CATERING THEORY AND DIVIDEND POLICY: A STUDY OF MENA REGION

Hadfi Bilel *, Kouki Mondher **

* *Corresponding author*, Faculty of Science Economics and Management of Tunis, University of Tunis El Manar, Tunisia
Contact details: University of Tunis El Manar - Campus Universitaire Farhat Hached Tunis BP no. 94 – ROMMANA 1068, Tunisia
** Faculty of Science Economics and Management of Tunis, University of Tunis El Manar, Tunisia

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Abstract

According to the catering theory of dividends, a company decides to distribute its dividends according to investor demand related by a dividend premium that results in this request. This study focuses on the impact of the catering theory of dividends of the 600 MENA companies in the financial industry listed in different stock exchanges of Tunisia, Morocco, Egypt, UAE, Saudi Arabia, and Kuwait during the period 2004-2010. The study employs an event study methodology in examining the effect of investor demand for dividends on the managers' decision to distribute and change the amount of dividends. Research result indicates that companies pay dividends when demand is strong, i.e. when investors value companies that pay in a "depressed" or "bearish" market environment. Furthermore, catering persists even after controlling for the effect of some variables like tax and risk. The results confirm that the decision to change the amount of the payments depends on investor demand and the market premium resulting from the payment of dividends. Even though the result is not strong, it can be the evidence supporting the catering theory of dividend, not only in well-developed markets but also in emerging markets characterized with civil law characterized by low governance index and investor protection such as our MENA zone countries.

Keywords: Tunisia, Morocco, Egypt, UAE, Kuwait, Saudi Arabia, Dividend, Catering Theory of Dividend, Dividend Premium

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1. INTRODUCTION

Corporate dividend policy has long been an issue of interest in the financial literature, and despite the large body of research on the subject, it remains a subject open to debate. In fact, Miller and Modigliani (1961) argue that dividend policies are equivalent and there is no specific policy that can increase shareholder wealth than the perfect capital market principle. However, several researchers offered alternative explanations for dividends payout under imperfect market conditions. Despite extensive evidence in the US market on the issue, there is no definitive answer as to why investors demand dividends.

In addition, businesses have become less likely to pay dividends beyond what might be expected in terms of changes in their characteristics such as size, profitability, and growth opportunities. In fact, Fama and French (2001) found that a decline in the proportion of dividends payout by US companies cannot be explained satisfactorily by changes in their characteristics. Therefore, the decision to distribute dividends is not fully explained by the individual characteristics of each company. On the international front, different authors conducted

cross-country comparisons and found that dividend policy can be appreciated by the catering theory of dividends. Specifically, they show that common law countries enjoy high investor protection and corporate governance indices. In these countries, investor preference for dividends is generally lower and more flexible than in civil law countries. However, despite the global importance of the MENA countries, few studies examined the catering theory and dividend payout in that particular region. In contrast, many studies examined this relationship in different regions.

The purpose of this paper is to observe whether the catering theory of dividends can affect firm's dividend disbursement decisions in 6 countries from the MENA region. However, our findings yield qualitatively consistent with the previous research. After controlling for the effect of the politic crisis in Tunisia and Egypt during 2010-2013, the result shows that the firm's decision to pay dividends could be influenced by the catering of dividends. Moreover, the dividend premium will reduce the probability that firms will decide to cut or omit dividend distribution from previous years. Moreover, the investors in MENA show their preference for the dividend to self-control and satisfaction. This could be the catering incentive of the firm to decide to pay dividends. Further this document provides evidence of Baker and Wurgler's proposed catering incentives in the emerging market.

On the international front, different authors provide a cross-country comparison from different countries and find that dividend policy can be drive by the catering theory of dividends. Specifically, they show that in common law countries where high investor protection and corporate governance index are more likely to be concentrated with the investor preference for dividends are generally lower and more flexible than in the civil law countries. However, despite the global importance of the MENA zone countries, the absence of published research examined the catering theory and dividend payout. In contrast, many published studies examined this relationship in different international countries. As far as we know, the most recent studies examine the catering of dividend around firms from single-country analyses, such as Baker and Wurgler (2004), Li and Lie (2006), Kulchania (2013), Hoberg and Prahbala (2010) for the USA; Tangitprom (2013) for Thailand; Tsuji (2010) for Japan; Kuo, Philip, and Zhang (2011) for the UK; Rashid, Nor, and Ibrahim (2013) for Malaysia; Abdulkadir, Abdullah, and Wong (2013) for Nigeria. In addition, some studies investigate catering in different countries' analyses, such as Ferris, Jayaraman, and Sabherwal (2009) for 23 countries; Kuo, Philip, and Zhang (2013) for 18 countries.

Even though the result is different from each country, it can be the evidence supporting the catering theory of dividends, not only in well-developed markets but also in emerging and Arabic markets such as Tunisia, Morocco, Egypt, UAE, Kuwait, and Saudi Arabia. Besides, our paper is structured as follows. First, we review the literature on the propensity to pay dividends and catering theory proxies (dividend premiums, modified dividend premium, and market to book). Second, we estimate a regression model to examine the relationship between these different factors. Finally, we highlight policy implications and conclude the paper.

2. LITERATURE REVIEW

First, we have to admit that reaching our research objectives is not an easy task to do. Like Black (1976) has put it: "The more we look at the dividend image, the more it looks like a puzzle, with pieces that just don't fit together". Since the 1960s, there has been an ongoing debate on dividend policy, which remains controversial to this day. Why do firms pay dividends? Academics have not been yet able to agree on a convincing answer to this question, and at the same time, many even claim that companies should not pay dividends, and so we have a "puzzle of dividends". The literature shows that different authors try to explain the dividend puzzle with different classic theories of dividend. These include the irrelevance theory of Miller and Modigliani (1961) and the bird-in-hand theory of Lintner (1962) and Gordon (1959), information asymmetry and signaling theory of Bhattacharya (1979), Kose and Williams (1985) and Miller and Rock (1985), agency theory of Jensen (1986), the cycle life theory of DeAngelo, H., DeAngelo, L., and Stulz (2006) and taxes and investor clienteles theory of Elton and Gruber (1970). All of these have spawned a very extensive body of research on the topic, but most of them favored the view that firms should not pay dividends, which is not helpful to explain why firms pay dividends. History-wise, dividends have been generally taxed higher than capital gains, and this makes it even more difficult to understand why dividends are preferred.

Baker and Wurgler (2004) suggest that firms are more likely to distribute dividends when the dividend premium is high. In addition, the dividend premium plays a key role in increasing stock price reaction to dividends issuance. Ferris, Sen, and Yui (2006) examined a sample of UK firms and concluded that a drop in dividend payout to 54.5% from 75.9% is explained by different factors like profitability, size, and by a change in the dividend premium. Baker and Wurgler (2004) prove that the catering theory can explain the decision of payment payout by managers, but not the impact of managers on dividends payment to their shareholders. Grullon and Mickaely (2004) show that companies with low dividend premiums choose to repurchase stocks that allow them to substitute dividends share. Some other studies focused on investor demand theory like Ferris Sen, and Yui (2006) who argue that a change in incentive demands brings a decrease in dividends payout proportions in the UK market. Denis and Osobov (2008) declared that a decrease in dividend premiums brings an unexpected decrease in dividends distribution, especially in companies recently highly rated and characterized by a low dividend issuance rate. Consistent with the literature, Von Eije and Megginson (2008) found no proof of the explanatory power of the catering theory. In contrast, a trend of research widely supports the role played by the catering theory of dividends (Baker & Wurgler, 2004; Ferris, Jayaraman, & Sabherwal, 2008). The literature suggests that catering appears in firms operating in common law countries than in firms operating in civil law countries. In fact, the authors indicate that dividend demand is more frequent in common law countries because of the strong legal protection investors enjoy in these countries. Investor demand for dividends has a strong effect on administrators. However, investor demand in civil law countries is

less frequent and tightened, hence the low effect of investor demand on administrators.

