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What are the determinants of dividend policies? A new perspective in Emerging Markets

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Abstract

Despite the growing literature investigating the link between corporate governance and dividend policy of firms, this problematic in emerging countries remains underexplored. In order to fill this gap, this article examines the effects of specific corporate governance mechanisms and ownership structures on dividend policy using a large sample of firms in GCC and East Asian countries over the period 2003-2013. Another crucial point of this study is to determine if firms change their corporate dividend policy during financial crisis. If most of our empirical study results confirms the previous researches, the results for the crisis period changes substantially. For governance mechanisms, the influence of board size, CEO duality and board intensity on dividend decision and/or payouts becomes negative. Moreover, the independence of board members no longer determines dividend policy. For ownership structure, institutional ownership plays always the same role, whereas concentration ownership becomes insignificant and managerial ownership has a significant negative effect on dividend decision and payouts. These results have strong implications for investors and firms that listed in these emerging markets.

This paper presents three main contributions to the existing reviews on dividend policy in emerging markets. Mainly, our study provides updated research on the impact of corporate ownership structure and board governance on dividend policy in emerging countries.

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1. Introduction

Despite the growing literature investigating the link between corporate governance and dividend policy of firms, this problematic in emerging countries remains underexplored (Denis, 2008; El-Sady et al., 2012). Mitton (2004), and Adjaoud and Ben-Amar (2010) among others, find significant differences in dividend policies between firms operating in developed and developing countries. They suggest that companies in emerging markets have specific corporate governance mechanisms and ownership structures which affect their dividend policy. Another relevant issue related to dividend policy addressed by the literature is whether firms change their corporate dividend policy during financial crisis (Kowalewski, 2013). In particular, the last global financial crisis, initiated by subprime mortgage default, has generated several controversies about its origins, especially in terms of these origins as ways to overcome the crisis. Liberal economists have noted that this crisis reveals structural problems of the current economy, basically, the failure of corporate governance systems in both developing and developed countries. These problems are particularly severe in developing countries, where a lack of disclosure of information and proper audit accentuates minority shareholders' exposure to abuse by controlling owners. Moreover, in turbulent periods, it is difficult for firms to raise external funds mainly in emerging countries, where financial markets are not sufficiently liquid and yield spreads are very high. Bistrova et al. (2013) show that payout ratios of European companies declined slightly during the 2008-2009 financial crisis. Thus, we expect that during crisis periods, firms in emerging markets change their dividend policy and should pay lower dividends because these constraints are tighter in these countries than in Europe.

Our research gives major interest to the effect of corporate governance and ownership structure on the dividend policy of companies in emerging markets, and this paper highlights the effects of the last global financial crisis on their dividend policy.

We focus on the Gulf Cooperation Council (GCC) and East Asian countries for two reasons. Firstly, taxes on dividends are very low in GCC countries: 0% in Bahrain, UAE and Oman, 5% in Saudi Arabia, and 15% in Kuwait. According to Miller (1988), taxes are still a strong determinant of dividend policy. Consequently, the low level of taxes in these countries can affect the observed results in emerging countries about the effects of corporate governance and ownership structure on the dividend policy (El-Sady et al., 2012). Secondly, stock markets in these countries are more volatile and entail a high degree of information asymmetry. Al-Kuwari (2009) suggests that agency costs are very high in these countries and that governance mechanisms are more developed than in other emerging countries.

Comparing to the existent literature, we attempt to:

1. Clarify the impact of corporate ownership structure and board governance on dividend policy in emerging countries. These two dimensions refer to agency cost and signal theories and have not previously been studied in emerging countries to explain dividend policies. We use an original sample of 362 non-financial firms of GCC and East Asian countries between 2003 and 2013 to test our hypotheses. These considerations could provide additional insight into the dividend policy debate.
2. Contribute to the understanding of dividend policy by testing whether the impact of corporate governance on dividend policy changes during crisis periods in emerging countries. To our knowledge, only few studies investigate this topic in developed markets (Kowalewski, 2013; Bistrova et al., 2013; Abreu et al., 2013; Hauser, 2013).

To fulfill these objectives, our paper is organized as follows. Section 2 presents empirical literature related to dividend policy in emerging markets and develops our hypothesis. Section 3 describes model specifications and data. Section 4 presents and discusses the empirical results.

2. Theoretical framework and hypothesis development

Recently, some researches on dividend policies in emerging countries appeared (Adjaoud and Ben-Amar, 2010). They have focused particularly on the differences between dividend policies in emerging markets and developed markets. Based on a sample of 19 emerging countries, Mitton (2004) claims that dividend policies exhibit specific characteristics that rely on the ownership structure and governance mechanisms that distinguish the emerging countries. He suggests that the level of economic development affects the degree of investor protection in the country. Most of his findings validate the agency theory arguments for

