
Corporate Governance, Ownership Structure and Dividend Smoothing: The Mediating Role of Family Ownership and Board Diversity in Emerging Markets

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Abstract:

Purpose: The study attempts to explore the determinants of dividend smoothing behavior of firms by using firm's specific characteristics, corporate governance and ownership structure variables as determinants of dividend smoothing in emerging markets due to their unique features from Western markets. The current study is undertaken to fill this gap in the literature.

Design/methodology/approach: In order to achieve the research objectives panel data (2009-2018) of more than 1000 Asian firms were analyzed by using Statistical techniques such as pool, fixed and random models.

Findings: Based on gender critical mass theory, the study finds that the presence of gender critical mass is positive and significantly associated with firm dividend smoothing behavior; whereas, presence of fewer women depicts negative or insignificant association with dividend smoothing behavior. Importantly, the study also finds moderating role of gender diversity between family ownership and firm's dividend smoothing behavior. Furthermore, contrary to the agency theory based on explanations of dividend smoothing, firms with family ownership smooth dividend more in emerging markets.

Practical implications: This paper helps out to the current as well as future potential investors to make better decision in such a changing economy as well as to help investors in selecting better investment opportunity to make their investment more profitable.

Originality/value: The current study is the first of its kind to investigate dividend-smoothing behavior for more than 1000 firms of emerging Asian countries based on cross country analysis.

Keywords: Dividend smoothing, Corporate Governance, ownership structure, Fixed Effects models, Random Effects models.

JEL Codes: G32, G33, M41.

Paper type: Research paper.

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1. Introduction

In the area of corporate finance, dividend behavior is considered an important topic of research, but we still do not have sufficient explanation for the dividend behavior of firms (Black, 1976). It is one of the ten unresolved puzzles in corporate finance literature as we obtain different views in respect of its determinants. Some researchers believe that dividend is irrelevant (Miller and Modigliani, 1961) while others strongly favor the relevancy hypothesis (Lintner, 1956; Fama and Babiak 1968; Brav *et al.*, 2005). It is not the dividend that has remained controversial but the assumptions about markets make dividend policy more complicated since we are suffering to have conclusive evidences in respect of dividend policy.

Following Lintner (1956), Fama and Babiak (1968), numerous studies explored that firms prefer to distribute smooth dividends to its shareholders. The signaling hypothesis suggests that managers tend to smooth dividends relative to earnings; they increase dividend payout ratio only when they believe a significant and sustainable increase in firm's earnings, they increase their dividend payments when they believe that earnings can sustain higher dividend levels permanently, and are reluctant to cut dividends except when adversative conditions are likely to persevere, as dividend cuts may be perceived as bad signal about firm's performance and results in lower share price due to market negative response.

The study confers with signaling hypothesis and relevancy theory of dividend payout. Despite of numerous studies relating to determinants of dividend smoothing behavior of the firms (Brav *et al.*, 2005), the literature is unable to resolve the controversies among dividend smoothing determinants. This controversy may stem from differences in investors' horizon, market behavior, and the economic condition in which firm is operating or overall governance mechanism of the economy (Leary and Michaely, 2011). In addition, most of the studies focused on US and western market where the conditions are significantly different from emerging markets.

Agency theory is used to explain and resolve issues in the relation between stockholders and their agents. Corporate governance represents a system of principles, policies, and evidently clear accountabilities and responsibilities used by shareholders to overawe the conflicts of interest inherent. It deals with defining ways to take active strategic measures to minimize the conflict of interests and added value to the firm. Dividend policy is used as a mechanism to reduce the agency conflicts, as per the substitute theory, which imitates minority-friendly comportment. Hence, shareholders can use governance mechanism to overcome the potential consequences of agency conflicts that may arise due to information asymmetry. It is quite imperative to investigate the role of important corporate governance determinants on dividend smoothing behavior of the firms. The pattern of shareholding significantly influences dividend smoothing behavior as the choices differ dramatically due to variation in tax brackets, control of firm's assets, parental and subsidiary relation etc., the ownership structure has a significant role in dividend

smoothing in emerging markets due to family dominance, group affiliations and growing subsidiary pattern. At the same time, dispersed structures are less typical, though there are noteworthy differences between jurisdictions among Asian countries. While China and Vietnam, for instance, are categorized by sizable state ownership, while India and Korea preserve substantial family ownership structures. Accepting ownership structures in Asia is precarious to confirming the advance of operational corporate governance standards. So, it is very important to test ownership role in dividend smoothing behavior of emerging markets.