Nevertheless, empirical evidence has been gathered on the explanatory power of the catering theory. Multi-country studies, like those of Baker, Saadi, Dutta, and Gandhi (2007) on the US market, and Tsuji (2010) on the Japanese, indicate that the catering theory is not an important paradigm to explain dividends payout decisions because managers do not take into account investor demand for dividends. Other authors like Von Eije and Megginsson (2008) and Turner, Ye, and Zhan (2011) indicate that the premium cannot explain why dividend policy varies; it just explains why it varies a little over time. Some other authors still indicate that the catering theory cannot explain dividend policy along with the risk factors it takes into account (Hoberg & Prabhala, 2009; Kuo, Philip, & Zhang, 2013). Furthermore, other studies argue that the catering theory can just explain corporate dividend policy. Accordingly, Haleem and Javid (2011) studying the Karachi stock market, and Li and Lie (2006), Denis and Osobov (2008), Baker and Wurgler (2004) studying the US market, assert that catering theory can explain the change in dividends payout. In addition, they found that a positive dividend premium can lead to more dividend omissions and issuances. Jiang, Kim, Lie, and Yang (2013) indicate that the dividend premium negatively affects the choice of redemption, while the redemption premium negatively affects the choice to pay dividends (Jun, Li, & Yugang, 2017). In addition, small funds and funds with low cash inflows are more likely to pay high dividends after controlling their ability to pay. More importantly, the predominant behavioral demand for dividends is mainly due to the continued dividends of individual investors. Thus, responding to a behavioral demand for dividends creates a potential agency problem rather than mitigating it. Marcet (2018) concludes that those companies combine executive compensation with accounting objectives (incentive compensation) based on investor preferences for specific accounting metrics. In addition, companies with strong CEOs are less affected by investor demand for accounting measures. Smith, Pennathur, and Marciniak (2017) find that dividend initiation is associated with a stronger governance structure (strong shareholders' rights and board independence), companies whose institutional owners are more likely to initiate dividends alongside the CEO's turnover. Both CEOs initiate dividends when they own more shares, and boards of directors initiate dividends with superior personal participation when shareholder rights are low. Hameed and Xie (2019) conclude that dividend initiations are motivated by the exogenous 2003 dividend tax cut. Also, they find that flows to dividend prone (averse) mutual funds increase the comovement among dividend-paying (non-dividend paying) stocks. Li, Subrahmanyam, and Yang (2018) examine the notion that financial products that take into account behavioral biases of investors can generate intense trading activity and are therefore profitable for issuers. They find the role of behavioral finance in financial innovation. Karpavičius and Yu (2018) find that policy-related economic uncertainty and the proportion of firms paying dividends explain more than half of the variation in dividend premium for assets.

The decision of dividend payment is one of the major elements in corporate policy, as this dividend policy influences the value of the company. Consequently, each company in a situation of growth policy tries to take advantage of these opportunities either by the reinvestment of the profits, or better still to allocate them to the payment of dividends. Jabbouri (2016) finds that size, current profit, liquidity, leverage, growth, free cash flow, and the state of the economy are those important factors on the dividend policy in MENA. Moreover, the evidence of agency problems in MENA markets could persuade regulators to introduce new mechanisms and strengthen existing governance mechanisms to tackle this major problem. The results should encourage decision-makers, boards of directors, analysts, institutional investors, and other investors to take a close look at corporate governance issues to restore the integrity of local markets. Imamah, Lin, Suhadak, Handayani, and Hung (2019) discover that the Islamic law is an important factor affecting dividend policy in Islamic countries from companies listed on the Indonesia Stock Exchange (IDX). They add that institutional ownership, insider ownership, and external large ownership pay a strong role in corporate governance since it is negatively related to dividend payouts. Duygun, Guney, and Moin (2018) find that firms with higher conflicts of interest among managers and shareholders pay lower dividends. They assert that the argument that the Indonesian government considers corporate dividends as one of the main sources of non-corporate income in its government budget. Cao, Du, and Hansen (2017) conclude that in an institutional context where foreign investors have very limited access to local securities markets and a relatively high risk of expropriation by majority shareholders, companies can use dividends to signal good opportunities for investment to foreign investors. San Martín Reyna (2017) finds that the payment of dividends is influenced by the type of ownership structure that dominates the company in the Mexican context. They add that the concentration of property in families negatively influences the payment of dividends; the presence of institutional shareholders has an inverse effect on the payment of the same. Wesson, Smit, Kidd, and Hamman (2018) indicated that the share repurchase activity has raised further concerns about whether the positive share price effect generally associated with share redemption announcements motivates companies to buy back shares rather than investing in the stock repurchase program. The purpose of this study was to determine the significant determinants of the choice between share repurchase and dividend payments to determine whether the short-term manipulation of stock prices affects distribution choices in South Africa.

3. RESEARCH METHODOLOGY

3.1. Data

In this section, we empirically examine the dynamic relationship between investor demand and dividend decisions on a sample of 600 firms several MENA countries (Tunisia, Morocco, Egypt, UAE, Saudi Arabia, and Kuwait) for ten consecutive years between 2004 and 2010. First, we describe the data and methodology. Then we test our main predictions. Finally, we discuss alternative explanations of our empirical findings.

The sample consists of companies listed on the MENA region stock exchanges from 2004 to 2010. Companies' annual reports were the main source used to obtain the financial information required by our tests. After removing the first-year data, the remaining samples consist of 24 companies (240 observations) for Tunisia, 56 companies (560 observations) for Morocco, 128 companies (1280 observations) for Egypt, 78 companies (780 observations) for the UAE, 146 companies (1460 observations) for Saudi Arabia, 168 companies (1680 observations) for Kuwait. The data covers the period 2005-2014 during which both the Arab spring of the Tunisian and Egyptian revolution took place. Banks and financial institutions were excluded from the analysis due to their special financial structures, accounting methods, and corporate governance. The sample includes both dividend and non-dividend paying firms. The exclusion of the non-dividend paying firms from the analysis may lead to a selection bias. Moreover, our sample includes both private and state-owned companies from different countries in the data. Further, our firms are owned by both non-resident and resident in the sample.

