in market with poor investor protection is substantial suggesting that weak protection rights for minorities drive a high control premium. These studies suggest that with weak investor protection rights, a controlling family can generate a large Private control benefit which fuels the incentive to adopt control enhancing mechanisms that secure control over group firms.

The dominant form of ownership structure in Jordan is family affiliation business groups. These families own several listed and unlisted companies operate in different sectors. These firms although seem independent legally. They are connected to each other in a way or another because they are owned by one family. It is expected that Agency theory would not be applicable within these groups, as the majority of these firms are managed by members of the family which distort the entity theory and the corporate governance code that have been issued by the Amman Stock Exchange Committee (ASE). This paper empirically examines the relationship between the ownership structure and dividend payout policy of (168) Jordanian industrial public shareholding companies for the period 2005-2007.

2. Literature Review

A substantial theoretical literature, including Bhattacharya (1979; 1980), Linter (1956), Linter (1962), Miller and Rock (1985) suggest that corporate dividend policy is designed to reveal earnings prospects to investors. Fama (1974) argue that firms a priory set their target dividend level and try to stick to it. Furthermore, there may be interrelation between dividend payout policy and agency cost (Jensen and Meckling, 1976). Lalay (1982) investigate a large sample of bond indentures focusing on conflict between shareholders and bondholders on the dividend decision. Bhattacharya (1979; 1980) derive the existence conditions for a non dissipative signaling model and show that dividends are signals for future cash flows. Gorden (1959) in his seminal work proposes that even in presence of perfect capital market, the existence of uncertainty about the future cash flow, success to make the price of shares dependent upon the dividend policy. Feldstein and Green (1983) provide a model of market equilibrium to explain why firms that maximize the value of their shares pay dividends. Miller and Modigliani (1961) in their pioneer work analyze the effect of dividend policy on the current price. They found no dividend policy is superior to any other dividend policy and that it is therefore irrelevant in firm value and/or maximizing shareholders' wealth.

Jensen et al. (1992) analyze the determinants of cross sectional differences in insider holdings, debt and dividend policies of firms. They find that high insider ownership firm chooses lower level of dividend.

Short et al. (2002) examine the potential association between ownership structures and dividend policy for the UK companies. They present the first results for the UK, where the institutional framework and ownership structures are different from those of the US. The results consistently produce strong support for the hypothesis that a positive association exists between dividend payout policy and institutional ownership. In addition, there is some evidence in support of the hypothesis that a negative association exists between dividend payout policy and managerial ownership.

Gugler (2003) investigates the relationship between dividend and ownership and control structure of the firm for Austrian firms over the period of 1991-1999. The results indicate that state-controlled firms engage in dividend smoothing, while family-controlled firms do not.

Kumar (2003) examines the possible association between ownership structure, corporate governance and firm's dividend payout policy. He examines the payout behavior of dividends and the association of ownership structure for Indian corporate firms over the period 1994-2000. Kumar finds support for the association between ownership structure and dividend payout policy.

Wei et al. (2003) investigate the relation between dividend payout policy and ownership structure using 3994 observations of Chinese listed firms for the period from 1995 to 2001. They find that there is a significantly positive correlation between the state ownership and cash dividends, but a significantly negative correlation between the public ownership and stock dividends.

Trojanowski (2005) examines payout policies of British firms listed on the London Stock Exchange during the 1990s. In a dynamic panel data regression setting, he relates target payout ratios to a wide group of ownership structure variables that characterize the sample firms. The major finding is that the payout policy in the UK is significantly related to ownership of the companies. The presence of strong block holders weakens the relationship between the corporate earnings and the payout dynamics.

Chen and Steiner (2005) use a nonlinear simultaneous equation methodology to examine how managerial ownership relates to risk taking, debt policy, and dividend policy. The results have implications for their understanding of agency costs. They find that risk is positive and significant determinant of the level of managerial ownership while

managerial ownership is also a significant and positive determinant of the level of risk. The result supports the argument 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. They further observe evidence of substitution-monitoring effects between managerial ownership and debt policy, between managerial ownership and dividend policy, and between managerial ownership and institutional ownership.