The study has several significant contributions. First, it provides empirically the impacts of corporate governance and ownership structure on dividend smoothing behavior of firms in emerging markets. Importantly, the study provides new evidence relating to significant role of gender diversity on firms' smoothing behavior. The presence of female director on corporate board significantly impacts dividend smoothing and female presence can be used as a mechanism to address the information asymmetry problems in firms by distributing smooth dividend. For more conclusive evidence, the study also split into male and female CEO and findings show alternative mechanism approach may be used to alleviate the conflicts. Secondly, family ownership is a crucial factor among other factors of ownership structure, as valuable proportion of family owned firms in Asian region, we examine its impact on dividend smoothing. The moderating effect of board diversity between family ownership and dividend smoothing is examined by the current research. To the best of our knowledge, this is the first study investigating dividend-smoothing behavior for more than 1000 firms of emerging markets.

The remaining article proceeds as follows: in the next section, we discuss previous studies regarding the relationship between various significant factors and dividend smoothing behavior and develop the hypothesis for our study. Data collection and various analysis techniques are mentioned in the third section. In the fourth section, results will be presented. Discussion and future recommendations will be in the last section.

2. Theoretical Framework

Dividend policy refers to the managerial decision on how much of a firm's earnings are to be distributed to stockholders as dividends versus holding for reinvestment in future prospects. In general, there are three schools of thought in regards firm's dividend policy (Damodaran, 2010). First, the dividend irrelevance theory proposes that dividend policy has no influence on market price of firm's stock; henceforth the firm's value in a perfect capital market remains unaffected (Miller and Modigliani, 1961; Black and Scholes, 1974). Second school of thought takes into consideration the tax disadvantage and claims that dividends are not useful for stockholders who fall in higher tax bracket thus resulting lower stock prices (Brennan, 1970; Litzenberger and Ramaswamy, 1979). Finally, the bird-in-the-hand school of thought contends that dividends are encouraging as their payments results in an increase in

stockholders' wealth through their influence on stock price (Harkavy, 1953; Gordon, 1963; Pettit, 1972; Ball *et al.*, 1979; Woolridge, 1983).

In addition to these three schools of thoughts, the signaling theory states how the increments/cut of dividend payout convey good/bad signals to the stock markets associated with company's future prospects (Miller and Rock, 1985) which ultimately explain into upward/downward movements of the stock value. As far as agency theory is concerned, dividend payments curtail agency costs between the management and shareholders (Moh'd *et al.*, 1995). This view also states that dividend payment also reduces discretionary accrual that can be utilized with self-interest by the management. In general, the study contents the dividend smoothing behavior of the Asian firms in context of agency theory, signaling theory and dividend relevancy aspects. Yet, it is not clear the factors that forces management to follow the aspect of dividend smoothing. In this paper, we study whether board characteristic or ownership structure indeed impact dividend smoothing behavior of the firms in emerging markets.

3. Literature Review and Hypotheses Development

Various researchers have investigated different factors which influence the dividend smoothing of firms. The present study highlights some of the important factors of corporate governance (board size, board diversity) and ownership structure (family ownership, institutional ownership). Limited reviews of the prior studies regarding the relationship between the above mentioned factors and dividend smoothing are provided below.