Table 1. Companies in each country

Country	*Number of companies*	*Percentage of companies*	*Number of observations*	*Percentage of observations*	*Company by region*
Tunisia	24	4	240	4	North Africa
Morocco	56	9,22	560	9,22	208
Egypt	128	21,02	1280	21,02	
UEA	78	12,82	780	12,82	Gulf countries
Saudi Arabia	146	23,97	1460	23,97	392
Kuwait	168	28	1680	28	
Total	600	100.00	6000	100.00	600

3.2. Variables measurement and hypotheses

3.2.1. Dependent variables

Two measures of dividend policy are proposed. The first is dividend decision (DD_{it}), it is a binary variable taking the value 1 in the case of firms payers and 0 on the case of firm non-payers (Baker & Wurgler, 2004, the USA; Li & Lie, 2006, the USA; Tsuji, 2010, Japan; Kuo, Philip, & Zhang, 2013, 18 countries around the world; Rashid, Nor, & Ibrahim, 2013; Abdulkadir, Abdullah, & Wong, 2014, Nigerian context; Rashid, Nor, & Ibrahim, 2013; Hoberg & Prahbala, 2009, USA; Ramadan, 2012, Jordanian context; Ferris, Jayaraman, & Sabherwal, 2009, 23 countries around the world; Kuo, Philip, & Zhang, 2011, UK; Rashid, Nor, & Ibrahim, 2013, Malaysian context; Tanjgitprom, 2013, Thailand context).

The second is dividend change (DC_{it}), it is computed from the difference between dividend per year in the current year and the previous year. This change in dividend payment will be categorized into an increase, decrease, or no change (Baker & Wurgler, 2004; Fama & French, 2001, USA; Tangjitprom, 2013, Thailand context; Li & Lie, 2006; Ferris, Sen, & Yui, 2006; Denis & Osobov, 2008; Haleem & Javid, 2011).

3.2.2. Independent variables

We chose the explanatory variables on the basis of their implications and explanations of the three theories mentioned above. We distinguish three categories of variables: 1) variables directly related to the catering theory; 2) control variables. Consistent with the previous empirical works, we use in our research the following variables.

- The dividend premium: The first proxy of the catering theory of dividend is measured by the difference between the market to book average of firms' payers and firm's non-payers. This proxy is the most used variables by other authors to explain the catering theory (Baker & Wurgler, 2004; Li & Lie, 2006; Tsuji, 2010; Kuo, Philip, & Zhang, 2013; Rashid, Nor, & Ibrahim, 2013; Abdulkadir, Abdullah, & Wong, 2014; Hoberg & Prabhala, 2009; Ferris, Jayaraman, & Sabherwal, 2009).
- The market to book (t-1): The second proxy of catering of dividend it's a naïve variable indicates the investor prevailing for the dividend. The previous MTB indicates the firm performance and quality of their share; this suggests that firms with the high market to book attract more shareholders. Moreover, firms with high (low) performance drive to demand more (low) dividends by investors. We measured this variable by firms' market value on total book equity.
- The modified dividend premium: The modified dividend premium is the third proxy of the catering theory is used to limit the growth indicator between firms payers and non-payers established (Kim & Byun, 2013; Baker & Wurgler, 2006). To calculate the modified dividend premium we regress the firms' market-to-book ratios on the current assets growth and capital expenditures and then use the residuals from the regression to compute a proxy for the dividend premium. Since when the residuals are less than or equal to zero, the log of residuals has no value, we construct a modified dividend premium as the log of residuals has no value, we construct a modified dividend premium as the mean of payers' residuals, divided by the mean residuals of dividend non-payers.

Hypothesis 1 (H1): Catering theory of dividend proxies affects positively dividend policy.

3.2.3. Control variables

- Profitability (ROA): Several studies confirm the existence of a significant impact of a firm's profitability on the decision to distribute dividends. Moreover, firms with higher profitability can attract investors than firms with lower profitability. Besides, Fama and French (2001) found that the disappearing of dividend distribution is due to the declining and change of their profit. Furthermore, some authors assert that firm with a stability of their level of profitability and future earning can increase or distribute a stable level of dividend (Alagathurai, 2013; Rafique, 2012; Malik, Gul, Khan, Rehman, & Khan, 2013; Murekefu & Ouma, 2012;

Trang, 2012; Alzomaia & Al-Khadhiri, 2013; Naceur & Goaied, 2002). We measured this variable by divided the firms return on equity by total assets.

Hypothesis 2 (H2): Firm's profitability is positively correlated with dividend policy.

- Debt level (DL): The compromise hypothesis believes that a firm's debt level plays an important role in the managers' decision to pay dividends. The debt and dividend mechanisms are supported by the financial literature as moderate the asymmetric information between managers and shareholders, also to reduce the agency conflict problem between us. A firm can finance its investments by debt, equity, or a combination of both. The use of debt along with equity in the capital structure is described as financial leverage or gearing (Dare & Sola, 2010; Litner, 1956; Fama & French, 2001; Amihud & Li, 2006; Ross, 1977). According to the irrelevance theory, changes in capital structure or financial policy relate to dividend policy because the theory assumes that raising funds from debt is for paying in only equity or vice versa. Our variable is calculated by divided total debt by the total asset.

Hypothesis 3 (H3): Debt level is associated with dividend policy.

- The growth of firms: In this case, the more the company has a strong growth in its assets, the more of dividend distribution by firms. Naceur and Goaied (2002), Kowalewski, Stetsyuk, and Talavera (2008), Myers and Majluf (1984), Trang (2012) indicate that firms with great investment opportunities not distribute dividends but finance their new project. In contrast, Jabbouri (2016) provides that investment opportunities can influence the dividend payment. Our factor explains the growth of the total assets of the firms.

Hypothesis 4 (H4): Firm's growth is positively associated with dividend policy.

- Firm's size: Accordingly, several studies confirm the existence of a significant impact of size on the firm's payment of dividends. Besides, authors asserts that larger firms expend a greater proportion of their net profits as cash dividends compared to smaller firms (Fama & French, 2001; Sawichi, 2009; Al-Kuwari, 2009; Al-Ajmi & Hussain, 2011). Investors should be more attracted to larger firms tend to be mature and are more likely to pay more cash dividends (Malik et al., 2013; Bradford, Chen, & Zhu, 2013; Rafique, 2012). Firm's size variable is the log of total assets.

Hypothesis 5 (H5): Firm's size affects positively the dividend policy.

3.3. The model

Our aim here is to present the model to be tested. Using the logistic panel and the logit multinomial method to estimates the causal relationship between catering and dividends, three models have often been used.

The investor demand for dividends can be measured by the catering incentives. Baker and Wurgler (2004) propose four alternatives to measure catering incentives. These are prioritized dividend premiums, calculated from the difference of the natural logarithm of the average market-to-book ratio between firms paying dividends and non-payers. Thus, our sample is divided into two additional sub-samples: one for dividend-paying firms, and a second for dividend non-paying firms. For each year, the book-value weighted average of the market-to-book ratio of each sub-sample is calculated. The result of the difference between the natural logarithm of those two sub-samples is the dividend premium. Moreover, we used the modified dividend premiums, calculated by regress the market-to-book ratios on current assets growth and capital expenditures of payer and non-payer firms. Furthermore, the market to book (t-1) measure is the third proxy used to explain catering incentives, measured by the dividend's market value to book value for each firm.

