

# “The effect of the professional education background of the chairman of the board and executive management on dividend policy in Taiwanese listed companies”

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## The effect of the professional education background of the chairman of the board and executive management on dividend policy in Taiwanese listed companies

### Abstract

This study investigates whether company's chairman of the board and management's education background is business or accounting, their decision making will cause the result of company's dividend policy or not. This study uses logistic and OLS regression method to exam Taiwanese public company from 2007 to 2011. The empirical result shows that when company's chairman of the board graduates from business school, the company will pay less cash dividend. On the other hand, when more management education background is business or accounting, the company tends not to pay cash dividend. Furthermore, under the situation that chairman of the board is also the CEO of the company, when chairman of the board graduated from business school, the company tends not to pay cash dividend and pay less cash dividend.

**Keywords:** education background, chairman of the board, management, dividend policy.

**JEL Classification:** G34, G35.

### Introduction

In 1908, when Edwin Gay founded Harvard Business School, he said that the purpose of business is to be able to benefit the company and shareholders by honest pursuit of profit and should have favorable behavior to the society as a whole. Cavanagh (2009) pointed out that many business leaders involved in a lot of business scandals occurred in the past decade, such as Enron, Tyco, WorldCom and 2008 global financial crisis graduated from the business school. Therefore, most scholars argue that education of business school should be held responsible for the unethical decision-making behaviors of these decision makers. Ametrano (2014) found that education of business school can indeed affect future decision-making behavior of students.

Warren et al. (2005) suggested that the CEO's professional education background and corporate policies setting are correlated. Agrawal and Chadha (2005) pointed out that the accounting profession can improve the monitoring mechanism of the company. However, empirical results of Koyuncu et al. (2010) found that CEO has a background in engineering education can have better corporate performance, and the company with a CEO having marketing, financial, legal or accounting professional backgrounds will have relatively poorer performance. Beer (2011) proposed that the current public expectations for business leaders are still consistent with the original idea proposed by Edwin

Gay. However, in the past fraud scandals, for these students of business school education, their decisions have been found to run counter to the expectations of the community.

Dividends are the right of investors as shareholders to enjoy the earnings. Regarding the motivation for dividend payment, there are theories including the dividend irrelevance theory, the customer utility theory, the catering theory, a bird in the hand theory and agency theory. Fan (2011), according to observation of practical experience, argued that the customer utility theory and the theory of "a bird in the hand" were preferred in Taiwan. On one hand, the company, through dividends payment, communicates the company's good operating condition information; on the other hand, the company can also respond to shareholders' demand. In recent years, Taiwanese investors prefer dividend payment to get some reward and avoid the risk of investment. However, the development of dividend policy will consider the funds needed to run the company. The funds will be deducted before the payment of dividends.

Dividends can be divided into two major types: cash dividend and stock dividend. As shown in Table 1, from 2010 to 2014, there are around 55% of listed companies paid only cash dividend, while about 40% paid both cash and stock dividend. Interestingly, less than 5% of companies paid only stock dividend. Dividend represents the return of stockholders, however, cash dividend is more "real" than stock dividend. The percentage of three methods (cash only, cash and stock, stock only) is not even, indicates there is a determination of how to pay dividend within company authorities. Our study would like to find out what factors affected the determination of how to pay dividend.

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Table 1. 2010 to 2014 Taiwan listed company dividend-paying method

Year	Cash dividend only	Both cash and stock dividend	Stock dividend only	Total listed companies
2014	924	663	15	1602
2013	824	757	19	1600
2012	781	792	21	1594
2011	733	831	28	1592
2010	674	843	35	1552

Chairman of the board CEO plays important role in company operation, including the operation results. The purpose of stockholders is to make profit from the investment in company, while the company uses investor's money to generate profit. However, the company's profit has both development and retain function, company needs to keep certain percentage of profit for future development, since company cannot rely on issuing new stock for development in all cases. On the other hand, if company keeps all the profit for future development, then what does the stockholders invest for? How to achieve equilibrium between company developments and retain investors, has always been the task of Board and CEO. CEO in charge of operation, CEO must make prediction of the requirement fund for company development, and CEO must consider the dividend policy to keep the stockholder. Director of the board considers the same thing as CEO, therefore, they play important role in dividend policy.