3.1 Firm's Dividend Smoothing

Since the seminal study by Lintner (1956), the phenomenon of dividend smoothing has been extensively studied. As, dividend changes may respond slowly to change in earnings, the management are reluctant to dividend cut and they are often ready to bear cost in order to avoid dividend cut even if the cost is significant. The evidences suggest that managers peruse dividend smoothing only because they are in belief that investors prefer smooth dividends. Lintner (1956) stated, "*Dividend smoothing behavior was motivated by the belief on the part of many managements that most stockholders prefer a reasonably stable rate and that the market puts a premium on stability or gradual growth in rate.*" In this vein, Brav, Graham, Harvey, and Michaely (2005) exhibited that executives are aware of a significant asymmetry between dividend cut and increases. Hence, they perceive a nominal reward for increasing dividends but a large penalty for dividend cut. So far, there is little (if any) empirical evidence in Asian context that describes the mechanism through which stockholders control management dividend smoothing behavior. Berk and DeMarzo (2013) stated that even more than fifty years after Lintner's seminal work, we lack clear reason why firms smooth their dividends, nor convincing evidence relating to factors that influence dividend smoothing.

3.2 Corporate Governance and Dividend Smoothing

According to Lazarides *et al.* (2009) corporate governance is a mechanism by which corporations are governed. Corporate governance primarily attempts to guard stockholders and then other stakeholders' interest by making certain transparency and enforcing accountability. In the meantime, the dividend-paying behavior in emerging market is different from that of the western because of the difference in tax, information asymmetry and market volatility (AlKuwari, 2009; Wardhana *et al.*, 2014). There is a probability that dividend payout is more vulnerable in playing the monitoring role which ultimately enables minority stockholders to control managers discretionary action to avoid any manipulation in firm's resources.

As the literature depicts that higher and stable dividends are the most appropriate mechanism to control agency conflicts (Easterbrook, 1984; Jensen, 1986) firms exposed to higher agency conflicts are more likely to follow higher degrees of dividend smoothing and the firms with weak governance mechanism tend to opt for a higher degree of dividend smoothing (Leary and Michaely, 2011; Javakhadze *et al.*, 2014). Hence, we can conclude the dividend and agency conflicts can serve as substitute for each other. Conversely, it is also believed that stockholders are able to influence firms' dividend policy by virtue of their strong shareholdings and influential role on the corporate board (Kowalewski, Stetsyuk and Talavera, 2007).

They can force the management to pay stable dividend resulting dividend smoothing as an outcome of a strong corporate governance mechanism. Even and stable payout policies may have a two-way effect on firm. First, it reduces the chances of expropriation by managers while at the same time revealing the firm to the external financial market. Though, smoothing dividend may not act as barometers, yet it can also significantly reduce financial costs. For that reason, firm always prefer to strike the optimal dividend policy that results in an appropriate level of dividend smoothing by the firm. The literature however highlighted inconsistent views regarding dividend smoothing and corporate governance mechanism. In this vein, Javakhadze *et al.* (2014) reported that firms with strong governance mechanism exhibit less dividend smoothing behavior whereas Leary and Michaely (2011) provided evidence showing that weak governance results in less dividend smoothing policy in countries with poor shareholders protection rights. Based on earlier empirical works of Leary and Michaely (2011) and Javakhadze *et al.* (2014), the current study uses board characteristics and ownership structure as proxies for corporate governance mechanism. Resultantly, the study extends on existing literature by including pertinent proxies of board characteristics (board size and board diversity) and ownership structure (family ownership and institutional ownership).

3.2.1 Board Size and Firm's Dividend Smoothing

According to resource dependency theory, board size provides different resources to them and enables it to make timely and useful decisions. Similarly, as per agency

theory larger board is more likely to reduce agency conflicts between management and stakeholders by better monitoring and reducing information asymmetry. In this vein, there are empirical evidences that show positive and significant impacts of board size on dividend smoothing by affecting firm performance according to resource dependency theory and reducing agency conflicts as per agency maxim. Board of directors and its size makes significant efforts to reduce the agency problems and make better relations between management and stockholders. In contrast, some views that small typically produces better returns in comparison to larger-firms. Small boards are more likely to identify and act on poor performance of CEO. According to Bokpin, 2011, small board spends less time in discussions and is more likely to make timely decisions.