From the first model we try to examine the relationship between dividend decision to distribute dividend by firms' managers and the catering theory of dividend controlling by some control variables:

$$DD_{it} = Logit(\beta_0 + \beta_1 DP + \beta_2 MTB_{it-1} + \beta_3 MTB_{it} + \beta_4 ROA + \beta_5 DL_{it} + \beta_6 GRO_{it} + \beta_6 SIZE_{it} + \varepsilon_{it}) \quad (1)$$

To examine the possible influence of catering theory on dividend changes we used the second model:

$$DC_{it} = LogitM(\beta_0 + \beta_1 DP + \beta_2 MTB_{it-1} + \beta_3 MDP_{it} + \beta_4 ROA + \beta_5 DL_{it} + \beta_6 GRO_{it} + \beta_6 SIZE_{it} + \varepsilon_{it}) \quad (2)$$

Finally, in the last model we try to investigate the important role of the investor demand for dividend on the dividend policy in an abnormal economic situation related to the Tunisian and Egyptian revolution:

$$DD_{it} = Logit(\beta_0 + \beta_1 Crisis + \varepsilon_{it}) \quad (3)$$

$$DC_{it} = LogitM(\propto_0 + \propto_1 Crisis + \varepsilon_{it}) \quad (4)$$

4. THE EMPIRICAL RESULTS

4.1. Descriptive statistics

Table 2 reports the descriptive statistics of firm characteristics and the proportion of firms paying dividends each year. The payer firms held 60.3%, a total of 3618 observations compared to 39.7%, 2382 observations for non-payer firms. Moreover, the results suggest the importance of dividend distribution decisions for managers in these emerging markets. Furthermore, the percentage of firms with increasing dividends amounts is 49.92%, making 2995 observations, the proportion of firms with no change in dividends amounts is 31.7%, 1902 observations and the proportion of firms with decreasing dividends amounts is 18.38%, 1103 observations. Our results suggest that managers of our study prefer to continue to distribute dividends and increase or not change the amount of firm compared with the previous dividend amount payment. Also, the lower value number of managers prefers to decrease the dividend amount suggesting that managers like better reduce to value of dividend payment more than stop or cut or omit distribute dividends to their shareholders.

Table 2. Descriptive statistics

		Continuous variables					
	MEAN	***MIN***	***MAX***	***SD***	***Median***	***Kurtosis***	***Skewness***
MTB	.0145275	-.5261261	2.053459	.0737266	.0018138	219.2336	12.49405
MDP	.0427846	-.2047049	4.812957	.3329839	.0001587	170.4199	12.29701
DP	-.000792	-1.75086	1.304764	.2059483	.0011148	52.49487	-4.894728
SIZE	2.605042	.2227165	8.984617	1.147827	2.563481	6.372531	1.09665
DL	.1652788	0	2.15529	.1882752	.0966487	6.183582	1.346087
ROA	.0607172	-1.741608	3.857143	.1341787	.0501376	143.0987	5.139942
GROW	.4001298	-.9987168	1432.804	18.53231	.0523631	5950.291	76.98599
Dummy variables							
Modalities						***Frequency***	***Percentage***
DD	1: Firms payers					3,618	60.30
	0: Firms non payer					2,382	39.70
DC	0: Dividend no change					1,902	31.70
	1: Dividend increase					2,995	49.92
	2: Dividend decrease					1,103	18.38

Table 3. Dividend payers, dividend non-payers MENA countries 2004-2013

Years/Countries	***Tunisia***		***Morocco***		***Egypt***		***UAE***		***Saudi Arabia***		***Kuwait***	
	P	***NP***	***P***	***NP***	***P***	***NP***	***P***	***NP***	***P***	***NP***	***P***	***NP***
2004	16	8	42	14	81	47	46	32	68	78	91	77
2005	16	8	44	12	81	47	48	30	67	79	101	67
2006	17	7	47	9	81	47	52	26	68	78	96	72
2007	18	6	48	8	83	45	55	23	79	67	112	56
2008	18	6	50	6	81	47	52	26	77	69	61	107
2009	16	8	46	10	82	46	54	24	77	69	59	109
2010	16	8	46	10	85	43	52	26	80	66	70	98
2011	18	6	42	14	79	49	53	25	84	62	71	97
2012	17	7	45	11	76	52	54	24	84	62	77	91
2013	17	7	46	10	75	53	55	23	86	60	85	83

Note: The sample includes non-financial and non-utility firms in the annual report for the financial markets Tunisia, Morocco, Egypt, UAE, Saudi Arabia, and Kuwait. A firm is a dividend payer if it has a positive dividend per share; otherwise, the firm is classified as a non-payer.

Table 4. Ownership structure in MENA stock exchanges

Country	***Stock exchange***	***Abbreviation***	***Establishment***	***Ownership structure***	***Changes in ownership***	***Change in governance***
Tunisia	Bourse de Tunis	BVMT	1969	Mutualised	No	No
Morocco	Bourse de Casablanca	CSE	1929	Mutualised	On-going	On-going
Egypt	Egyptian Exchange	²EGX	1883	Public institution	None	YES
UAE	Abu Dhabi Securities Exchange	ADX	2000	State-owned	None	None
	Dubai Financial Market	DFM	2000	State-owned	None	None
Saudi Arabia	Saudi Stock Exchange	SSE	1984	State-owned	Yes	None, under discussion
Kuwait	Kuwait Stock Exchange	EGX	1984	State-owned	On-going	On-going

Source: OECD (2018).

4.2. The test of relationship between propensity to pay dividends and catering theory

In the following regression model, we try to determine the relationship between propensity to pay dividends and catering incentives. The latter variable is proxied by the dividend premium, where Dividend payment represents a change in the likelihood to pay dividends and MTB is the current investor demand. Dividend premium denotes the lagged dividend premium I, as a variable reflecting investor sentiment in the market. An economic shock like a crisis is likely to create structural changes that could be either of a temporary or permanent nature. This finding indicates that higher investor demand for dividends, as measured by a higher dividend premium (higher market-to-book ratio of firms paying dividends compared to non-payers) would incite firms to pay dividends. This amounts to a positive change in dividend payout likelihood, i.e. more firms pay dividends than it was expected. This implies that the higher investor demand for dividends could be explained by catering incentives. This would force managers to pay dividends.

Table 5 provides the result of the relationship between catering supported by some firm's characteristics on the dividend payment by managers in six countries from the MENA region. Moreover, our table asserts that catering theory proxy (dividend premium, modified dividend premium, and the previous market to book) influence the managers' decision to distribute dividend in the case of Tunisia, UAE, and Kuwait, suggesting, that manager prefer to pay more dividend when the investor demand dividend. Further, when the dividend premium is high the probability that managers initiate or continue the paid dividend is high. Our result confirms the previous study of Tangjitprom (2013) in the Thailand context founded that dividend premium plays an important role in the managers' decision to distribute dividends.