Article 230 of Taiwan Company Act provides: the dividend policy is formulated by the board of directors. As the leader of the board of directors, coupled with the close relationship with the company's managers, chairman plays a very important role in the board of directors and management. Harford et al. (2008) found that in the company of weak corporate governance, the manager will spend the cash rapidly in the form of capital to reduce the cash dividends. According to Kirchmaier and Owen (2008), to improve corporate governance, the chairman should be the bridge between the board of directors and the manager, and should have the ability to deal with the contradictory relationship between the two. In addition to the formation of a well-functioning board of directors, we have to avoid the hindrance of future development of the company because of focus on the oversight function. Therefore, as far as the dividend policy is concerned, board chairman plays a role that cannot be underestimated.

In the past, the impact of decision-making behavior caused by educational background on dividend policy has been rarely discussed. Wu (2003) investigated college students in Taiwan, and found that business education in Taiwan affects their

decision behavior. Thus, this study aims to explore the business or accounting educational background of board chairman and executive management, and discuss whether it affects the development of the company's dividend policy.

The empirical results suggest that the chairman of the board's business school educational background indeed affects the company's total dividend payment and the two are negatively correlated, indicating that the chairman of the board with a business school education is less inclined to pay the dividends in the form of cash. Regarding executive management, the regression results suggest that higher proportion of the company's executive management with a business education background means the company is more unlikely to pay cash dividends. The results are the same when the percentage of executive management with accounting educational background.

This study further explores the companies with or without board chairman and CEO duality, finding that board chairman and CEO duality, board chairman with a business school education are positively correlated to cash dividends and the percentage of cash dividends against the total dividends. Regarding executive management, in the case of board chairman and CEO duality, if the percentage of executive management with accounting educational background is higher, the percentage of cash dividends against the total dividends is lower. Overall, board chairman and executive management with business school and accounting educational background can indeed affect the development of the company's dividend policy.

The remainder of this paper is organized as follows: Section 1 is the literature review and hypotheses development; Section 2 presents the research design and method; Section 3 discusses the empirical results; final Section offers conclusion and suggestions.

## 1. Literature review and hypotheses development

As the previous literature associated with the dividends policy mostly focused on whether the dividends policy and agency conflicts can effectively reduce (Dittmar and Mahrt-smith, 2007; Leary and Michaely, 2011), or whether there is a higher shareholder value (Dittmar et al., 2003; Pinkowitz et al., 2004), what factors affect the dividends policy decisions has been rarely discussed. Based on the literature review, this paper proposes hypotheses to empirically analyze the impact of the educational background of board chairman and executive management on dividends policy.

### 1.1. Correlation between board chairman with a business school education and dividends policy.

Fama and Jensen (1983), Navissi and Naiker (2006) suggested that the board of directors is expected to be effective in improving the agency problems between shareholders and managers. Holder-Webb et al. (2008) found that the board of directors of higher independence would have better corporate governance. Hoitash (2011) pointed out that the asymmetry of information, personal relationships with managers and board members and other issues of outside directors resulted in agency conflict between the Board and the shareholders. According to Article 203 of Taiwan's Company Act, board chairman is elected by the Board. If the company has managing directors, board chairman must be one of the managing directors. The board chairman is the chairman of shareholder meeting, board of directors and the chairman of the managing directors and represents the company externally. It thus can be concluded that the role of board chairman may reflect or affect the formulation of dividends policy and the quality of corporate governance. Although Lorsch and Zelleke (2005) argued that board chairman is considered the leader of the board of directors and is able to affect the company manager's decision-making, Kirchmaier and Owen (2008) proposed that board chairman should be the bridge between the Board and management, and is able to choose how to play a supervisory role and assist the company's development at the same time.

Business school education has a profound impact on students to become decision-makers in the future to make judgments and decisions. Hitt and Tyler (1991) suggested that professional background would affect their choice of basic values and attitudes. Finkelstein and Hambrick (1996) argued that business and management education would attract conservative and risk averse students. During the training process, the course has a lot of statistical techniques to avoid errors or loss. As a result, under the business management educational background, they tend to be risk averse and will take sound business strategy.