The current study is mainly concerned with agency conflicts model, therefore, we confer positive association between board size and dividend smoothing behavior of the firms in Asia. This is in line with earlier findings (Bokpin, 2011; Batool and Javid 2014). It is also observed that large board size with more proportion of independent directors are supportive to increase dividend payments and at the same time helpful to mitigate agency conflict between management and shareholders (Afzal *et al.*, 2009; Yarram and Dollery 2015). On the basis of these arguments, we hypnotized as follows:

Hypothesis 1: The board size has a significant positive influence on the dividend smoothing behavior of firms in emerging markets.

3.2.2 Board Diversity and Dividend Smoothing

In modern business, gender equality is one of the most important factors that promote ethics in corporate board. Board with gender diversity is more likely to have fewer agency conflicts. Good governance mechanism doesn't call for dissent in the corporate board, but it often calls for gender diversity. Female presence on the corporate board is good, as it is beneficial for internal and external stakeholder. Its presence is more pronounced and useful in firms and markets where shareholders protection rights are on the lower side or/and agency conflicts prevails due to information asymmetry. In this vein, Byoun (2016) reported alike findings for US firms and report that firms with gender diverse boards are more likely to smooth their dividend policy because these firms exhibit lower agency cost.

Board gender diversity is one of a common phenomenon used in most of the emerging markets and it has significant impact on financial decisions like dividend payout ratio made by board of directors (Bebchuk *et al.*, 2009). It is also observed that as compare to male directors, female directors are more ethical, which leads smoothness of dividends and curtailing of agency conflict on one side and strengthen better relation among management and stockholders on the other side (Ararat *et al.*, 2015; Suryanto *et al.*, 2017). The stakeholders can reduce agency cost by increasing proportion of female directors in the board. Similarly, it is evidenced that boards with female directors have more effective monitoring mechanism as compare to the

boards with male directors and more female directors in the board strengthen the corporate governance and dividend smoothing practices (Rozeff, 1982). On the basis of above literature, the following relation is expected:

Hypothesis 2: The board diversity has a significant positive influence on the dividend smoothing behavior of firms in emerging markets.

3.2.3 Ownership Structure and Dividend Smoothing

A concentrated ownership structure can help to reduce the agency conflicts, since greater monitoring efforts by large shareholders is a key feature of concentrated ownership (Jensen and Meckling 1976). In contrast, ownership concentration also has costs that can lead to the expropriation of minority rights (La Porta *et al.*, 1999), with perhaps negative outcomes on firm's performance. Ownership structure emerges as an important factor that could influence on various financial decisions taken by the firms including dividend payments. When the legal environment does not provide sufficient protection for outside investors, entrepreneurs and original owners are forced to maintain large positions in their companies which results in concentration of firm ownership (La Porta *et al.*, 2000; Mori and Ikeda, 2015). The ownership pattern whether it is institutional or family determines the control and influence of shareholders in the firm (Mehboob *et al.*, 2015).

3.2.4 Family Ownership and Dividend Smoothing

Family ownership is characterized as that the firm is controlled and managed by family members (Kraiczy, 2013). There are two schools of thought regarding role of family ownership. First school declare family ownership as a mechanism to reduce agency conflicts resulting from information asymmetry, hence, resulting in better performance and alignment of resources. In such firms, the board of directors remains under scrutiny of family ownership and interest of both group is better aligned. The second school states that in family owned firms, the rights of minority shareholders are less protected and management is reluctant to distribute dividends.

Based on these schools of thought, we also find two controversial findings in literature. Some views the presence of family ownership is a positive determinant of dividend smoothing (Weisskopf, 2010; Saerang and Pontoh 2016). On the other hand, the literature highlights that family owned firms pay lower dividends to the minority shareholders and retain more amount of free cash flow for their personal benefits (De Cesari, 2012; Suryanto and Thalassinos, 2017)). There are less independent directors appointed by family owned firms as compared to the firms owned by non-family shareholders, which shows a negative impact of family owned firms on board independence in Malaysia in the research of Leung *et al.* (2014). However, the current study considers positive view and develops the following hypothesis:

Hypothesis 4: Family ownership has a significant positive influence on the dividend smoothing behavior of firms in emerging markets.