Table 5. Results of the regression analysis

Dependent variable: DD	*Tunisia*	*Morocco*	*Egypt*	*UAE*	*Saudi Arabia*	*Kuwait*
Catering and fundamental as independent variable						
C	.4574773	-3.25431	.6033376	2.023216	3.17814	-.724284
P(Value)	0.359	0.018	0.000	0.014	0.088	0.055
Dividend premium	4.11629	-.939016	.148286	-60.3865	4.08097	-8.67508
P(Value)	0.098***	0.593	0.925	0.006*	0.168	0.231
Market to book	35.0319	-14.2861	-.357261	-12.0527	35.4066	229.9503
P(Value)	0.043**	0.274	0.935	0.331	0.174	0.000*
Modified dividend premium	-11.7856	2.03264	.0261215	33.96637	-8.17581	6.601851
P(Value)	0.075**	0.393	0.961	0.129	0.112	0.074**
Profitability	14.38907	6.465088	-.241113	2.690987	.950005	1.16492
P(Value)	0.000*	0.007*	0.049**	0.054**	0.197	0.067**
Debt level	-4.34255	.4681003	-.203353	-1.23998	-3.05910	-1.48732
P(Value)	0.048**	0.778	0.005*	0.301	0.002*	0.002*
Growth	-.007475	1.457678	.0257252	-.031412	-.354141	.030246
P(Value)	0.995	0.025*	0.169	0.893	0.282	0.572
SIZE	.0954794	1.812865	.0361767	-.142725	-.500318	.5281535
P(Value)	0.173	0.000*	0.024*	0.589	0.290	0.005*
Loglikelihood	-116.453	-184.753	.47394	-346.704	-482.452	-857.642
Fisher			2.52			
P(F)			0.0141			
CHI2	20.11	25.26		13.46	14.17	39.47
P(CHI2)	0.0053	0.0007		0.0617	0.0483	0.0000
P(Hausman)	0.7866	0.7278	0.0413	0.9961	0.7135	0.2364

*Note: * significant at 1% level (p < .01), ** significant at 5% level (0.1 < p < .05), *** significant at 10% level (p > 05).*

On the other hand, we conclude that the absence of a relationship between dividend payment and the catering theory of other countries (Morocco, Egypt, and Saudi Arabia). Our result suggests that managers are not pressed by the investor demand for dividend, this can confirm the previous study such as Baker and Wurgler (2004), Li and Lie (2006), Abdulkadir, Abdullah, and Wong (2014), Baker and Wurgler (2006) argue that catering appears in common law countries but no appear in civil law countries. Moreover, managers respond rationally to investor demand for dividends in common law countries. On the other hand, in civil law countries, companies do not follow investors' preferences for payment of the dividend. show that in common law countries (Canada and United Kingdom) – where shareholders exert strong pressure on managers – the theory of catering is verified but in a very insignificant way, while in the countries of "civil" law" (Germany, France, and Japan) – where the shareholders exert a weak pressure on the leaders – the theory of satisfaction is rejected and finds no empirical validation. Furthermore, our table provides that the firm's characteristics variables such as, profitability, debt level, size, and growth play a key factor in the managers' decision to distribute dividends. Our result suggests that big firms with high profitability and in growth cycle life should distribute more dividends to their shareholders. Related for Fama and French (2001), concluded that the changing of the firms characteristics and declining propensity to pay to appear more clearly in the dividend decisions of former payers and companies that have never paid. Lower profitability and strong growth opportunities produce much lower expected dividend yields from companies that have never paid. Companies that have never paid dividends are more profitable than former payers and have strong growth opportunities. Dividends are in turn more profitable than companies that have never paid.

4.3. The test of relationship between the decision to change dividend and catering theory

We calculate dividend change as the difference between dividend per year in the current year and the previous year. This change in dividend payout reports to three trends: increase, decrease, or no change. To determine the effect of catering proxy on dividend change, we use a multinomial logit model. The control variables in the multinomial logit model include the factors that may affect dividend payment decisions. They are firm size, level debt, profitability, growth. Another regression is conducted to examine the relationship between absolute dividend change and dividend premium, using the same set of control variables. We add a dummy variable to control the proportion of dividend change. Payer-firms choose to continue or omit dividends, and non-payer firms chose to issue dividends or continue to pay dividends. This is attributable to managerial discretion. Three scenarios are distinguished: increase, decrease, or no change in the previous year.

Tables 6 and 7 provide the result of the association between the catering theory and the dividend change. We conclude that the catering theory plays an important to affect the managers' decision to change the amount of dividend payment in all countries, just no evidence in Morocco. Moreover, our result suggests that more number of firms will pay more dividends if there are catering incentives from dividend premium. Further, the catering theory plays a key factor to discourage managers to cut dividend payments in the case of Saudi Arabia and Egypt. Furthermore, when the dividend premiums are high managers are far from omitting dividends. Investors should place more premiums in the stock of firms to encourage the manager to increase the dividend amount. Our result confirms some other works, for example, Li and Lie (2006) extend the Baker and Wurgler (2004) argue that dividend catering appears not only for the initiation of dividends but also for increases and decreases the level of dividend payments. Li and Lie (2006) also find that the capital markets reward managers for paying attention to the investor demand for dividends. Tangjitprom (2013) argues that managers can decide to pay dividends or initiate dividend payments when dividend premiums are high. On the other hand, they may cut dividends or omit them when dividend premiums are low or even negative.

Table 6. Result of the multinomial logit for dividend changes: North Africa countries

Dependent variable: DC		*Tunisia*			*Morocco*			*Egypt*	
Model	*DI*	*DD*	*DNC*	*DI*	*DD*	*DNC*	*DI*	*DD*	*DNC*
Catering and fundamental as independent variable									
DP	-.0463907	.0505139	-.004123	-.060728	.031176	.0295523	-.141071	-.025622	.1666997
P(Value)	0.145	0.099***	0.895	0.384	0.532	0.570	0.173	0.838	0.112
MDP	.0965352	.0064249	-.102960	.0048465	-.0110675	.006221	.0072108	.010463	-.0176739
P(Value)	0.000*	0.789	0.000*	0.758	0.344	0.569	0.397	0.321	0.054**
MTB	-.099655	-.062523	.1621788	.1084252	.0108857	-.119310	.6469447	-1.12334	.476404
P(Value)	0.378	0.552	0.088***	0.678	0.947	0.618	0.198	0.138	0.469
ROA	1.339117	-.327067	-1.01204	1.061871	-.0358843	-1.02598	-.036815	-.027206	.064022
P(Value)	0.001*	0.388	0.013*	0.000*	0.792	0.000*	0.737	0.833	0.547
DL	-.196249	-.547407	.7436574	.1474328	-.0597248	-.087708	-.185592	.0762045	.1093881
P(Value)	0.529	0.065**	0.007*	0.170	0.477	0.265	0.008*	0.328	0.081***
SIZE	-.044044	.0024096	.0416351	-.002614	.0305471	-.027932	.030809	.0280228	-.0588318
P(Value)	0.000*	0.812	0.000*	0.929	0.161	0.166	0.026*	0.096***	0.000*
GROW	-.252942	.084899	.168043	.0532052	-.0605782	.007373	-.021181	.0363342	-.0151529
P(Value)	0.214	0.632	0.347	0.000*	0.000*	0.100***	0.440	0.227	0.576
Probability	.3802577	.3109111	.3088311	.7205791	.1750519	.1043689	.2052974	.5635861	.2311164

Table 7. Result of the multinomial logit for dividend changes: Middle East countries