According to Gioia (2003), some of the business schools encourage students to make unethical behavior and decision-making. Over the past decade, many business scandals and financial turmoil occurred. Cavanagh (2009) mentioned that these leaders involved in business scandals mostly graduated from business schools. Wankel and Stachowicz-Stanusch (2011) pointed out that moral education of business school for policymakers failed. In view of this, board chairman, when affecting the decisions of managers and the board of

directors, may not be able to reflect the true thoughts and needs of shareholders.

Linck et al. (2008) suggested that the impact of the professional background of the board chairman on the decisions have been rarely discussed. For the board chairmen with a business school education, although they are more risk averse and prefer sound business strategy, they may accept the excessive investment behavior of managers for the sake of short-term stock price growth, or even managers to make decisions harmful to shareholders. This paper suggests that board chairman with a business school education may affect dividends policy. Hence, H1 is proposed as follows:

*H1 (a):* Board chairman with a business school education affects the payment of cash dividends or not.

*H1 (b):* Board chairman with a business school education affects the percentage of cash dividends against the total dividends.

### 1.2. Correlation between board chairman with an accounting professional background and dividends policy.

In addition to discussing a wide range of business education, some scholars have discussed the impact of accounting education on decision-making behavior in the past. Mayer-Sommer and Loeb (1981) considered most accounting education curriculum emphasized technical professional training, and ignored reflections on ethics. McCarthy (1997) pointed out the lack of ethics, professional responsibility and professional judgment in accounting education curriculum design. As a result, accounting education has been widely criticized by people. Nagle et al. (2012) empirically studied American companies, and found that ethics training can indeed reduce behaviors in violation of the company's accounting policies.

Beasley (1996) suggested that professional background and right incentives are necessary to carry out effective supervision. The Blue Ribbon Commission held in the U.S. in 1998 recommended that members of the Audit Committee should have the ability to interpret financial statements. Guidelines on corporate governance of listed and OTC companies in Taiwan require that directors and supervisors must have operational judgment, accounting and financial analysis, operations management and crisis management capabilities. They can understand the company's accounting method and should better strengthen the supervision of the company. Agrawal and Chadha (2005) found that if the board members have CPA or CFA licenses, or relevant degrees, the company's financial statements are of higher quality. It thus can

be concluded whether the board members have the accounting-related capabilities, they have a considerable impact on decision-making and oversight of the company.

To sum up, although accounting education can professionally help to improve the corporate governance mechanism, it is noteworthy that accounting education lacks in moral concept education. This study infers that board chairman with an accounting professional background will affect dividends policy. Hence, H2 is proposed as follows:

*H2 (a):* Board chairman with an accounting professional background affects the payment of cash dividends or not.

*H2 (b):* Board chairman with an accounting professional background affects the percentage of cash dividends against the total dividends.

**1.3. Correlation between the percentage of executive management with a business school education and dividends policy.** Ashforth et al. (2008) pointed out that business school education was thought to prevent future business scandals from happening again because education background has influence on decision-making behavior. However, many former leaders involved in the commercial scandals were educated at business schools. Cavanagh (2009) mentioned that leaders responsible for the scandals graduated from America's best business schools. Therefore, conveying moral and social responsibility and good moral habits by these business schools to the students' is a failure. Maritz (2010), Walker et al. (2011) pointed out that American business leaders not only lost the trust of their employees, and caused a crisis of confidence of the society.