3.2.5 Institutional Ownership and Dividend Smoothing

Since institutions (e.g., mutual funds, pension funds, hedge funds, and private equity firms) often occupy a significant portion of money at their disposal, they are always welcomed by the equity market and their role is more pronounced than any other type of investor. They are considered as a mechanism to reduce the agency conflict because their vocally stated benefits are aligned with those of smaller stockholders. These institutions generally purchase large blocks of a company's outstanding shares and can exert considerable influence upon its management (Celik and Isaksson, 2014). Institutional ownership play an influential role in financial decision making process, firms having large institutional participation provide higher dividends to shareholders due to the dominant role of institutional shareholders, in light of institutional theory (Thanatawee, 2013). In most of the emerging economies, policies made by board of directors are influenced by directly institutional investors. The following relationship is expected on the basis of the above literature:

Hypothesis 5: Institutional ownership has a significant positive influence on the dividend smoothing behavior of firms in emerging markets.

3.2.6 Control Factors

The study used firms' characteristics such as market to book value, cash to total assets, firms' age and firms' size as control variables. The market to book ratio is used to find the value of a company by comparing the market value of a firm to its book value. The operating cash flow to total assets ratio is a financial metric that can be used to quantify such benefits. This ratio measures the amount of operating cash flow that is generated for every dollar of assets that is owned. Firm size can be measured with the help of various proxies such as total assets of the firm, total sales of the firm, number of employees, market capitalization, etc. The firm age is measured by the natural logarithm of the number of years since it was listed for the first time on stock exchange.

4. Research Methodology

The main objective of the study is to evaluate the effect of corporate governance and ownership structure on the dividend smoothing behavior in emerging markets. The sample comprised of a total of 1020 firms from emerging economies including Pakistan (145), India (438), Sri Lanka (125), Malaysia (160) and Singapore (152). These countries are selected on the basis of some common economic characteristics and their recognition as important emerging countries in Asia. The sample consists of non-financial firms listed on stock exchanges of the above-mentioned Asian countries. The financial institutions are excluded from the sample due to the differences between both types of firms. Here, we follow the sampling criteria of Fama and French (1992), as they suggest excluding financial firms from samples because they are normally high leveraged. Data related to corporate governance and ownership structure are compiled from the annual reports published in the public

disclosure platforms and firms' official websites. For gender diversity, we follow the financial report of each firm and the names of CEO and other board members are matched with their photos published in reports to avoid any conflicts. The definition and calculation of each variable is mentioned in appendix A. The sample period for this study extends from 2009 to 2018. The panel data analysis assists in investigating time-series as well as cross-sectional data simultaneously. Speed of adjustment is used as a measure of dividend smoothing and it is considered a dependent variable in this study. Corporate governance (board size, board diversity) and ownership structure (family ownership, institutional ownership) are used as independent variables in the current study. The study used firm's characteristics (market to book ratio, cash reserves available to firm, size and age of the firms) as control variables.

The study used panel data procedures due to the fact that the sample contains data across firms, countries and over time. According to Baltagi (2005), utilization of panel data is more informative, more efficient, and has more degrees of freedom and less collinearity among variables. Fixed Effect and Random Effect models are the most famous techniques used for panel data analysis. The decision regarding the application of Fixed or Random Effect models is based on the Hausman test (1978). The general form of a panel regression model can be expressed as:

$$Y_{i,t} = \beta_0 + \beta_1 X + \varepsilon_{i,t} \dots \dots \dots \text{eq 1}$$

where *i* and *t* represent the firm and time, respectively, *Y* is the dependent variable which is a measure of dividend smoothing, β_0 is a scalar, β_1 is $K \times 1$ and X_{it} is the *i*th observation on *K* explanatory variables. Here, $\varepsilon_{i,t}$ is an error term for *i*, firms and *t* time. The extended model for corporate governance and ownership structure of the study is expressed as:

$$SOA_{i,t} = \beta_0 + \beta_1 \text{Corporate Governance} + \beta_2 \text{Ownership Structure} + \varepsilon_{i,t} \dots \dots \dots \text{eq 2}$$