Dependent variable: DC		*UAE*			*Saudi Arabia*			*Kuwait*	
Model	*DI*	*DD*	*DNC*	*DI*	*DD*	*DNC*	*DI*	*DD*	*DNC*
Catering and fundamental as independent variable									
DP	.1102281	.2156426	-.3258707	.0981974	.0107169	-.1089143	.317046	-.2536418	-.0634042
P(Value)	0.187	0.000*	0.000*	0.065**	0.757	0.042**	0.018*	0.012*	0.611
MDP	.100461	-.398691	.2982301	-.2106566	-.0361377	.2467943	.0231639	-.0228314	-.0003326
P(Value)	0.446	0.000*	0.022*	0.006*	0.488	0.001*	0.033**	0.007*	0.973
MTB	-.2641865	.4626738	-.1984873	-.3525574	.0091601	.3433973	.7426862	.4312965	-1.173983
P(Value)	0.867	0.615	0.898	0.121	0.947	0.107***	0.364	0.402	0.150
ROA	-.5992996	.1416473	.4576523	-.2085404	.0910957	-.0328795	.0561219	-.1951451	.1390232
P(Value)	0.003*	0.264	0.008*	0.042**	0.142	0.134	0.524	0.013*	0.082***
DL	-.011939	-.0410326	.0529716	-.012458	.0453376	-.0328795	.1044172	-.0653648	-.0390523
P(Value)	0.907	0.600	0.593	0.860	0.318	0.639	0.104***	0.184	0.514
SIZE	.0154444	.0133174	-.0287618	-.0087869	-.0218386	.1174447	-.0318398	.0152216	.0166182
P(Value)	0.464	0.398	0.162	0.672	0.123	0.232	0.147	0.352	0.413
GROW	-.0100398	.0512754	-.0412356	.0305362	-.0267038	-.0038324	-.0120291	.0015615	.0104676
P(Value)	0.827	0.048*	0.399	0.260	0.357	0.886	0.264	0.801	0.217
Probability	.45500001	.1758511	.36914883	.4593447	.12759155	.4130637	.5150894	.1711450	.3137655

*Note: * significant at 1% level (p < .01), ** significant at 5% level (0.1 < p < .05), *** significant at 10% level (p > 05).*

On the other hand, the absence of the association between catering theory and the dividend change decision in Morocco suggest that managers consider the dividends paid are the expected level of future results and the past trend. In other words, executives are attentive to the demand of their shareholders and seek to provide them with information on the future of the company through the dividend. A priori, they do not really wonder why their shareholders claim dividends. They doubt that dividends really have an impact on stock valuation. In fact, they seek to satisfy their shareholders and give them what they guess to be their request, even if it comes from behavioral bias.

Table 8. Results of the regression analysis: All MENA

Dependent variable:		*DD*			*DC*	
Model	*1*	*2*	*3*	*DI*	*DD*	*DNC*
Catering and fundamental as independent variable						
C	1.023556					
P(Value)	0.000*					
MTB	-.1276511		-.0824007	-0.0413749	.0286528	0.0127221
P(Value)	0.847		0.900	0.685	0.757	0.889
DP	.2077596		.2375173	-0.1864737	0.1450677	0.041406
P(Value)	0.273		0.193	0.000*	0.001*	0.235
MDP	.1383664		.0215367	-0.2269972	-0.2964325	-0.0694353
P(Value)	0.379		0.900	0.000*	0.000*	0.033**
ROA		1.423264	1.426929	-0.0002007	0.0082268	-0.0080261
P(Value)		0.000*	0.000*	0.997	0.818	0.861
DL		-1.2634	-1.26983	0.0473579	-0.0624956	0.0151377
P(Value)		0.000*	0.000*	0.173	0.019*	0.640
GROW		.0352212	.0351174	0.0018753	-0.0018518	-0.0000235
P(Value)		0.401	0.404	0.609	0.698	0.994
SIZE		.0799318	.0728831	-0.0073	0.0047382	0.0025618
P(Value)		0.165	0.273	0.231	0.321	0.651
Fisher		33.81	36.09			
P(Fisher)		0.0000	0.0000			
CHI2	3.28					
P(CHI2)	0.3501					
Hausman Test	0.6125	0.0000	0.0000			
NE	RE	FE	FE			
Log Likelihood	. -2592.553	-1290.80	-1289.666	.50439429	.17517241	.32043331
Model EST	PL	PL	PL	LM	LM	LM

*Note: * significant at 1% level (p < .01), ** significant at 5% level (0.1 < p < .05), *** significant at 10% level (p > 05).*

From Table 8, we can conclude to the absence of a relationship between catering theory and dividend decisions of managers in the six countries of our model (600 non-financial firms). This suggests that dividend decisions in these countries relates to other factors such as firm-specific variables, but not to investor demand for dividends. Moreover, these results show that managers do not pay any attention to investor demand and distribute dividends. Furthermore, this finding confirms the hypothesis that the catering theory explains such behavior in common law countries but not in civil law countries. Indeed, the insignificant relationship between catering and dividend policy is highlighted in some previous studies (Kuo, Philip, & Zhang, 2013 in 18 countries, Kuo, Philip, & Zhang, 2011 in the UK, Hoberg & Prabhala, 2006; Tsuji, 2010 in Japan, and Ferris, Jayaraman, & Sabherwal, 2009 in 23 countries). All these authors found no explanatory link between the catering theory of dividends and dividend payout decisions.

In contrast, they conclude that dividend policy can be explained by other factors such as risk and firm-specific variables. Nevertheless, our results contradict other studies like those of Baker and Wurgler (2004), Li and Lie (2006) Kulchania (2013) in the US, Tangjitprom (2013) in Thailand, Ferris, Jayaraman, and Sabherwal (2009) in 23 countries, Rashid, Nor, and Ibrahim (2013) in Malaysia and Abdulkadir, Abdullah, and Wong (2014) in Nigeria. These studies pointed to the important role of the catering theory in explaining decisions to distribute dividends. When the dividend premium and investor demand are high managers encourage issuing or distributing dividends to their shareholders, but when the dividend premium is low mangers choose not to cater to investor demand. Xiong and Lui (2007), Lin and Cao (2010), and Yan and Gong (2013) indicated that investor demand for cash dividends has a significant impact on cash dividend payment tendency. From the previous theoretical and empirical accounts, there is a focus on the important role of catering on managers' decisions to distribute dividends, especially in common law countries, yet catering is less of a trend in civil law countries.

Furthermore, Table 8 above shows that profitability and debt level are key factors that affect dividend decisions of firms. This suggests that managers of payer firms decide to continue distributing dividends or the managers of non-payer firms decide to issue and start to distribute dividends when the firm has cumulated profits from their investments. The debt level has a significant and negative effect on divided decisions. This suggests that managers do not use their debt to distribute dividends but to finance their investment opportunities. These results are confirmed by Fama and French (2001) who conclude that firm's tendency to block dividends payout depends on their profitability and debt level. El-Ansary and Gomaa (2012), Rehman and Takum (2012) in Karachi Stock Exchange; Maladjian and El Khoury (2014) in Lebanon; Khan and Ahmad (2017) studying Pakistan; Hassonn, Tran, and Quach (2016) in Palestine; Milhem (2016) in Jordan; Al-Ajmi and Hussain (2011) studying Saudi securities market; Awad (2015) studying the Kuwait Stock Exchange; Mehta (2012) in the UAE; Osman and Mohammed (2010) in Saudi Arabia; Titus and Ambrose (2015) in Kenya; Nuhu, Musah, and Senyo (2014) in Ghana; Almeida, Pereira, and Tavares (2014) in Portugal confirm that some firm-specific variables like profitability and debt affect dividend decisions across different countries in their studies.

