

# The Jordanian Catering Theory of Dividends

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## Abstract

This paper aims to investigate the validity of Catering Theory of dividend in the Jordanian market. Utilizing unbalanced pooled cross-sectional time series OLS regression model for all Amman Stock Exchange listed companies, after excluding the financial sector firms and non-consistently dividends-paying firms, for the time period of 1999–2013. Findings indicate that dividend premium, a proxy for Catering Theory, is affected by the explanatory variables. Therefore, the study concluded that Amman Stock Exchange listed companies counts for the investors require for dividends and react to this require in their dividend policy, and thus, confirming the validity of the Catering Theory of dividend in the Jordanian market.

**Keywords:** Jordan, catering theory, dividend

## 1. Introduction

Dividend policy has long considered one of the most important topics in the financial literature. In spite of the large volume of research on this subject, it is still an arena of dispute and a subject of debate. In fact, since the M&M 1961 irrelevance proposition, many researchers have proposed several explanations for the dividends in inefficient markets, and in spite of the size of these studies and their concentration on the US-market, there is no definitive answer to why investors prefer dividend.

Behavioral finance literature is considered one of the most important evidence that cast doubt on the fact that the investors are indifferent with regard to dividends, assuming that psychological characteristics of investors will affect the behavior of financial markets, and the irrational behavior of investors determines the control procedures of the financial markets.

Accordingly, The most plausible and important explanations (Zhang, 2006; Coval, Stein & Baker, 2008; Han, 2008; Kurov, 2008, among others) are based on investors' desires. The equilibrium clientele theory considered the first theory that provided explanations for investors' desire to obtain dividends. This theory suggests that a changes in investors' desire for dividends is associated with change in dividend policies.

An explanation to the dividends payout has its origin on the catering theory of dividends anticipated by Baker and Wurgler (2004a). Baker and Wurgler offers experiential proof that changes in the amount of dividends that companies pay can be explained by what so called "catering incentives", which is, a determine of the market desire for dividend-paying stocks. The catering theory suggests that companies correct their dividend in reply to their share holders' claim for dividend.

As an alternative of focusing on investor decisions, the catering theory of dividends suggest that company will logically react to time variation in investor demand for dividends by adjusting their dividend policy. Baker and Wurgler indicate that management behavior in the US is in line with the catering theory of dividends. Baker and Wurgler count for dividend initiation and omission decisions and link them with the share price premiums for dividend payers. As for the initiations, the relation with a price premium for dividends is remarkably strong, where the relation between dividend premium and dividend initiation is existed.

Catering theory of dividend received great interest since the paper of Baker and Wurgler (2004a,b) where dividend premium has received a significant attention as one of the most important factors that influence the payout policy of the company. Fairchild and Zhang (2005) expand Baker and Wurgler's (2004a, b) model, where they included the repurchase premium factor as one of the important factors that are taken into account when determining payout policy. Their model concluded that the firm's stimulants to cater out of dividends or stock

repurchase, or not to distribute profits in order to reinvest, depends on the manager's time horizon and the value of dividend and repurchasing premium.

Ferris et al. (2006) examine if U.K. firms have lower tendency to pay dividends. Controlling for profitability and firm size, the results find that the number of companies that distribute dividends has dropped down to 54.5% from 75.9% during the study period. To clarify these changes in payout policy, Ferris et al. inspected dividend premium of U.K. firms and discover that catering incentives appeared to shift in the U.K. Ferris et al. conclude that these changes in catering incentives expected to clarify why less U.K. firms are willing to pay dividends.

Li and Lie (2006) expand Baker and Wurgler's (2004a) by counting for increases and decreases in dividend. They explained that while Baker and Wurgler's (2004a) model can explain the distribution or refrain from distributing profits, there is no evidence of their ability to explain the change in the level of distribution of profits.

Accordingly, Li and Lie assume that investors classify companies based on the level of dividend of profits and not just into payers and non-payers companies. They find that the probability of increases and decreases of dividend and the percentage change in the dividend affect the dividend premium. Precisely, dividend is positively associated with the dividend premium, so that, as the dividend premium increases, an increase in the dividend is most likely to appear, and more probability if the dividend premium is low, that firms will decrease dividends and repurchase shares.

Denis and Osobov (2008) investigate the catering theory in developed financial markets by investigating the association between the tendency to pay dividends and the Baker and Wurgler's (2004a, b) dividend premium. Their finding did not afford support for the catering theory of dividends for market other than the U.S.