Authors will follow the statistical techniques recommendations from Bhatti, Haque, and Osborn (2013) to evaluate the impact of corporate governance and ownership structure on dividend smoothing, the panel data analysis will be applied for this purpose.

5. Empirical Results

5.1 Descriptive Statistics

Table 1 explains descriptive statistics for all the selected firms, including firm's specifics, corporate governance, and ownership structure variables. The results show that the average dividend per share is 8.2874 and ranges from -23.442 to 1857.81, shows large differences in dividend per share paid by the firms. The average value of market to book value is 0.6320 and ranges from 0.0090 to 18.600. This shows large

variation between the markets to book values of various firms. Cash available to total assets has an average value of 0.8280 and ranges from 0.0041 to 22.587, showing significant variation of cash available to total assets among firms. 29.8206 is the average value of firm age, while minimum and maximum values of firm age are 7.02573 and 122.00, respectively. The average size of the firm is 26.8594 and ranges from 5.9930 to 121.00, which shows large variation in firm size. Table 1 also shows different characteristics of corporate governance. The average value of the board of directors is 12.399 while the maximum and minimum values are 22.000 and 3.000, respectively. This shows significant differences between the board sizes of various firms. 0.594371 is the average value of board diversity, while it ranges from 0.00 to 1.00. The average value of family ownership is 63.014, while its minimum and maximum values are 4.000 and 676.00 respectively. Institutional ownership has an average value of 12.579 while it ranges from 1.000 to 1413, which shows significant variation. Some of the variables related to ownership structure are also explained in the following Table 1.

Table 1. Descriptive Statistics

	DPS	MTB	CTA	SIZE	AGE	BD	BS	FO	IS
Mean	8.29	0.63	0.83	26.86	29.82	0.59	12.40	63.01	12.58
Median	8.29	0.63	0.83	26.86	29.82	0.59	12.40	63.01	12.58
Maximum	16.81	18.60	22.59	121.00	122.00	1.00	22.00	676.00	1413.00
Minimum	3.44	0.01	0.00	5.99	7.03	0.00	3.00	4.00	1.00
Std. Dev.	7.52	1.00	0.58	21.17	23.04	0.49	1.02	10.38	14.34

Source: Authors' calculations.

5.2 Correlation Analysis

Correlations among variables are expressed in Table 2. The correlation analysis is used to identify the presence of multicollinearity among firms' specific characteristics, corporate governance, ownership structure and dividends paid by firms. The results show that all correlation coefficients are small and most are less than 0.80, which shows no issue of multicollinearity among variables (Lewis-Beck, 1993).

Table 2. Correlation Matrix

	DPS	MTB	CTA	SIZE	AGE	BD	BS	FO	IS
DPS	1.000	-0.006	0.0476	0.0906	-0.0668	-0.0094	0.0172	0.0136	-0.011
MTB		1.000	0.1143	0.0317	-0.0311	0.0411	0.0224	0.0323	0.0182
CTA			1.000	0.039	-0.084	-0.031	-0.037	-0.017	-0.007
SIZE				1.000	-0.589	-0.026	0.262	-0.036	0.010
AGE					1.000	0.016	-0.222	0.028	-0.011
BD						1.000	-0.004	0.053	-0.009
BS							1.000	-0.046	0.001
FO								1.000	0.002
IS									1.000

Source: Authors' calculations.