Table 9 reports the results of the multinomial logit model for dividend changes. The model examines the effect of catering and firm-specific variables like profitability, debt level, growth, and size, on dividend change. The latter is a binary variable that, 1 if dividends payout increases, 0 if there is no change and 2 if dividends payout decreases.

The results show a negative relationship between dividend premiums and dividends payout increase but a significant positive relationship between dividend premiums and dividend payout decreases. Moreover, the coefficient of the modified dividend premium is negatively associated with dividends payout change. This can be intuitively interpreted as follows: higher dividend premiums can induce more firms to pay dividends but cannot encourage firms to increase the amount of dividends payment. It also can partially support the catering theory because firms will be less likely to reduce dividends payment when investors show higher demand for dividends measured by higher dividend premiums. Higher dividend premiums cannot increase the amount of dividends payment but they play an important role in reducing the amount of dividends. When dividend premiums are higher, managers will not cut dividends or tend to cut only a small portion, and omitting dividends is much less likely. Our results consistent with those of Tangjitprom (2013), Li and Lie (2006), Fama and French (2001), Ferris, Sen, and Yui (2006), Denis and Osobov (2008), Haleem and Javid (2011), who indicated that dividend premiums play significantly explain dividends payout change.

Moreover, they found that the probability of decreasing and increasing dividends payout and the magnitude of dividend change correlate with dividend premiums. Baker and Wurgler (2004) indicate that managers face the decision as to whether the firm should pay a dividend (and not how much to pay). In addition, the investor categorizes firms into only two groups based on dividend policy (payers vs. non-payers) and does not think about how much dividends are paid. Li and Lie (2006) found that firms are more likely to increase dividends when the dividend premium is high and the stock price reacts more positively to news about dividend increase. Conversely, when the dividend premium is low, firms are more likely to repurchase a stock (which is an alternative means of boosting payout) and decrease dividends. A decrease in dividends amounts tends to be larger, and the stock price's reaction to news about dividend decrease is more positive. However, our results contradict those of previous studies pointing to the insignificant effect of catering on the propensity to distribute dividends by managers (Von Eije & Megginsson, 2007; Turner, Ye, & Zhan, 2011; Baker & Wurgler, 2004; Hoberg & Prabhala, 2006).

4.4. The test of relationship between the catering theory and dividend policy in abnormal economic situation

Therefore, the effect of the politic crisis in the Tunisian and the Egyptian economy should be controlled by introducing a dummy variable representing the years of the crisis (2011-2013) as Dcrisis. Stock markets are subject to various shocks

such as wars, political change, natural disasters, and terrorism. This latter event could affect market behavior and returns, especially in emerging economies such as Tunisia and Egypt. Moreover, we try to show the role of the catering theory of dividend on the dividend decision and change in abnormal economic situation.

Table 9 presents the coefficients of the regression after the introduction of a dummy variable of the Politic crisis in Tunisia and Egypt. The coefficient of the dummy variable is negative and statistically significant at the convention level in Egypt but insignificant in Tunisia, which can be interpreted as the positive effect of the crisis period on the propensity to pay dividends in Egypt. Moreover, we conclude that the catering theory plays an important role in the investor preference on the decision to pay dividends in Tunisia. Our result suggests that investors demand more dividends and increase the amount of dividend premiums to encourage managers to distribute dividends especially in an abnormal economic situation. Further, Baker and Wurgler (2004) develop the idea of a dividend demand in case of strong equity value, especially because the markets are depressed; in this case, the shareholders have the feeling of winning something or losing less. Baker and Wurgler (2004) confirmed this hypothesis, called 'catering incentives', in the United States. Companies pay dividends when demand is strong, that is when investors value companies that pay in a "depressed" or "bearish" stock market environment.

Table 9. Catering theory and dividend payment: Crisis period included

Dependent variable: DD	*Tunisia*			*Egypt*		
	Crisis excluded	*Crisis*	*Crisis included*	*Crisis excluded*	*Crisis*	*Crisis included*
Catering and fundamental as independent variable						
C	.4574773	1.134716	.6494225	.6033376		1.347914
P(Value)	0.359	0.005*	0.249	0.000*		0.058**
CRISIS		.3416539	.6638251		-.322411	-.3630025
P(Value)		0.352	0.475		0.085**	0.068**
DP	4.11629		33.20258	.148286		-25.23087
P(Value)	0.098***		0.058**	0.925		0.569
MTB	35.0319		4.030077	-.357261		1.221941
P(Value)	0.043**		0.112	0.935		0.950
MDP	-11.7856		-11.64531	.0261215		-.9831533
P(Value)	0.075**		0.082**	0.961		0.854
ROA	14.38907		14.67306	-.241113		-1.493226
P(Value)	0.000*		0.000*	0.049**		0.127
DL	-4.34255		-4.354969	-.203353		-1.117857
P(Value)	0.048**		0.047*	0.005*		0.127
GROW	-.007475		-.1697357	.0257252		.3438223
P(Value)	0.995		0.887	0.169		0.120
SIZE	.0954794		-.0051482	.0361767		.1672441
P(Value)	0.173		0.974	0.024*		0.69
Loglikelihood	-116.453	-129.4636	-116.19901	.47394	-272.7425	-536.89628
Fisher				2.52		
P(F)				0.0141		
CHI2	20.11	0.87	20.68		2.94	11.34
P(CHI2)	0.0053	0.3521	0.0080		0.0862	0.1830
P(Hausman)	0.7866	0.8939	0.2470	0.0413	0.8270	0.7122
EN[1]	RE	RE	RE	FE	RE	RE
Model EST[2]	PL	PL	PL	PL	PL	PL

*Note: * significant at 1% level (p < .01), ** significant at 5% level (0.1 < p < .05), *** significant at 10% level (p > 05).*

Table 10. Result of the multinomial logit for dividend changes: Crisis period included

Dependent variable: DC	*Tunisia*			*Egypt*		
Model	***DI***	***DD***	***DNC***	***DI***	***DD***	***DNC***
Catering and fundamental as independent variable						
Crisis	-.2004931	-.114589	.3150821	-.0450866	-.0386592	.0837459
P(Value)	0.229	0.207	0.065**	0.150	0.116	0.003*
MTB	-.029216	.1876605	-.1584444	-.3588815	-2.371352	2.730234
P(Value)	0.918	0.250	0.587	0.851	0.198	0.070**
DP	-5.496557	-1.450099	6.946656	-6.131189	7.342614	-1.211426
P(Value)	0.235	0.421	0.227	0.310	0.111	0.797
MDP	.8586909	-.8833539	.024663	.1029092	.6899016	-.7928107
P(Value)	0.262	0.196	0.969	0.882	0.166	0.234
ROA	.7417526	-.136995	-.6047575	-.0344908	-.045971	.0804617
P(Value)	0.179	0.750	0.194	0.791	0.680	0.445
DL	.4605378	.2779826	-.7385204	.078705	-.1928682	.1141632
P(Value)	0.179	0.259	0.019*	0.313	0.006*	0.068**
GROW	-.0172673	-.1036941	.1209614	.0347668	-.0250219	-.0097449
P(Value)	0.943	0.588	0.554	0.238	0.372	0.703
SIZE	.0072815	.0361514	-.0434329	.0281065	.0334045	-.061511
P(Value)	0.790	0.074**	0.080**	0.095***	0.016*	0.000*
LogLikelihood	.57090001	.17176725	.25733274	.56584268	.20452414	.22963319
Model EST	LM	LM	LM	LM	LM	LM