the case of the emerging market. The agency theory states that outside stockholders have a preference for higher payouts to the detriment of reinvested earnings to limit the waste of internal funds by insiders. Developing countries provide lower investor protection, and the preference for dividends may be more relevant because outside shareholders perceive a higher risk of expropriation by insiders. Mitton's findings show a negative relationship between corporate governance and dividend payouts in countries with weak investor protection. Furthermore, he finds a strong negative relationship between dividend payouts and growth opportunities for well-governed firms. Amidu and Abor (2006) provide an insightful discussion on the determinants of dividend payout ratios in the emerging countries. They test the signal hypothesis, which establishes that, in emerging countries, managers have more information about the firm's future cash flows than outsiders. Managers have interest in signaling this information to the market (Gugler et al., 2003). Their results show significant positive relationships between the dividend payout ratio, profitability, cash flow, and tax. Therefore, risk and market-to-book value are shown to be negatively linked to dividend payouts. Omneya et al. (2010) use cross-sectional data on the top 50 listed Egyptian firms between 2003 and 2005 to examine the effect of board of directors' composition and ownership structure on dividend policies in Egypt. They find a significant positive relationship between institutional ownership and firm performance and between dividend policy and the payout ratio. Their results confirm that firms with higher financial profitability and higher institutional ownership paid higher dividends. However, they find that board composition has no significant effect on dividend decisions. Using a sample of GCC firms, Al-Kuwari (2009) shows that dividend policy is significantly related to government ownership, firm size and firm profitability. His results show also a negative relationship between dividend payouts and the leverage ratio. He notes that, in the GCC region, firms pay dividends to resolve agency problems and to preserve firms' reputation. He also suggests that governance mechanisms are more developed in these emerging countries because of agency costs. In fact, the beneficial influence of internal governance mechanisms on the reduction of agency costs is well known in the literature, even if some authors explain that the impact varies with firms' characteristics such as growth opportunities (Florackis, 2008; Darren, 2010).

In particular, the board of directors is a crucial internal mechanism of governance because it plays an important role in monitoring and controlling management. The quality of the board's performance has been extensively examined through three fundamental characteristics (Jensen, 1986). First, the composition of the board, i.e., the size of the board, the type of directors, and the existence of specialized committees (Omneya et al., 2010; Schllenger et al., 1989), second, the board structure, which indicates the nature of management: monistic or dualistic (Gregory, 2000; Borokhovich et al., 2005; and Lipton and Larsh, 1992), and third, the intensity of the activity of the Board, which is generally measured by the frequency of its meetings (Schellenger, Wood and Tashakori, 1989; and Chen et al., 2011).

According to Bokpin, (2011), larger boards are less effective than the smaller boards owing to the quandaries of coordinating large groups. Boards' firms in emerging countries are very small in size. Therefore, smaller-sized boards result in lower agency costs to monitor managers.

H_1: Board size positively affects dividend payments.

If independent directors are an effective monitoring device, then board independence and dividend policy should be substitutes in the monitoring of agency problems. Borokhovich et al. (2005) examine the relationship between board independence and dividend policy over the 1992-1999 period for U.S. companies. Their results show a significant and negative relationship between board independence and dividend policy. Board independence strengthens the control power of shareholders, which reduces the use of dividend payouts. This is not the case for the emerging countries, where board independence is generally very low.

H_2: Board independence is associated with lower dividend payments.

Baliga et al. (1996) suggest that in case of the CEO and chairman duality, the board is less effective in control mechanisms. In emerging countries, firms generally show CEO duality, which implies a high portion of insiders. This specific nature of board composition should have a negative effect on board

performance, leading to an increase agency costs. As such, to better monitor managers and to limit their expropriation of cash flow, shareholders require higher dividend payouts.

H_3: There is a negative relationship between the CEO Duality and dividend payments.

According to Conger et al. (1998), directors need sufficiently well-organized periods of time to make effective decisions. Moreover, Laksmana (2008) supports the idea that a sufficient number of well-organized meetings could lead to board effectiveness. He shows that meeting frequency can be considered as a proxy for directors to perform their duties. This reduces the agency costs and limits the need for very high payouts.

H_4: There is a negative relationship between the number of board meetings and dividend payments.

Ownership structure is also a determinant factor of dividend policy. The importance of majority shareholders affects the decision-making power in their favor, such as dividends' decisions (Bistrova, 2013). According to the agency theory (Jensen, 1986), there are two basic compounds that enhance the efficiency of the ownership structure as an internal mechanism of corporate governance: the ownership concentration and the nature of the shareholders. In our research, we investigate the impact of these two elements on the firm's dividend policy. There are two competing views in the literature about the effect of ownership concentration on dividend payouts: the monitoring hypothesis and the rent extraction hypothesis. The monitoring hypothesis states that the ownership concentration is associated with higher dividend payments. According to Shleifer and Vishny (1997), ownership concentration allows dominant shareholders to expropriate minority investors. This allows us to solve the free-rider problem related to dispersed ownership, where no single shareholder has enough incentives to incur monitoring costs for the benefit of all shareholders. However, the rent extraction hypothesis recognizes that ownership concentration is associated with lower dividend payments. Claessens and Djankov (1999) and Maury and Pajuste (2002) show that ownership concentration reduces firm value, which decreases dividend payouts.

H_5: Ownership concentration has a negative impact on dividend payments.

In emerging markets, institutional investors focus on governance as a way to enhance profitability markets, unlike in the developed countries, where institutional investors focus on governance as a way to avoid risk (Khanna and Zyla, 2010). Thus, we can expect that as the importance of the proportion of institutional investors increases, the dividend payouts in emerging markets will increase because cash dividends reduce the expropriation of managers of internal resources and increase the profitability of institutional shareholders. Based on the above discussion, we posit the following hypothesis:

H_6: Institutional ownership affects dividend payments positively.