In more comprehensive study, Chen et al. (2005) analyze a sample of 412 publicly listed Hong Kong firms during the period of 1995–1998 in order to answer three questions. Does concentrated family ownership affect firm operating performance and value? Does it affect dividend policy? What is the impact of corporate governance on performance, value, and dividend payouts? Results do not show a positive relationship between family ownership and return on assets, return on equity or the market-to-book ratio. In addition, they find a negative relationship between CEO duality and performance (where CEO duality is much more likely in family-controlled firms). They also find little relationship between family ownership and dividend policy. However, only for small firms there is a significant negative relationship between dividend payouts and family ownership up to 10% of the company's stock and a positive relationship for family ownership between 10% and 35%. Dividend payouts in small firms also show little sensitivity to performance. Finally, the composition of the board of directors (proportion of independent non-executive directors, outsider-dominated board, and presence of audit committees) has little impact on firm performance and dividend policy, particularly for small market capitalization firms.

Moh'd et al. (2005) examine the influence of agency costs and ownership concentration on the capital structure of the firm of particular interest of composition of equity ownership as a determinant of overall capital structure and the dynamic adjustment of capital structure to changes in the equity ownership. The results indicate that the distribution of equity ownership is important in explaining overall capital structure and managers ownership do reduce the level of debt as their own wealth is increasingly tied to the firm.

Mancinelli et al. (2006) investigate the relationship between dividend policy and ownership structure using a sample of 139 listed Italian companies. The results of the empirical analysis reveal that firms make lower dividend payouts as the voting rights of the largest shareholder increase. Additionally, the results also suggest that the presence of agreements among large shareholders might explain the limited monitoring power of other `strong' non-controlling shareholders.

Khan (2006) investigates the relationship between dividends and ownership structure for a panel of 330 large quoted UK firms. The results indicate a negative relationship between dividends and ownership concentration. Ownership composition also matters, with a positive relationship observed for shareholding by insurance companies, and a negative one for individuals.

Gerald et al. (2009) examine the determinants of cross-sectional differences in insider ownership, debt, and dividend policies. These policies are related not only directly, but also indirectly, through their relationship with operating characteristics of firms. To distinguish these effects, they examine the determinants of the three policy choices within a system of equations. Their empirical results support the hypothesis that level of insider ownership differ systematically across firms. Further, high insider ownership firms choose lower levels of both debt and dividends. Finally, the effects of profitability, growth, and investment spending on debt and dividend policy support a modified "pecking order" hypothesis.

Ramli (2010) investigates the effect of large shareholders and dividend policy of Malaysian companies using panel data from 2002 to 2006. Ownership structure in Malaysia is concentrated; therefore the relevant agency conflicts to analyze are the one that arises from the relationship between large shareholders and minority shareholders. The result shows that companies make higher dividend payout as the shareholding of the largest shareholder increase. The magnitude of dividend payout is also larger when there is a presence of the substantial second largest shareholder in the company.

3. Research Methodology

This section presents research methodology adopted in this study. It explains sample selection criteria, variables of the study and research model.

3.1 The Research Sample

The study examines all industrial companies listed on the Amman Stock Exchange (ASE) for the period from 2005 to 2007. The total number of industrial companies listed in ASE in 2007 is 77 company. However, 21of which are deleted due to unavailability of annual reports before 2007 or due to merger and acquisition activities. Thus, the final sample consists of 168 firm-observations for the companies listed on the ASE for the period 2005-2007. The

combination of these companies represents several ownership structure models in order to examine whether there are different in their dividend payout policy.