*Note: * significant at 1% level (p < .01), ** significant at 5% level (0.1 < p<.05), *** significant at 10% level (p > 05).*

[1] EN: The effect nature of panel estimation; RE (Random Effect) or FE (Fixed Effect).
[2] Model EST: The model estimation of our regression; PL (Panel logistic).

Furthermore, the crisis dummy variable is positively significantly with the dividend change. Besides, the managers decide to not change the amount of dividend payment in the political crisis in both Tunisia and Egypt (Table 10). Ferris, Jayaraman, and Sabherwal (2009) test the hypothesis of Baker and Wurgler (2004) on a sample of publicly traded companies in 23 countries. They find that differences exist between countries. Businesses appear to be responding to investor demand primarily in common law countries, i.e. in countries with strong shareholder pressure. On the other hand, in civil law countries, these authors highlight a relative lack of response to investors demand for dividends, when markets are depressed or bearish.

The majority of stocks exchanges in our paper have been established for only 35 years in Saudi Arabia and Kuwait, only 19 years in UAE, 50 years in Tunisia, 90 years in Morocco, and 136 years in Egypt. Further, with the lack of availability and completeness of data, the historical data could be gathered for only 15 years. Furthermore, our result is limited to the absence of some common law countries from the MENA region. Therefore, our practical implications consider that investors in MENA show their preference for dividends to self-control and satisfaction. "This could be the catering incentive of the firm to decide to pay dividends".

The findings yield qualitatively consistent with the previous research. After controlling for the effect of the politic crisis in Tunisia and Egypt during 2010-2013, the result shows that the firm's decision to pay dividends could be influenced by the catering of dividends. Moreover, the dividend premium will reduce the probability that firms will decide to cut or omit dividend distribution from previous years. Our result is compatible with some literature review established that investor preference for dividend specially explained by dividend premium plays an important role on the managers' decision to distribute a dividend (Baker and Wurgler, 2004; Li and Lie, 2006; Tangitprom, 2013; Abdulkadir, Abdullah, & Wong, 2014; Rashid, Nor, & Ibrahim, 2013; Ramadan, 2012). Besides, the catering of dividends plays a minor role or insignificant from other investigations (Tsuji, 2010; Ferris, Jayaraman, & Sabherwal, 2009; Kuo, Philip, & Zhang, 2013; Hoberg & Prabhala, 2008; Kuo, Philip, & Zhang, 2011).

This document provides evidence of Baker and Wurgler's proposed catering incentives in the emerging market. Even though the result is different from each country, it can be the evidence supporting the catering theory of dividends, not only in well-developed markets but also in emerging and Arabic markets such as Tunisia, Morocco, Egypt, UAE, Kuwait, and Saudi Arabia. Investors in MENA show their preference for dividends to self-control and satisfaction. This could be the catering incentive of the firm to decide to pay dividends. Moreover, the absence of some common law country in my investigation can be a positive point and a future research outlook with comparative research between common and civil law MENA country. Further, the catering theory of dividends can play an important role to influence the market stock price more especially the abnormal return from different countries.

5. CONCLUSION

This paper provides a test of the predictions of the catering theory of dividends. We propose a new approach to examine the effect of investor demand for dividends on dividend decisions and dividend change. The results indicate that dividend policy decisions are conditioned by some firm-specific variables, thus revealing the desire of managers to issue dividends (for non-payer firms) or continue to distribute dividends (for payer firms), or to change the alter dividend policy (to increase, decrease or not change). Therefore, our evidence provides empirical support for the existence of a psychological component in the decision to pay, unlike in the catering theory. Our study has several policy implications that are particularly relevant, as we provide a better understanding of the implications of the catering theory for dividends by examining the moderating role played by some firm-specific variables.

This moderating role has not been accounted for in previous research, either theoretically or empirically. However, our findings lend support to the hypothesis that investors appreciate dividend payments depending on firm-specific variables. In fact, our study makes a further contribution to determine which firm-specific variables and catering proxies do moderate managers' decision to cater to dividend payout. We examine firm-specific variables and three catering proxies of dividend policy in 6 Arabic countries in the MENA region. We found that the higher firm profitability and the lower debt level, the higher managers cater to investor demand. Our evidence also provides empirical support that firm-specific variables are important to changing managers' attitudes towards dividends payout. The decision to issue dividends or continue distributing them depends on firm profitability and debt level. Moreover, debt seems to negatively affect dividend policy when there is a decrease in dividend amounts. This suggests that managers decrease dividends amount when debt is high.

In fact, our results indicate that catering does affect the decision to change dividends amount and not the decision to issue dividends or continue to distribute them. It is important to admit that this finding reports to the assumption that managers are more encouraged to cater to investor demand in payer firms that score more efficiency and more profitability. Moreover, our results indicate that catering plays an important role in encouraging managers to change the dividend amounts paid to their shareholders. In addition, a high dividend premium of stock may encourage managers not to omit or to cut distributing dividends or to increase dividend amounts.

In addition, like the Saudi and Kuwait context, this result seems surprising because the dividends in those countries are tax-disadvantageous, with a 5% and 15% holdback successively in Saudi Arabia and Kuwait. Dividend income is taxed while capital gains are tax-free. One possible explanation is that investors in Kuwait and Saudi Arabia are more cautious and avoid risk and prefer some cash flow in the form of dividends rather than waiting for capital gains. This evidence may in part support the bird-in-hand theory proposed by Gordon (1959) and Lintner (1962). On the hand, for the other countries like Egypt, Tunisia, and UAE context, their results

are logical because the dividend in those countries are tax-advantageous (free tax), suggesting, that play an important factor to encourage investor to demand more dividend from firms. Finally, the absence of a relationship between investor preference for dividend and the managers' decision in Morocco related to the tax-disadvantageous in this country with 15% holdback.

Finally, our results about all MENA firms confirm those of Tsuji (2010), Ferris, Jayaraman, and Sabherwal (2009), Kuo, Philip, and Zhang (2013), Hoberg and Prabhala (2008), Kuo, Philip, and Zhang (2011). These authors found no relationship between catering and dividend decisions. They conclude that managers cater to investor demand in common law countries more than the civil law countries. In contrast, our results are different from those of Baker and Wurgler (2004), Li and Lie (2006), Tangitprom (2013), Abdulkadir, Abdullah, and Wong (2014), and Rashid, Nor, and Ibrahim (2013) who concluded the importance of catering to dividend payment propensity.

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