In the absence of other governance mechanisms, dividend policy is likely to have an important role in monitoring management and reducing agency costs. This is the case of emerging markets characterized by high managerial ownership and low dispersed capital. Sundaramurthy and Lewis (2003) highlight the role of managerial ownership in controlling managerial opportunism in the firm. In this perspective, managerial ownership can serve as governance mechanism in aligning the interest of mangers with that of the other shareholders. But Vo and Nguyen (2014) find for Vietnam's listed firms that managerial ownership has a positive impact on dividend. We expect that dividend policies in emerging markets will be significantly affected by the managerial ownership of the firm.

H_7: Managerial ownership is associated with lower dividend payments.

Another crucial point of this study is to identify if firms change their corporate dividend policy during financial crisis (Kowalewski, 2013). Despite the importance of the empirical results highlighted above, no studies have tested the impact of board governance and ownership structure on dividend policy in emerging countries during the last financial crisis period. Hauser (2013) uses a life-cycle model to predict the probability that a firm pays dividends during the 2007-2009 period. He shows evidence that dividend payouts decline in crisis periods, even after taking the firm's financial condition into account. Bistrova et

al. (2013) study the dividend policy of European companies during the financial crisis. Their results show that payout ratios declined slightly during the 2008-2009 financial crisis. The dividend payouts during the recession did not drop below the 50% threshold, while in peak years, the share of dividend paying was approximately 57%. Based on the agency theory, Abreu et al. (2013) suggest that the agency cost hypothesis explains dividend payouts before and during the financial crisis. However, the signaling hypothesis explains dividend payouts only during the financial crisis. The imbalance situations that arise from financial crises create power differentials between managers and shareholders. Managers seek to take advantage of these conditions by neutralizing the governance mechanisms and strengthening their discretion. The need for effective corporate governance mechanisms becomes more pronounced during troubled periods. Without effective protection of minority shareholders, high future earnings can increase outsiders' expropriation and, in turn, affect the firm's dividend payout. As our two set of hypothesis on the impact of board governance and ownership structure on dividend policy can be affected by financial crisis, we integrate this new variable in the 7 hypothesis explained above in the second part of our empirical study. For example, the hypothesis H_1 becomes: "Board size positively affects dividend payments in periods of crisis".

3. Model specifications and data

Our empirical approach consists of a panel regression model to examine the relationship between board governance, ownership structure and dividend payouts. We first investigate the effect of board governance and ownership structure on dividend payout policy. Our common empirical model can therefore be stated as follows:

$$DP_{it} = \beta_0 + \sum_k \beta_k Own\_S_{it} + \sum_l \beta_l Board\_G_{it} + \sum_h \beta_h Control_{it} + \varepsilon_{it} \qquad \text{(Model 1)}$$

Where:

DP_{it} is the dependent variable that defines the dividend policy of firm i. We use two dependent variables separately. The dividend payout is measured by the dividend yield (*D_Yield*) and dividend decision *D_Dec*, which is a dummy variable that equals one if the firm decides to pay dividends and zero otherwise.

Own_S_{it} denotes ownership structure variables. Four measures of ownership structure are used in this analysis. *Inst_Own* is institutional ownership, and it is measured as the percentage of shares held by institutions. *Mang_Own* is Managerial ownership, and it is defined as the proportion of equity capital owned by managers and directors. We use two measures for ownership concentration: *Conc*. *Conc* is a dummy variable; equal one if the percentage of shares owned by largest shareholder are over 50%, zero otherwise.

$Board\_G_{it}$ denotes board governance variables. Four measures of board governance are used in this analysis. These are board independence, board size, CEO duality, and intensity. *Board_indep* is board independence, and it is defined as the number of independent board members on the corporate board. *Board_size* is board size, and it is defined as the number of board members. *Int* is board intensity, and it is defined as the number of board meetings per year. *Duality* is a dummy that takes a value of one if the CEO is also the board chairman and zero otherwise.

$Control_{it}$ are control variables. Eight Control variables are used in this paper: *Firm age*, *Beta*, *Firm size*, *ROE, effective tax rate, debt* and *invested capital.* To control for the Industry sector, we add a dummy variable that takes the value of 0 for a non-financial company, 1 for a petroleum company, 2 for a financial company and 3 for a service company. Table 1 provides the definitions of all the variables used in our analysis.

To test the fixed effect in our econometric specification, we run the Hausman test. The null hypothesis shows that the preferred model has random effects vs. alternative fixed effects. The results of the regression show that the p-value of the F statistic is equal to 0.003. As a result, the random estimation method is rejected. The p-value of Hausman statistics shows that the fixed effects method is more appropriate for our model.

We suspect endogeneity problems in our estimates relating to causality between exogenous variables and the dependent variables (especially the debt variable). Therefore, traditional econometric methods (OLS and fixed effects generalized least squares) don't enable us to obtain efficient estimates of this model. To solve this problem, we use the generalized method of moments (GMM) to estimate our panel models. This