3.2 Variables of the Study

3.2.1 Dependent Variable-Dividends Policy

In the regression, our main proxies for dividend policy are the return on assets (ROA) and Tobin's q.: Tobin's q. is a ratio comparing the market value of a company's stock with the value of a company's equity book value. The ratio was developed by James Tobin (Tobin 1969). It is calculated by dividing the market value of a company by the replacement value of the book equity:

Tobin's q = (Equity Market Value + Liabilities Book Value)/(Equity Book Value + Liabilities Book Value)

Furthermore, return on assets (ROA) is applied as an accounting measure that is beyond management manipulation and shows a balance-sheet effect. It is calculated at the firm level as the earnings before interest and taxes (EBIT) over total assets. The advantage of this measure is that it is not influenced by the liability structure of the corporation, as it excludes interest payments and financial income. The ratio reflects the availability of resources to distribute once investment funding is secured, which should increase dividend payments. Tobin's q reflects expectations about future earnings and market perceptions about the value of the company. Companies' demand of funds for further investments is represented by a high Tobin's q value, which should have a negative impact on dividends.

3.2.2 Independent variables-Ownership Structure

Differs according to the several models of   ownerships, used in the study, the researcher classify the ownership to four categories (Private, Government, Foreign, and Family). A dichotomous variable equal to 0 if the firm i has any of the previous ownership, and 1 otherwise. The underneath hypotheses represent the exp0ected relationship between the alternative independent variables and dependent variable.

H01: There is no relationship between Private ownership structure and firm's dividend payout policy.

H02: There is no relationship between government ownership structure and firm's dividend payout policy.

H03: There is no relationship between foreign ownership structure and firm's dividend payout policy.

H04: There is no relationship between family ownership structure and firm's dividend payout policy.

Size and debt ratio are added to regression model as control variables. Table (1) presents the proxies of dependent and independent variables.

3.3 Research Model

In order to test the study hypotheses, the research model can be designed as follows:

$$DPP. = \beta 0 + \beta 1\ Priv + \beta 2\ Fam + \beta 3\ Foreign + \beta 4\ Gov + \beta 5\ Size + \beta 6\ Debt + e$$

Where: DPP = dividend payout policy; β = the regression coefficient, i = 0, 1… 6; Priv = Private ownership; Farn = family ownership; Foreign = foreign ownership; Gov = government ownership; Size = company size; Debt = debt ratio; e = error term.

4. Statistical Analysis

This section presents the results of descriptive, univariate and multivariate analyses for the study variables.

4.1 Descriptive Analysis

Table (2) presents the results of descriptive analysis for the dependent variables and continuous independent variables. As it can be seen in this Table, on average companies distribute 1.54 as dividend using Tobin's Q as a proxy for independent payout policy with a minimum of 0.32 and a maximum of 5.83. The standard deviation of Tobin's Q is 0.827 documents that there is low variation between companies in paying dividend for their shareholders.

4.2 Univariate Analysis

This section presents the results of univariate analysis for each of the ownership structure variables, namely; Private ownership, government ownership, foreign ownership and family ownership and dividend payout policy expressed by Tobin's Q. Table (3) presents the result the two independent sample t-test. The results demonstrate that foreign ownership is the only variable shows significant differences in the mean of dividend payout policy expressed by Tobin's Q. Thus, H03 which hypothesized that there is no relation between dividend payout policy and foreign ownership is rejected.

Table 4 presents the results of the Mann-Whitney U test (a non-parametric analysis alternative of the two independent sample t-test). The results of the Mann-Whitney U test provide inferences quite similar to those reported based on the t-test presented in Table 3.

Additionally, Table 5 and 6 present the results of the two independent sample t-test and the Mann-Whitney U test for each of the ownership structure and dividend payout policy expressed by return on asset. The results of these Tables provide similar results to those reported in Tables 3 and 4, with only slight difference in that private ownership appears to be significant at the level of 5%.