As far as we know, this new theory has not been tested for Jordan; thus, testing the Catering Theory using Jordanian data is an objective of this paper.

Findings indicate that dividend premium, a proxy for Catering Theory, is affected by dividend per share; the firm size; return on assets; net operating cash flow and previous year dividend per share the explanatory variables. Therefore, the study concluded that Amman Stock Exchange listed companies counts for the investors require for dividends and react to this require in their dividend policy, and thus, confirming the validity of the Catering Theory of dividend in the Jordanian market.

The rest of the paper will be organized as follows. Section 2 presents the data and methodology. Section 3 presents the empirical results. Section 4 presents the conclusions.

## 2. Data and Methodology

This study utilized an unbalanced pooled cross-sectional time series OLS regression model for all Amman Stock Exchange Listed Companies within the time period 1999-2013. Non-payers and Financial firms were excluded from the sample resulting in 1380 firm-year observation for the complete time period. Relevant firm level data, namely, dividend premium a proxy of catering theory; dividend per share; the firm size; return on assets; growth opportunities; firm's debt level ; net operating cash flow and previous year dividend per share, were extracted from the historical information provided by officially website of the Amman Stock Exchange (ASE).

To achieve the aims of the study, this study seeks to test the validity of the catering theory of dividends in the Jordanian stock market. Thus, this study seeks to test the following hypothesis:

*H<sub>0</sub>: There is no significant effect of the traditional determinants of dividend payout namely, dividend per share; the firm size; return on assets; growth opportunities; firm's debt level; net operating cash flow and the previous year dividend per share, on the dividend premium for the Amman Stock Exchange listed companies.*

Thus, the null hypothesis can be formed as:

$$H_0: \beta_i = 0, \quad \text{; } sig < 0.05 \quad (1)$$

Where:  $H_0$  is the null hypothesis to be tested;  $\beta_i$  is the regression coefficient of the independent variables (e.g. traditional determinants of dividend payout) in the econometric model to be estimated.

Dividend premium, a proxy of the catering theory of dividend, can be seen as a function of the dividend per share; the firm size; return on assets; growth opportunities; firm's debt level; net operating cash flow and previous year dividend per share, therefore, the estimation regression model of the study can be written as follows:

$$Dprem_{it} = \alpha + \beta_1 DPS_{it} + \beta_2 SIZ_{it} + \beta_3 ROA_{it} + \beta_4 GO_{it} + \beta_5 LEV_{it} + \beta_6 NOCF_{it} + \beta_7 DPS_{it-1} + \varepsilon_{it} \quad (2)$$

where:  $Dprem$  is the dividend premium, a proxy for catering theory, following Baker and Wurgler's (2004a)

$Dprem$  defined as the log difference between the average market to book ratio of dividend payers and non payers;  $i$  is the  $i^{th}$  cross-sectional firm;  $t$  is the  $t^{th}$  period;  $\alpha$  is constant in the estimation regression model;  $\beta^s$  are the unknown parameters of the estimation regression model to be estimated;  $DPS$  is dividend per share defined as the total dividends paid out over an entire year divided by the number of outstanding ordinary shares issued;  $SIZ$  is the size of the firm defined as the natural log of total assets;  $ROA$  is the return on assets, a proxy of the firm's profitability, defined as the ratio the net income to total assets;  $GO$  is the growth opportunities of the firm defined as the market value to book value ratio;  $LEV$  is the firm's debt level defined as total debts to total assets;  $NOCF$  is the net operating cash flow of the firm.

### 3. Empirical Results

#### 3.1 Descriptive Analysis

Table 1 shows the descriptive analysis for all variables included in the study during the fifteen years of the study period, based on data of 1380 firm-year observation for the Amman Stock Exchange Listed Companies. The investors in ASE, on average, received 7% cash dividend during the study period. Also, the table shows an average of 7.3% as an return on the assets. Leverage, an average, is 74.2%, pointed out a heavily use of debt in the capital structure as almost 75% of the needed money came from borrowing sources.