method is much more consistent and efficient for estimating coefficients and controlling the potential problems of endogeneity, heteroscedasticity, and autocorrelation (Arellano and Bover, 1995).
Moreover, using this method (GMM) to estimate panel models has another advantage. It generates instruments from the explanatory variables, which is not the case for other traditional methods such as instrumental variables (2SLS and 3SLS), which require the selection of theoretical instrumental variables correlated and uncorrelated with the explanatory variables.
Our sample consists of 362 listed firms and covers the 2003-2013 period; 187 of the selected firms come from four East Asian countries – Malaysia, Thailand, Taiwan, Indonesia – and 175 from four GCC countries – Bahrain, Saudi Arabia, Kuwait and Oman. For conformity with previous studies, financial institutions are excluded from our sample due to their specific financial characteristics (i.e., Banks, securities firms and insurance companies). In developing countries, small and medium-sized firms are highly concentrated; to ensure that this effect will have no impact on our results, we select firms with large sizes. We collected data from the Worldscope database and corporate governance statistics from firms' annual reports.
Overall, the dividend decision registers a mean of 0.573, which denotes that more than 57% of the firms have paid dividends over 2003-2013. The dividend yield has an average value of 5.69%. This value is slightly higher than that reported by Omneya et al. (2010), who document a dividend yield mean of 4.34% on the Egyptian market. Our preliminary statistics show that duality is a distinctive feature of firms from emerging countries; 51.96% of companies operate with CEO-chairman duality. This is consistent with the results of Wellalage and Locke (2011) and Elsayed (2007), who find high duality in emerging countries. However, this percentage is higher than those reported by Faleye (2007) in the developed countries. CEO-Chairman duality appears more common in East Asian countries (67.3%) than in GCC countries (39.8%).
Our results also show that more than one-third of firms in our sample have concentrated ownership structures. On average, the concentration ownership (variable *Conc)* of the whole sample is 30.14%. East Asian firms appear more concentrated than GCC firms (47.4% versus 23.6%). Following the approach of Sahut et Hothmani (2010), we also tested the impact of another variable for the concentration ownership called Top5_Share, which is the sum of shares owned by the largest five shareholders. Finally, this variable is not significant in our regression and its high degree of correlation with the variable *Conc* (at the risk level of 1%) conducts us to ignore it.
Additionally, our sample includes both small and large firms (with a mean and standard deviation for Firm_size of 7.011 and 2.982, respectively) and low- and high-profit firms (with a mean and standard deviation for ROE of 0.194 and 0.325, respectively).

4. Empirical results

4.1. Impacts of ownership structure and governance mechanisms

Firstly, to test the fixed effect in our econometric specification, we run the Hausman test. The p-value of this test demonstrates that the fixed effects method is appropriate for our model. Table 2 reports the GMM fixed effects panel estimation results of model 1.
Among control variables, Beta and total debt have a significant negative effect on dividend decisions and payouts. Firm age and size are found to be positively significant for dividend decisions, especially for East Asian countries. This result corroborates previous studies (Al-Malkawi, 2007) that suggest that mature firms do not have a great interest in future investment growth, which allows shareholders to require dividend payouts. Another possible explanation is that large firms have higher agency costs due to the dispersion of their ownership, which requires additional monitoring and control, and higher dividends provide this complementary governance role.

The tax rate has a negative and significant effect on dividend yield in East Asian countries but no significant impact on firms' dividend yield in GCC Countries. This shows that higher tax rates in East Asian countries reduce dividend policy and that board members favor reinvesting incomes if equity returns are sufficiently competitive. ROE appears insignificant for GCC and East Asian countries, confirming the dividend irrelevance theory of Miller and Modigliani (Jensen, 1986). The dividend irrelevance theory states that shareholders and stockholders remain constant in perfect market conditions and that any growth in the current payout is financed by literally priced stock sales[1].

The table 2 shows only a positive and significant relationship between *board size* and firms' dividend decision and payouts in East Asian countries. Contrary to the findings of Omneya et al. (2010), we suggest that larger board size is associated with high dividend payouts. The increase of board members reduces agency costs for monitoring managers and can be perceived by the market as a positive signal that affects firms' dividend decisions. La Porta et al. (2000) suggest that large boards provide higher protection of shareholders' interests and increase dividend payouts. Contrarily, the *Board size* has no significant effect in GCC Countries. So, we accept the hypothesis that board size positively affects dividend decision and payouts (H1) for East Asian countries, and we reject it for GCC Countries.

The board independence variable appears to have a significant and negative effect on dividend decision and payouts. The hypothesis H2 is validated. Moreover, this impact is more significant for firms in the GCC countries. This indicates that firms with a higher percentage of external board members may pursue low-dividend payout policies. This result is consistent with Borokhovich et al. (2005). They show that there is significant and negative relationship between board independence and dividend policy on a sample of 192 U.S. companies over the period 1992-1999. Sharma (2011) confirms this positive link for 944 firms of the S&P 1500 in 2006.

CEO *duality* is found to have a significantly positive effect on dividend policy and dividend payouts in both regions. This result disproves our initial hypothesis H3. This means that firms with CEOs and chairman positions held by the same person tend to pursue a high dividend payout policy. This result can be explained by the fact that combining the chairman and CEO positions in emerging markets cannot be considered as an effective tool to mitigate expropriation risk. Therefore, to resolve free cash flow problems, shareholders require higher dividend payouts. This argument corroborates findings by Baliga et al. (1996), who argue that CEO duality is not an effective control mechanism in developed countries.

Our estimation also shows a significant positive relationship between *board intensity* and dividend payouts. For the dividend decision, the relationship is non-significant. Consequently, the hypothesis H4 is rejected. Thus, we can deduce that a very active board has the potential to help align the incentives of managers and shareholders through its impact on the payout policy.