4.3 Multivariate Analysis

In order to test whether dividend payout policy is significantly associated with ownership structure characteristics and control variables, a multiple OLS regression analysis is performed using SPSS version 17. Multiple regression assumptions are checked before the analysis has been performed in order to ensure that the assumptions are not violated. Table (7) presents the correlation matrix among the independent variables. However, the correlation matrix indicates multicollinearity problem between private ownership and family ownership (r = - 0.796). The rule of thumb for checking for a collinearity problem involves looking for such a problem when the correlation is more than 0.80 (Field, 2005).   Field (2005) suggests that this problem can be solved when one of collinearity variables is omitted from regression model. Therefore, private ownership is omitted from the main regression model which is expressed by Tobin's Q.

Table (8) presents the results of multiple OLS-regression analysis. This model is highly significant (F = 4.712 P-Value = 0.000) with an adjusted R^2 10.1%, which means that the combinations of the Independent variables explain around 10 % of variation of dependent variables. Specifically, divided payout policy is found to be related to foreign ownership at the level of 1 %. This result reveals that there is positive relation between foreign ownership and dividend payout policy. This result is consistent with previous studies such as Short at al. (2002) and Kumar (2003). Additionally, the results documents positive relation between dividend payout policy and government ownership at the level of 10%. This result is consistent with precious studies such as Gulger (2003) and Wei et al. (2003). However, the results reveal that there is no relation between dividend payout policy and family ownership. This result is consistent with previous studies such as and inconsistent with Gulger (2003) and Chen et al. (2005).

4.4 Sensitivity Analysis

Additional regression model is performed using private ownership instead of family ownership and the results document similar inferences. In particular, the result indicates no relation between dividend payout policy and private ownership. This result is consistent with Short et al. (2003) and inconsistent with previous studies such as Jensen et al. (1992), Chen and Steinar (2005), Trojanowski (2005), Gerald et al. (2009) and Moh'd et al. (2005).

On the other hand, In order to examine whether the results of the study are sensitive to change in measure of dividend payout policy, return on asset (ROA) is employed as proxy for dividend payout policy instead of Tobin's Q. Multiple regression analysis is performed and the results are expressed in Table (9).

The results indicate that foreign ownership and size are positively related to dividend payout policy, whereas, debt is negatively related to dividend payout policy. In general, the results of regression models tend not to conflict with the conclusion provided by primary analysis of the study.

5. Summary and Conclusion

The objective of this study is to examine the relationship between ownership structure and dividend payout policy for the industrial companies listed on the ASE for period 2005-2007. The empirical results reveal that there is no relation between Private ownership, government ownership, foreign ownership structure and the dividends policy measured by Tobin's Q. However, the results show positive and significant relation between foreign ownership and dividend payout policy. Several multiple regression analyses are run used ROA as proxy for dividend payout policy instead of Tobin's Q reveal that the results are robust across alternative ownership structure.

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Table 1. Independent Variables and their Measurements

Independent Variables	Code	Proxies
Private ownership	PRIV	A dichotomous variable equal to 1 if the firm i has private ownership, and 0 otherwise.
Government ownership	GOV	A dichotomous variable equal to 1 if the firm i has government ownership, and 0 otherwise.
Family ownership	FAM	A dichotomous variable equal to 1 if the firm i has family ownership, and 0 otherwise.
Foreign ownership	Foreign	A dichotomous variable equal to 1 if the firm i has foreign ownership, and 0 otherwise.
Control Variables		
Company size	SIZE	The natural logarithm of total asset
Financial leverage	Debt	Total debt to total assets.

Table 2. Descriptive Analysis for Dependent and Continues Independent Variables

Variable	Minimum	Maximum	Mean	Std. Deviation
Tobin's Q	.32	5.83	1.5387	.82742
ROA	-32.41	28.42	4.1343	8.55303
Size	3.782	20.113	16.43319	2.121088
Debt	-.26	91.63	31.7499	20.31506

Table 3. Descriptive and Univariate Analysis between Dividend Payout Policy Expressed by Tobin's Q and Dichotomous Independent Variables-Parametric Test