Business education is considered to be held partially responsible for the scandal. Ghoshal (2005) made the judgment of America's business schools, arguing that education in business school did not allow students to be ready to face ethical issues related to decision-making. Gioia (2003) found that some of the business school curriculum even encouraged students to make unethical behaviors and decisions. Koehn (2005), Giacalone and Thompson (2006), Weber et al. (2008), Datar et al. (2010), Sims and Sauser (2011) pointed out that many universities and scholars were committed to enhancing the influence of business moral education on the students. However, Cavanagh (2009) argued that many schools are still emphasizing on raising short-term stock price while ignoring other issues. Friedman (2009) pointed out that this business education problems impact on the behavior of

decision-making led to policymakers in the 2008 financial crisis to believe they can lead investors to make a profit and to avoid risk. However, Friedman (2009), Lowenstein (2011) found that thousands of people around the world paid a terrible price because of these ongoing fraud and guile. The empirical results of Koyuncu et al. (2010) suggest that CEO with a background in engineering education has a better operating performance while the performance of companies with CEOs in the marketing, financial, legal or accounting background is poorer.

According to Harford, Mansi, and Maxwell (2008), in a company of poor corporate governance, managers may spend the cash as capital expenditure to reduce dividends policy. Therefore, regardless of the impact of executive management educational background on corporate governance or the impact on decision making, it is not beneficial to dividends payment. Hence, H3 is proposed as follows:

*H3 (a):* If the percentage of executive management with a business school education is higher, the company is more unlikely to pay cash dividends.

*H3 (b):* If the percentage of executive management with a business school education is higher, the percentage of cash dividends against the total dividends is lower.

**1.4. Correlation between executive management with an accounting professional background and dividends policy.** Warren et al. (2005) pointed out that CEO's professional education background and corporate policies setting are correlated. Gabaix et al. (2008) and Bennedsen et al. (2008) suggested that a variety of talents and technologies of CEO such as personal characteristics and educational background affect the company's performance. However, in the past literature, it is debatable whether CEO with accounting professional background can have better operating performance. Agrawal and Chadha (2005) pointed out that the accounting profession can improve the monitoring mechanism of the company. However, Koyuncu et al. (2010) argued that the performance was poorer because the CEO with accounting professional knowledge had no engineering professional background.

Mayer-Sommer and Loeb (1981), McCarthy (1997) indicated that accounting education mostly focused on improving professional skills while ignoring the moral thinking. Therefore, when making decisions, it may result in the deviation from company and shareholder interests. It is thus inconclusive whether accounting education has a positive impact on corporate performance in the previous literature. Hence, H4 is proposed as follows:

H4 (a): The percentage of executive management with accounting educational background affects the payment of cash dividends or not.

H4 (b): The percentage of executive management with accounting educational background affects the percentage of cash dividends against the total dividends.

## 2. Research design and method

**2.1. Research design.** By using the listed and OTC companies in Taiwan as the research subjects, this paper analyzes the data from 2007 to 2011 to explore whether the educational background of board chairman affects cash dividends and the

percentage of cash dividends against the total dividends. The data sources include the financial, stock price and corporate governance databases of TEJ and the open information observation site. This paper source uses 10,394 original samples of companies paying dividends. After eliminating 3,180 samples of companies having omissions, there are 7,214 observation values, of which, 4,878 pay cash dividends and 2,336 do not pay cash dividends.

**2.2. Empirical model.** H1(a), H2(a) are to explore whether the business or accounting education background of the board chairman will affect the payment of cash dividends. Hence, the relationship equations are expressed in equations (1) and (2):

$$Div_{i,t} = \alpha + \beta_1 Bus\_COB_{i,t} + \beta_2 Assetgrowth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \varepsilon \quad (1)$$

$$Div_{i,t} = \alpha + \beta_1 Acct\_COB_{i,t} + \beta_2 Assetgrowth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \varepsilon \quad (2)$$

$Div_{i,t}$ : In Term  $t$ , whether the company pays the cash dividends.

$Bus\_COB_{i,t}$ : In Term  $t$ , whether the company's board chairman has a business education background.  $Acct\_COB_{i,t}$ : In Term  $t$ , whether the company's board chairman has an accounting education background.  $Assetgrowth_{i,t}$ : Term  $t$  assets growth.  $Risk_{i,t}$ : Term  $t$  company risk and daily returns on stock.  $MKTBook_{i,t}$ : Term  $t$  company's

growth opportunity.  $CAPEXP_{i,t}$ : Term  $t$  company's capital expenditure.  $FORE\_ratio_{i,t}$ : Term  $t$  the shareholding ratio of foreign institutional investors.