The variable Conc (ownership concentration) appears to be significantly and negatively related to firms' dividend decision and payouts in both regions. In line with Harada and Nguyen (2011), we suggest that ownership concentration plays a significant role in corporate decisions on dividend payout policy in emerging countries. Thus, the hypothesis 5 is validated. This result is contrary to that found for developed countries by Zeckhauser and Pound (1990), who did not find a significant relationship between dividend payout ratios and large block holders. They conclude that ownership concentration and dividend policy cannot be considered as substitute monitoring devices. But more recently, Claessens and Djankov (1999) and Maury and Pajuste (2002) prove that ownership concentration shrinks firm value, and conduct to reduce dividend payouts. This impact is greater for mature firms and/or financial markets where dividends are a strong determinant of firm value such as in GCC countries.

As expected, institutional ownership has a positive and significant effect on firms' dividend decision and payouts in both regions. This finding validates the hypothesis H6. It confirms that the market did not interpret the presence of an institutional shareholder as signaling good news regarding the firm's management efficiency. Han et al. (1999) find the same result and suggest that the positive relationship

[1] To test the impact of the Return on assets on dividend payouts, we re-run our model by replacing the ROE with ROA. The results also show a non-significant coefficient of ROA, once again confirming the dividend irrelevance theory.

between dividend payouts and institutional ownership supports the tax-based hypothesis. Their finding conjectures a certain type of "dividend clientele," that is, institutions' preference for dividends. However, this result is contradictory to the findings of Short et al. (2002), who claim that large institutional ownership may mitigate the use of dividends as a signal of good performance.
Contrary to expectations, managerial ownership has no effect on dividend decision and payouts. This result is quite surprising in the case of emerging markets. It shows that managerial ownership cannot serve as a substitute in reducing agency costs. Consequently, we reject the hypothesis H7. In fact, several factors interfere in the development of managerial ownership program and can explain this result in the context of emerging markets. In particular, lower dividend will increase the probability that a firm engages in managerial ownership program and vice versa. Moreover, managers tend to increase their ownership when firm size becomes larger (Vo and Nguyen, 2014).

4.2. Dividends and crisis

In order to test the impact of board governance on dividend policy during the most recent crisis period, we run our basic model by adding a new variable – C*risis* – to the regressions. This variable should capture the impact of the financial crisis and economic slowdown on firms' dividend policy. The variable *Crisis* takes the value of 1 for the 2007-2010 period and 0 otherwise. Furthermore, to control whether the impact of ownership structure and corporate governance on dividend policy changes during the crisis period, we interact ownership structure and corporate governance variables with the *Crisis* variable. Globally, the results in table 3 highlight that the impact of the crisis is more relevant for the dividend policies of firms in GCC countries.
This table shows that *board size* has significant and negative effects on firm dividend decisions in both regions when interacted with the crisis variable. The impact appears more significant in the GCC countries where crisis strongly affects dividend decision and payouts. This shows that board size is more relevant in the emerging markets during the financial crisis. This negative relationship can be explained by the fact that during the crisis, board members become more risk averse, which is a sign of better company governance. These companies seek to protect their shareholders during periods of high uncertainty by reinvesting their earnings internally.
Regarding dividend yields, the interacted coefficients of CEO duality with crisis are negatively significant at the 5% and 1% levels for the East Asian and the GCC countries, respectively. This implies that during crisis periods, firms with CEO duality pay lower cash dividends. This explanation can be interpreted to mean that during crisis periods, it is difficult for firms to raise external funds to support their growth; accordingly, CEOs prefer to reduce their dividend payouts. This implies that CEOs who are also chairmen of the board of directors can exercise more control over their firms and may be less likely to have their dividend policy decisions challenged by the board of directors.
Another interesting result is that the interacted coefficient of board intensity has a significantly negative effect on both firms' dividend decision and payouts in both regions. This finding implies that firms with active boards were less likely to pay out dividends during the recent financial crisis. The purpose of having more board meetings during the financial crisis was to establish policies that protect shareholders and sustain the financial stability of the firm.
Contrary to previous results, managerial ownership has a significant negative effect on dividend decision and payouts when interacted with the crisis variable for firms in both regions. This is consistent with several previous studies and confirms our basic hypothesis. Demsetz and Lehn (1985) suggest that managerial ownership is an important internal monitoring force that is particularly important in times of crisis when other governance mechanisms are not very functional. They defend that managerial ownership is an effective monitoring tool for resolving the agency conflicts between external stockholders and managers during crisis periods.
Contrary to GCC firms, institutionals have a significantly positive effect on dividend yields in the crisis period for firms in East Asian countries. This implies that during turbulent periods, institutionals require higher cash dividends in order to reduce the risk of expropriation and to increase shareholder profitability. This finding is in line with the arguments of Jensen (1986) supporting that dividend can be used by

institutionals as a mechanism to reduce agency problems between shareholders and managers. The two variables "*ownership concentration*" and "*ownership concentration interacted with crisis*" appear insignificant and do not affect the dividend decision and yield of firms in both regions. Ownership concentration plays any role in corporate decisions on dividend payout policy during crisis. In fact, firms with concentrated ownership are also less likely to increase dividends when earnings rise (Harada and Nguyen, 2011). But in times of crises, earnings decrease, net income can become negative and firm main goal is to avoid bankruptcy. Consequently, the interests of large shareholders converge with those of minority shareholders and ownership concentration doesn't matter.

The results for the control variables are in line with previous regressions. Again, firm age and size are positively and significantly related to the dividend decision measure. Beta and debt are negative and highly significant. As before, the remaining control variables are statistically insignificant.