Variables	No. of cases Exist/non-Exist	Mean	S.D	Equal variance t-test t-value	2-tail sig
PRIV	64	1.4281	0.624	1.355	0.77
	107	1.6049	0.925		
GOV	3	2.0167	1.054	-1.009	0.314
	168	1.5302	0.824		
FAM	87	1.4493	0.790	1.502	0.135
	83	1.6400	0.861		
Foreign	16	2.4163	1.188	-3.200	0.006***
	155	1.4481	0.728		

*** Significant at the 1% level

Table 4. Descriptive and Univariate Analysis between Dividend Payout Policy Expressed by Tobin's Q and Dichotomous Independent Variables-Non-parametric Test

Variables	No. of cases Exist/non-Exist	Mean rank	Mann-Whitney U-test z-value	Asymp. Sig. (2-tailed)
PRIV	64	81.82	-0.854	0.393
	107	88.50		
GOV	168	119.17	-1.171	0.242
	3	85.41		
FAM	87	79.82	-1.540	0.124
	83	91.45		
Foreign	16	129.41	-3.684	0.000***
	155	81.52		

*** Significant at the 1% level

Table 5. Descriptive and Univariate Analysis between Dividend Payout Policy Expressed by ROA and Dichotomous Independent Variables-Parametric Test

Variables	No. of cases Exist/non-Exist	Mean	S.D	Equal variance t-test t-value	2-tail sig
PRIV	64	2.438	7.766	-1.109	0.269
	107	5.149	8.871		
GOV	168	4.0374	8.575	-1.1615	0.239
	3	9.5567	5.807		
FAM	87	4.0216	7.40	0.170	0.865
	83	4.2466	9.71		
Foreign	16	2.4163	1.875	-3.200	0.006***
	155	1.4481	0.728		

*** Significant at the 1% level

Table 6. Descriptive and Univariate Analysis between Dividend Payout Policy Expressed by ROA and Dichotomous Independent Variables-Non-parametric Test

Variables	No. of cases Exist/non-Exist	Mean rank	Mann-Whitney U-test z-value	Asymp. Sig. (2-tailed)
PRIV	64	75.70	-2.103	0.035**
	107	92.16		
GOV	168	85.31	-1.365	0.172
	3	124.67		
FAM	87	83.94	-0.424	0.672
	83	87.14		
Foreign	16	128.59	-3.613	0.000***
	155	81.60		

*** Significant at the 1% level

** Significant at the 5% level

Table 7. Correlation Matrix

Variable	PRIV	GOV	FAM	Foreign	Size
GOV	-.103				
FAM	-.796***	-.137*			
Foreign	-.248***	-.043	-.330***		
Size	-.092	.199***	-.144	.309***	
Debt	-.015	.115	-.126	.167**	.343***

*** Significant at the 1% level

** Significant at the 5% level

* Significant at the 10% level

Table 8. The Results of Multiple Regression Analysis of Dividend Payout Policy Expressed by Tobin's Q and Family Ownership among other Independent Variables

Variables	Coefficients	t-statistic	VIF
Intercept	1.880	1.994**	
GOV	0.858	1.780*	1.183
FAM	0.006	0.043	1.158
Foreign	1.031	4.123***	1.454
Size	-0.029	-0.486	1.573
Debt	0.001	0.232	1.143
Adjusted R2	10.1%		
Model F Test	4.712 P-value = .000		

*** Significant at the 1% level

** Significant at the 5% level

* Significant at the 10% level

Table 9. The Results of Multiple Regression Analysis of Dividend Payout Policy Expressed by ROA and Family Ownership among other Independent Variables

Variables	Coefficients	t-statistic	VIF
Intercept	-27.728	-2.870***	
GOV	2.205	0.431	1.183
FAM	1.514	1.124	1.158
Foreign	4.806	1.975**	1.454
Size	1.993	3.312***	1.573
Debt	-0.081	-2.426**	1.143
Adjusted R2	11.9%		
Model F Test	5.504 P-value = .000		

*** Significant at the 1% level

** Significant at the 5% level

* Significant at the 10% level