5.3 Corporate Governance, Ownership Structure and Dividend Smoothing

Table 3 shows the relation among different variables used in the study. Corporate governance includes board diversity and board size. Board diversity has a significant inverse (-1.367) at 1% level of significance, but it has no effect on dividend smoothing when there are 2 female directors included in the board, but board diversity has significant positive impact (0.596) at 1% level of significance on dividend smoothing due to the existence of 3 female directors in the board while board size has no effect on dividend smoothing behavior of firms in emerging markets.

Ownership structure is another independent variable that is explained by the following Table 3. It includes institutional and family ownership. Institutional ownership has no impact on the dividend smoothing behavior of firms, while family ownership has a significant positive impact (0.099) at 10% level of significance on the dividend smoothing behavior of firms. This shows that in emerging markets, family firms pay smooth dividends to minority shareholders. The moderating role of board diversity and family ownership is also explained in Table 3. Moderating role of board diversity and family ownership has a significant positive impact (0.587) at 10% level of significance on dividend smoothing behavior, shows that firms smoothing their dividends is correlated with board diversity and family ownership. Firm characteristics are also expressed in Table 3. Among other characteristics, market-to-book value and firm size have a significant effect on dividend smoothing behavior while cash to total assets and firm age have no impact on the dividend smoothing behavior of firms.

Table 3. Determinants of Dividend Smoothing

Dividend Smoothing				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Corporate governance				
Board diversity (dummy)	-1.367***	0.325	-4.206	0.000
Board diversity_2 (dummy)	0.231	0.183	1.263	0.362
Board diversity_3 (dummy)	0.516***	0.183	3.263	0.002
Board size	-0.245	0.470	-0.520	0.603
Ownership structure				
Institutional ownership	-0.313	0.220	-1.423	0.155
Family ownership	0.099*	0.060	1.660	0.097
Moderation Role				
Board diversity *family ownership	0.587***	0.056	3.806	0.002
Firm's characteristics				
market to book value	0.911**	0.421	2.165	0.030
cash to total assets	0.188	1.370	0.138	0.891
firm's size	-0.634**	0.213	-2.972	0.003
firm's age	0.058	8.025	0.007	0.994

Source: Authors' calculations.

5.4 Role of Male CEO and Female CEO and Dividend Smoothing

Table 4 compares two groups of firms; firms with male CEOs and firms with female CEOs. Table 4 describes various factors including corporate governance, ownership structure, and firm specific characteristics. In firms with one female director, board diversity is significantly positive (0.047) effect on firms with a male CEO but inverse significantly effect (-0.0390) on firms with a female CEO. When there are 2 female directors, board diversity has a significant positive effect (0.0161) at 5% level of significance on the dividend smoothing behavior of firms with male, but insignificant on firms with female CEOs. Similarly, with the presence of 3 female directors in the board, it has significant positive (0.186) impact at 1% level of significance on dividend smoothing behavior in firms with male CEO, while it has positive effect (0.181) at 5% level of significance on dividend smoothing in firms with female CEO. Different patterns of ownership are also describe in Table 4.

Institutional ownership has a significant inverse (-0.113) effect on dividend smoothing at 10% level of significance in firms with male CEOs and no effect on the firms with female CEOs. Family ownership has a significant positive effect (0.099) at 5% level of significance on the dividend smoothing behavior of firms with male CEOs, it also has a significant positive effect (0.039) at 5% level of significance on the dividend smoothing behavior of firms with female CEOs, which show that family owned firms with male or female CEOs give smooth dividends to the minority shareholders in an Asian context.

The moderating role of board diversity and family ownership has a significant positive (0.087) effect at 5% level of significance on the dividend smoothing behavior of firms with male CEOs and firms with female CEOs. This shows that family owned firms with female directors smooth their dividends given to minority shareholders in order to maintain their reputation in emerging markets. The relevant firm characteristics include market to book value, cash to total assets, firm size and firm age, as described in the following Table 4. Market to book value has a positive effect on the dividend smoothing in both type of firms. The data shows a positive trend of dividend smoothing rising with the market value of firm. Firm size has a negative effect on dividend smoothing. This is shown by how firms with both male and female CEOs pay fewer dividends as the firms become mature in age.