5. Conclusion

The purpose of this paper was to test the effects of specific corporate governance mechanisms and ownership structures on dividend policy using a large sample of firms in GCC and East Asian countries over the period 2003-2013.

If most of our empirical study results confirms the findings of previous researches, the results for the crisis period changes substantially.

For governance mechanisms, the influence of board size, CEO duality and board intensity on dividend decision and/or payouts becomes negative. Moreover, the independence of board members no longer determines dividend policy. For ownership structure, institutional ownership plays always the same role, whereas concentration ownership becomes insignificant and managerial ownership has a significant negative effect on dividend decision and payouts. In fact, the main interest of this research is to discover these changes on the dividend policy of the mechanisms of governance and ownership structures during the crisis. Our results highlight that behaviour of managers, directors and large shareholders changes. Consequently most of governance mechanisms cannot serve in reducing agency costs. However, the risk of bankruptcy helps to align interests of all these actors.

The implications of this study are relevant to investors and firms that listed in emerging markets. We showed that the efficiency of governance mechanisms is highly dependent of the shareholding structure of the firm. We thought that legal authorities in emerging markets have to reinforce governance standards and should focus on issues born from the blockholders shareholding that put a risk of expropriation for the minority shareholders and impede capital market development.

Finally our work requests for future researches that should deepen the association between block holding and good corporate practices such as transparency and effective audit committee and its impacts on dividend policy, in the same perspective than Eldomiaty et al. (2009) who showed that increasing the transparency of financial reporting for companies in the Dubai Financial Market General Index reduces the systematic risk of these companies.

References

Abreu, J. F. and Gulamhussen, M. (2013). "Dividend payouts: Evidence from U.S. bank holding companies in the context of the financial crisis". *Journal of Corporate Finance*. Vol 22, September, pp. 54-65.

Adjaoud, F. and Ben-Amar, W. (2010). "Corporate Governance and Dividend Policy: Shareholders' Protection or Expropriation?" *Journal of Business Finance & Accounting,* Vol. 37, Issue 5-6, pp, 648-667.

Al-Kuwari, D. (2009). "Determinants of the Dividend Policy in Emerging Stock Exchanges: The Case of GCC Countries". *Global Economy and Finance Journal.* Vol. 2 September, pp. 38-63.

Al-Malkawi, H. N. (2007). "Determinants of corporate dividend policy in Jordan: An application of the Tobit model". *Journal of Economic and Administrative Sciences,* Vol. 23, N° 2, pp. 44–70.

Amidu, M. and Abor J., (2006). "Determinants of Dividend payout ratios in Ghana". *Journal of Risk Finance,* Vol. 7, N°2, pp. 136 - 145.

Arellano, M., Bover, O. (1995). "Another look at the instrumental variables estimation of error-components models". *Journal of Econometrics*, Vol. 68, N°1, pp. 29–51.

Baliga, B.R., Moyer, R.C. and Rao, R.S. (1996). ''CEO duality and firm performance: what's the fuss?''. *Strategic Management Journal,* Vol. 17, N°. 1, pp. 41-53.

Bistrova, J., Lace, N., and Kozlovskis, K. (2013). "Ownership Type Influence on Dividend Payments in CEE Countries". *Business: Theory and Practice Journal,* Vol 1, N°3, pp. 259-266.

Bokpin, A. (2011). "Ownership structure, corporate governance and dividend performance on the Ghana Stock Exchange." *Journal of Applied Accounting Research,* Vol. 12, N° 1, pp. 61-73.

Borokhovich, K., Brunarski, K., Harman, Y., and Kehr, J. (2005). "Dividends, Corporate Monitors and Agency Costs. *The Financial Review*, Vol. 40, n°1, pp. 37-65.

Chen, L., C. Lin., and Yong-Cheol, K. (2011). "Financial Characteristics, Corporate Governance and the Propensity to Pay Cash Dividends of Chinese Listed Companies". *International Business and Management,* Vol. 3, N°1, pp. 176-188.

Claessens, S. and Djankov, S. (1999). "Ownership concentration and corporate performance in the Czech Republic". *Journal of Comparative Economics,* Vol. 27, N°3, pp. 498-513.

Conger, J, Finegold, D and Lawler I, E (1998). "Appraising Boardroom Performance". *Harvard Business Review,* Vol. 76, N°1, pp. 136-148.

Darren, H. (2010). "Agency costs, ownership structure and corporate governance compliance: A private contracting perspective". *Pacific-Basin Finance Journal*, Vo. 18, N°1, pp. 24-46.

Demsetz, H. and Lehn, K. (1985). "The structure of corporate ownership: causes and consequences". *Journal of Political Economy,* Vol. 93, N°6, pp. 1155-77.

Denis, DJ. (2008) "Why do firms pay dividends? International evidence on the determinants of dividend policy". *Journal of Financial Economics*, Vol. 89, N° 1, pp. 62–82.

Eldomiaty, T.I., Al Dhahery, M.H., Al Sukri, M. (2009). "The Fundamental Determinants of Systematic Risk and Financial Transparency in the DFM General Index". *Middle Eastern Finance and Economics*, N°5, pp. 49-61.

El-Sady, H.M., Hamdy, H.I., Al-Mawaziri, K. and Al-Shamari, T. (2012). "Dividend policies in an emerging market". *International Review of Business Research*, Vol. 8, N°2, pp. 12- 28.