H1 (b), H2(b) are to explore the inclination of cash dividends when the board chairman has a business or accounting educational background. Thus, the following Regression Equations (equations (3) and (4)) are established:

$$CDiv\_ratio_{i,t} = \alpha + \beta_1 Bus\_COB_{i,t} + \beta_2 Assetgrowth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \varepsilon, \quad (3)$$

$$CDiv\_ratio_{i,t} = \alpha + \beta_1 Acct\_COB_{i,t} + \beta_2 Assetgrowth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \varepsilon, \quad (4)$$

where,  $CDiv\_ratio_{i,t}$  is the percentage of cash dividends against the total dividends in Term  $t$ .

In addition to the educational background of the board chairman, this paper also explores the percentage of executive management with a business or accounting educational background on the dividends policy. The additional variables including the shareholding ratio of institutional

investors ( $Ins$ ), the governmental shareholding ratio ( $Gov$ ) and history of payment of cash dividends ( $Div\_paid$ ) are added as the control variables.

H3 (a) and H4 (a) explore the impact of the percentage of the company's executive management with a business school education on dividends policy. Thus, the regression equations are expressed as equations (5) and (6):

$$Div_{i,t} = \alpha + \beta_1 Bus\_ratio_{i,t} + \beta_2 Assetgrowth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \beta_7 Gov + \beta_8 Ins + \beta_9 Div\_paid + \varepsilon, \quad (5)$$

$$Div_{i,t} = \alpha + \beta_1 Acct\_ratio_{i,t} + \beta_2 Assetgrowth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \beta_7 Gov + \beta_8 Ins + \beta_9 Div\_paid + \varepsilon. \quad (6)$$

H3 (b) and H4 (b) are to explore the impact of the percentage of the company's executive management with an accounting professional

background on dividends policy. Thus, the regression equations are expressed as equations (7) and (8):

$$CDiv\_ratio_{i,t} = \alpha + \beta_1 Bus\_ratio_{i,t} + \beta_2 Assetgrowth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \beta_7 Gov + \beta_8 Ins + \beta_9 Div\_paid + \varepsilon, \quad (7)$$

$$CDiv\_ratio_{i,t} = \alpha + \beta_1 Acct\_ratio_{i,t} + \beta_2 Assetgrowth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \beta_7 Gov + \beta_8 Ins + \beta_9 Div\_paid + \varepsilon \quad (8)$$

**2.3. Variable definitions.** 2.3.1. *Dependent variables.* Equations (1) and (2) are to explore the dividends of the company in the case of business and accounting educational background. Therefore, dependent variable (*DIV*) represents the payment of cash dividends. It is 1 for companies paying the

dividends, otherwise, it is 0. Equations (3) and (4) are to explore the inclination of cash dividends in the case of business and accounting background, thus, dependent variable (*CDiv\_ratio*) represents the percentage of cash dividends against the total dividends:

$$CDiv\_ratio = \frac{Cash\ dividends\ per\ share}{Cash\ dividends\ per\ share + stock\ dividends\ per\ share}$$

2.3.2. *Independent variables.*

(1) Board chairman with or without a business education background (*Bus\_COB*).

Equations (1) and (3) determine whether the company pays cash dividends and the inclination of paying the cash dividends in the case of board chairman with a business school education. If the board chairman's educational background is accounting, financial management, finance, management and foreign trade, the value of *Bus* is 1, otherwise, it is 0.

(2) Board chairman with or without an accounting education background (*Acct\_COB*).

Equations (2) and (4) determine whether the company pays cash dividends and the inclination of paying the cash dividends in the case of board

chairman with an accounting professional background. Therefore, in the case of board chairman with an accounting professional background, the value of *Acct* is 1, otherwise, the value is 0.

(3) Percentage of executive management with a business school education (*Bus\_ratio*).

Equations (5) and (7) determine the impact of the percentage of company's executive management with a business school education on dividends policy.

(4) The percentage of executive management with accounting educational background (*Acct\_ratio*).