Table 4. Dividend Smoothing (Male CEO Versus Female CEO)

Variable	Firms with male CEO		Firms with female CEO	
	Coefficient	Std. Error	Coefficient	Std. Error
Corporate governance				
Board diversity (dummy)	0.047*	0.025	-0.0390	0.0640
Board diversity_2 (dummy)	0.0161**	0.006	0.993	0.8106
Board diversity_3 (dummy)	0.186***	0.033	0.181**	0.0702
Board size	-0.245	0.560	0.0998	0.1703
Ownership structure				
Institutional ownership	-0.113*	0.069	-0.015	0.6211

Family ownership	0.099**	0.041	0.039**	0.018
Moderating Role				
Board diversity * Family ownership	0.087**	0.025	0.188*	0.1170
Firm's characteristics				
Market to book value	0.111*	0.061	0.099**	0.0401
Cash to total assets	0.188	0.370	-0.6342	0.4434
Firm's size	-0.634**	0.113	-0.051**	0.0254
Firm's age	0.058	0.125	-2.5935	0.8214

Source: Authors' calculations.

6. Conclusion and Policy Implications

The results indicate an impact of various factors of corporate governance and different patterns of ownership structure. Among other factors of corporate governance, board diversity has significant positive impact on dividend smoothing behavior of both firms. This relationship persists for both male and female CEOs. Hence, we can conclude that gender presence reduces agency conflicts by positively influencing dividend smoothing behavior of firms. This is in line with the female aspects that they are more ethical in nature. However, we provide evidence in favor of critical mass theory because the presence of one female serves as tokenism in the corporate board. Our findings also show negative relation between dividend smoothing and presence of one female on the corporate which is in line with the view that their fewer presence serve as token. So, the study significantly contributes in context of agency theory and gender critical mass maxim in Asian context.

However, when we include gender diversity as interaction term between family ownership and dividend smoothing, the findings shows that it weakens the relation between them. Based on the viewpoint, we can further conclude that gender diversity role does not moderate the relationship between family ownership and firm dividend smoothing.

Among other patterns of ownership structure, family ownership has significant positive impact on dividend smoothing behavior in both types of firms with male and female CEOs. The result highlights that family owned firms smooth dividends towards targeted dividends for maintaining their reputation. While institutional ownership has significant inverse effect on dividend smoothing behavior of firms with male CEO, while no effect in firms with female CEO. Based on these findings, we can conclude that higher family ownership leads to dividend smoothing behavior of the Asian firms.

The study strongly recommends the presence of gender critical mass to reduce the agency conflicts among Asian firm. For the purpose, the authorities are required to force a significant portion of gender on the corporate board and mere a woman will serve as token. At the same, the findings depict that board interlock serve as negative determinant of divided smoothing. This may have impact on board independence

also that may be the reason of insignificant association between board independence and dividend smoothing.

However, it is important to mention the limitations of this study. First, the study only focuses on non-financial firms. Second, the study only used data from five Asian countries. For further research, the effect of investor legal protection on the dividend smoothing behavior of Asian countries because investor legal protection varies in various Asian countries, can be studied to provide in-depth information to investors.

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Appendix A: Variables and Their Definitions

Variable	Measurement	References
Board diversity_1 (dummy)	Female director present in the board	Byoun (2016)
Board diversity_2 (dummy)	2 female directors in the board	Ararat et al., (2015)
Board diversity_3 (dummy)	3 female directors in the board	Ararat et al., (2015)
Board size	Total number of directors in the board	Bokpin (2011)
Institutional ownership	Percentage of shares hold by institutions	Celik & Isaksson, (2014).
Family ownership	Percentage of shares hold by family members	Leung et al., (2014).
Market to book value	Market value of equity/book value of equity	Momoh, (2017)
Cash to total assets	Cash reserve to total assets	Keythman (2018)
Firm's size	Total assets of the firm	Ball and Foster, (1982)
Firm's age	No. of years since firm first time appeared in the stock exchange	Ilaboya and Ohiokha (2016).