Elsayed, K. (2007), "Does CEO Duality Really Affect Corporate Performance?" *Journal compilation,* Vol. 15, N° 6, November, pp. 1203-1214

Faleye, O. (2007). "Does one hat fit all? The case of corporate leadership structure". *Journal of Management and Governance*, Vol 11, N°3, pp. 239-259.

Florackis, C. (2008). "Agency costs and corporate governance mechanisms: evidence for UK firms". *International Journal of Managerial Finance*, Vol. 4, N°1, pp.37-59.

Gugler, K. and Yurtoglu, B. (2003). "Corporate governance and dividend pay-out policy in Germany*"*. *European Economic Review,* Vol. 47, N°4, pp. 731-58.

Glen, J. D., Karmokolias, Y., Miller, R. R. & Shah, S. (1995). "Dividend Policy and Behaviour in Emerging Markets: To Pay or Not to Pay". IFC Discussion Paper No. 26.
Gregory, H.J. (2000). "The globalization of corporate governance". *October 2000 issues of Global Counsel.*
Han, K.C., Lee, S.H., Suk, D.Y. (1999). "Institutional shareholders and dividends". *Journal of Financial and Strategic Decisions*, 12, pp. 53–62.
Harada, K. and Nguyen, P. (2011). "Ownership concentration and dividend policy in Japan". *Managerial Finance*, Vol. 37, N°4, pp. 362-379.
Hauser, R. (2013). "Did dividend policy change during the financial crisis?". *Managerial Finance*. Vol. 39, N° 6, pp. 584-606.
Jensen, M. C. (1986). "Agency costs of free cash flow, corporate finance, and takeovers". *American Economic Review,* Vol. 76, N° 2, pp. 323-329.
Khanna, V. and Zyla, R. (2010). "Corporate Governance Matters to Investors in Emerging Market Companies". *International Finance Corporation*- World Bank Group, Survey says-2010.
Kowalewski, O. (2013). "Does Corporate Governance Determine Corporate Performance and Dividends During Financial Crisis: Evidence from Poland". http://fic.wharton.upenn.edu/fic/papers/12/12-14.pdf.
Laksmana, I. (2008). "Corporate board governance and voluntary disclosure of executive compensation practices". *Contemporary Accounting Research*, Vol. 25 N° 4, pp. 1147-1182.
La Porta, R., Florenico, L.D.S., Shleifer, A. and Vishny R.W. (2000). "Agency Problems and Dividend Policies Around the World". *Journal of Finance.* Vol. 55, N° 1, pp. 1-33.
Lipton, M et Lorsh, J. (1992). "A modest proposal for improved corporate governance". *Business Lawyer*, Vol.48, N°1, pp.59-77.
Maury, B. and Pajuste, A. (2002). "Controlling Shareholders, Agency Problems and Dividend Policy in Finland". *Journal of Business Economics.* Vol. 51, N°1, pp. 15-45.
Miller, M. (1988). "The Modigliani-Miller Propositions after Thirty Years". *Journal of Economic Perspectives*, Vol. 2, N°4, pp. 99-120.
Mitton, T. (2004). "Corporate governance and dividend policy in emerging markets". *Emerging Markets Review,* Vol. 5, N°4, pp. 409-26.
Omneya, A., El-Masry, A. and Elsegini, S. (2008). "Board composition, ownership structure and dividend policies in an emerging market, Further evidence from CASE 50". *Managerial Finance*. Vol. 34 N°. 12, pp. 953-964.
Sharma, V. (2011). "Independent directors and the propensity to pay dividends". Journal of Corporate Finance, 17, issue 4, p. 1001-1015.
Schellenger, M.H., Wood, D.D. and Tashakori, A. (1989). "Board of Director Composition, Shareholder Wealth, and Dividend Policy". *Journal of Management*, Vol.15, N°3, pp. 457-467.
Shleifer, A. and Vishny, W. (1997). "A Survey of Corporate Governance". *The Journal of Finance,* Vol 52, N° 2, pp. 737-783.
Short, H., Zhang H, and Keasey, K. (2002). "The link between dividend policy and institutional ownership". *Journal of Corporate Finance,* Vol. 8, N°2, pp. 105-122.
Sundaramurthy, C., Lewis, M. (2003). Control and collaboration: Paradoxes of governance. *Academy of Management Review*, Vo. 28, N°3, pp. 397–415.
Vo D.H., Nguyen T.Y. (2014). "Managerial Ownership, Leverage and Dividend Policies: Empirical Evidence from Vietnam's Listed Firm". International Journal of Economics and Finance, Vol. 6, N°5, pp 274-284.
Wellalage, N. and Locke, S. (2011). "Does CEO Duality is Really Matter? Evidence from an Emerging Market". *Corporate Ownership and Control*, Vol. 8, No. 4, pp.112-122.
Zeckhauser, R. J., and Pound, J. (1990). "Are large shareholders effective monitors? An investigation of share ownership and corporate performance". In: R. G. Hubbard (ed.), Asymmetric information, corporate finance, and investment, Chicago: University of Chicago Press.