Table 1. Descriptive analysis

Variable	Obs.	Mean	Std. Dev	Min	Max
<b>Dprem</b>	1380	0.62	0.314	0.09	1.13
<b>DPS</b>	1380	0.07	4.52	0	0.84
<b>SIZ</b>	1380	4.55	0.81	3.74	5.51
<b>ROA</b>	1380	.073	0.57	-0.94	3.28
<b>GO</b>	1380	1.12	0.96	0.25	2.43
<b>LEV</b>	1380	0.742	57.94	0.026	0.924
<b>NOCF<sup>1</sup></b>	1380	18.23	3.57	9.21	30.14
<b>DPS<sub>t-1</sub></b>	1380	0.07	4.52	0	0.84

Where:  $Dprem$  is the dividend premium, a proxy for catering theory, defined as the log difference between the average market to book ratio of dividend payers and non payers,  $DPS$  is dividend per share defined as the total dividends paid out over an entire year divided by the number of outstanding ordinary shares issued;  $SIZ$  is the size of the firm defined as the natural log of total assets;  $ROA$  is the return on assets, a proxy of the firm's profitability, defined as the ratio the net income to total assets;  $GO$  is the growth opportunities of the firm defined as the market value to book value ratio;  $LEV$  is the firm's debt level defined as total debts to total assets;  $NOCF$  is the net operating cash flow of the firm. \*\*, \* 1% and 5% significance level respectively. The critical t-value for 7 df at 1%, 5% = 2.3646% and 1.8946% respectively.

1) cash flow values are rescaled to avoid measurement unit error.

#### 3.2 Regression Analysis

The Regression analysis is performed to investigate the validity of the Catering theory of dividend in the Jordanian market. From table 2, the variables that were tested in the study can explain almost 63% of the variation in the dividend premium, a proxy for catering theory ( $adj. R^2 = 0.6278$ ). Also, the Econometrics model is significant at 1% level of significant ( $p-value = 0.000$ ), and has no serial correlation problem ( $D-W = 1.78$ ).

Table 2. Regression analysis

Explanatory Variables	$\beta$	t-statistic	p-value
DPS	0.078*	2.378	0.0491
SIZ	0.334**	3.578	0.0089
ROA	0.809*	3.161	0.0159
GO	-0.063	1.704	0.1329
LEV	-0.715	2.145	0.0678
NOCF <sup>1</sup>	0.464*	2.433	0.0452
DPS <sub>t-1</sub>	0.591**	4.078	.0047
No. of observation	1380		
R <sup>2</sup>	0.63		
Adj. R <sup>2</sup>	0.6278		
D-W statistic	1.78		
F-statistic	291.8		
Sig of F	0.000		

Where: Dprem is the dividend premium, a proxy for catering theory, defined as the log difference between the average market to book ratio of dividend payers and non payers, DPS is dividend per share defined as the total dividends paid out over an entire year divided by the number of outstanding ordinary shares issued; SIZ is the size of the firm defined as the natural log of total assets; ROA is the return on assets, a proxy of the firm's profitability, defined as the ratio the net income to total assets; GO is the growth opportunities of the firm defined as the market value to book value ratio; LEV is the firm's debt level defined as total debts to total assets; NOCF is the net operating cash flow of the firm. \*\*, \* 1% and 5% significance level respectively. The critical t-value for 7 df at 1%, 5% = 2.3646% and 1.8946% respectively.

1) Cash flow values are rescaled to avoid measurement unit error.

The result in table 2 shows that the dividend premium, a proxy for catering theory, is affected by the explanatory variables. The dividend per share is significantly positively associated with the dividend premium, which implies that the value placed by investors on dividend paying stocks, is derived from the high dividend per share ratio. Another finding is that each of the profitability, firm's size, cash flow and previous dividend per share significantly applies positive effect on the dividend premium, the proxy of the catering theory. This result provides support for the Catering Theory of dividend in Jordan. Table 2, also, shows insignificant negative effect of the GO and LEV on the dividend premium.

#### 4. Conclusion

This paper aimed to investigate the validity of Catering Theory of dividend in the Jordanian market. Utilizing unbalanced pooled cross-sectional time series OLS regression model for all Amman Stock Exchange listed companies, after excluding the financial sector firms and non-consistently dividends-paying firms, for the time period of 1999-2013. Findings indicate that dividend premium, a proxy for Catering Theory, is affected by the explanatory variables. Therefore, the study concluded that Amman Stock Exchange listed companies counts for the investors require for dividends and react to this require in their dividend policy, and thus, confirming the validity of the Catering Theory of dividend in the Jordanian market.

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