Appendix

Table 1 - Definition of variables

Variable	Description
Dependent Variables	
D_Yield	Dividend yield (Annual Dividend Per Share as a Percentage of the Share Price)
D_Dec	Dividend decision (Dummy variable; equals one if the firm decides to pay dividends, zero otherwise)
Independent Variables	
Ownership variables	
Inst_Own	Institutional Ownership (The percentage of a firm's shares held by institutions)
Conc	Ownership concentration (Dummy variable; equal one if the percentage of shares owned by largest shareholder are over 50%, zero otherwise)
Mang_Own	Managerial Ownership (The percentage of a firm's shares held by managers)
Board variables	
Int	Intensity (the number of board meetings)
Board_size	Board size (the number of board members)
Duality	CEO Duality (a dummy equal to one if the CEO is also the board chair and zero otherwise)
Board_indep	Board independence (The number of independent board members on the corporate board)
Control variables	
Firm_age	Listing age in this study employed the age of the listing (AGE) as a proxy for firm age rather than the year of incorporation to control for firm maturity)
Beta	Beta, systematic risk
Firm_size	The natural logarithm of total market capitalization
ROE	Return on equity (Net Income divided by Average Total Equity)
Tax	Effective Tax rate
Debt	Total Debt
Industry	Dummy variable (0 Industrial company, 1 petroleum company, 2 financial company and 3 service company)
Crisis	Dummy variable: takes the value of 1 for the 2007-2010 period and 0 otherwise

Table 2. Impact of corporate governance and ownership structure on dividend policy

This table reports the GMM fixed effects panel model estimation. The model sets the relationship between board governance and dividend policy for a sample of 362 non-financial firms over the 2003-2013 period. Dependent variables are Dividend decision (D_Dec) and dividend yield D_Yield), respectively. Definitions of all variables are reported in table1. ***,**,* indicate significance at the risk level of 1, 5 and 10%, respectively.

	D_Dec		D_Yield	
	East Asian Countries	GCC Countries	East Asian countries	GCC Countries
Inst_Own	0.4482***	0.3956***	0.0704 ***	0.3325***
Conc	-0.0807*	-0.1586**	-0.4097***	-0.0922***
Mang_Own	-0.2050	0.0648	0.0375	-0.0786
Duality	0.3884***	0.6570***	0.3307***	0.5479***
Int	0.8255	0.9784	0.0239**	0.2904**
Board_size	0.0411**	0.0460	0.1204***	0.3217
Board_indep	-0.2474***	-1.2648 ***	-0.3637***	-0.9652***
firm_age	0.0522***	0.6350**	0.4958 *	1.2562*
Beta	-0.1742***	-0.1575***	-0.0796**	-0.5443***
Firm_size	0.0757***	0.3016*	-0.2080	-0.0391
ROE	-0.0404	-0.0161	-0.0417	-0.0087
Tax	-0.2703	-0.0434	-0.3269**	0.0591
Debt	-0.0376*	-0.0315**	-0.0856***	-0.3374**
Industry	-0.0057	-0.0077	0.0005	0.0149
Constant	-0.1904***	-0.6929***	-0.2618***	0.7353***
R-squared	0.4903	0.5178	0.3875	0.3752
Wald-Test	144.31***	175.69***	217.58***	201.83***
Obs.	2057	1925	2057	1925

Table 3. Board governance, ownership structure and dividend policy: impact of crisis

This table reports the GMM fixed effects panel model estimation. The model sets the relationship between board governance and dividend policy for a sample of 362 non-financial firms over the 2003-2013 period. Dependent variables are Dividend decision (D_Dec) and dividend yield (D_Yield), respectively. Definitions of all variables are reported in table 1. ***, **,* indicate significance at the risk level of 1, 5 and 10%, respectively.

	D_Dec		D_Yield	
Independent variable	East Asian countries	GCC Countries	East Asian countries	GCC Countries
Duality	0.7245***	0.6142***	0.2045***	0.1758***
Int	0.0609***	0.1283 ***	0.0853***	0.1962***
Board_size	0.0884	0.0254	0.0558	0.0724
Board_indep	-0.0535***	-0.2017***	-0.0542 ***	-0.1675***
Crisis	-0.7502***	0.3536***	-0.0394 ***	-0.0686
Duality*Crisis	-0.0067**	-0.2004**	-0.2079**	-0.0622***
Int*Crisis	-0.5986*	-0.6157***	-0.6225***	-0.7419***

Board_size*Crisis	-0.2566***	-0.4496 ***	-0.0832 ***	-0.0075*
Board_indep*Crisis	0.0018	0.0723	0.0210	0.0022
Mang_Own*Crisis	-0.4541***	-0.6390***	-0.5487***	-0.4722***
Inst_Own*Crisis	0.4125***	0.1087	0.3254***	0.2203
Conc*Crisis	0.0332	-0.0997	-0.0796	0.0805
Inst_Own	0.2273***	0.3987 ***	0.0719***	0.1261***
Conc	-0.0772	-0.0547*	-0.0726	-0.0822
Mang_Own	0.1489	0.0910	-0.1104	-0.0864
firm_age	0.1086 ***	0.0705 ***	0.0708	0.0087
Beta	-0.0707 ***	-0.0570***	-0.6113**	-0.0216**
Firm_size	0.0964**	0.0782***	0.0433 **	0.0521**
ROE	0.0562	0.0340	-0.0581	-0.0357
Tax	0.0312	-0.0279	0.0072	0.0093
Debt	-0.0906**	-0.0975**	-0.0011**	-0.0078*
Industry	-0.0317	-0.0102	0.0014	0.0057
Constant	-0.4159***	-0.6883***	0.0187*	0.0644**
R-squared Within	0.2645	0.3374	0.2782	0.3581
Wald-Test	161.27***	201.98***	149.54***	229.53***
Obs.	2057	1925	2057	1925