Equations (6) and (8) determine the percentage of the company's executive management with an accounting professional background on dividends policy.

$$Bus\_ratio = \frac{The\ number\ of\ company's\ executive\ management\ with\ a\ business\ educational\ background}{The\ number\ of\ company's\ executive\ management}$$

$$Acct\_ratio = \frac{The\ number\ of\ company's\ executive\ management\ with\ an\ accounting\ educational\ background}{The\ number\ of\ company's\ executive\ management}$$

2.3.3. *Control variables.*

(1) Growth opportunity variable.

If the growth opportunity is higher, the company has more investment opportunities and the amount of disposable cash would be relatively less, thus, the cash dividends paid to shareholders will be fewer. As a result, growth opportunity and payment of cash

dividends are negatively correlated. Hence, this paper adopts the assets growth variable proposed by Chung and Charoenwong (1991) and the asset market value/book value ratio variable proposed by Smith and Watts (1992), Gaver and Gaver (1993), Barclay and Smith (1995), Baber et al. (1996), Gay and Nam (1998) as the growth opportunity control variables.

$$Assets\ growth = \frac{Change\ in\ total\ assets}{Previous\ term\ total\ assets}$$

$$MKTBook = \frac{(Common\ stock\ market\ value + liabilities\ book\ value)}{Total\ assets}$$

(2) Company risk (*Risk*).

This paper uses the daily returns rate to measure the risk of the company by using the daily returns rate of TEJ as the measurement variable.

(3) Capital expenditure ratio (*CAPEXP*).

Companies with higher capital expenditure ratio have lower level of cash dividends. Therefore, this study uses capital expenditure ratio as the control variable:

$$CAPEXP = \frac{\text{The sum paid for the purchase of fixed assets in the current term}}{\text{Total assets}}$$

(4) The shareholding ratio of the foreign institutional investors (*FORE\_ratio*).

According to Longstaff (2004), Vayanos (2004), Beber et al. (2009), in the shareholding strategy of foreign institutional investors, the dividends policy

is one of the indicators and foreign institutional investors prefer companies of good corporate governance. Hence, this study uses the shareholding ratio of the foreign institutional investors as one of the control variables:

$$FORE\_ratio = \frac{\text{The number of shares held by the foreign institutional investors}}{\text{The number of outstanding shares}}$$

(5) The shareholding ratio of the government (*Gov*).

$$Gov = \frac{\text{The number of shares held by the government}}{\text{The number of outstanding shares}}$$

(6) The shareholding ratio of domestic financial institutions (*Ins*).

$$Ins = \frac{\text{The number of shares held by domestic financial institutions}}{\text{The number of outstanding shares}}$$

(7) History of the payment of cash dividends (*Div\_paid*).

If cash dividends have been paid in previous year, then, the value of *Div\_paid* is 1, otherwise, it is 0.

### 3. Empirical results analysis

**3.1. Descriptive statistical analysis.** This paper first summarizes the sample descriptive statistics as shown in Table 1. Among the dependent variables, *Div* denotes the payment of cash dividends and its mean value is 0.64, indicating that more than half of all listed and OTC companies in Taiwan will pay cash dividends. Among companies paying the cash dividends, the ratio of companies paying the cash dividends *CDiv\_ratio* is 0.79, indicating the percentage of all listed and OTC companies paying cash dividends account for more than three quarters.

Regarding independent variables, for listed and OTC companies in Taiwan, regardless of board

chairman or executive management, the percentage of those with a business school education is not high. *Bus* denotes whether board chairman has a business school education, and its mean value is 0.40, accounting for less than half of all the listed and OTC companies. Regarding the percentage of executive management with a business school education, *Bus\_ratio* mean value is 0.46, accounting for less than half of all the listed and OTC companies. Regarding the background of accounting education, the number of board chairmen with an accounting professional background is very low and the average *Acct* is only 0.02. The mean value for executive management is slightly higher as the mean value of *Acct\_ratio* is 0.14. Regarding control variables, opportunity growth (*Asset growth* and *MKTbook*) mean values are 0.14 and 1.31 representatively, indicating that listed and OTC companies in Taiwan had growth opportunities from 2007 to 2011.

Table 2. Descriptive statistical analysis

Variables	Sample	Ave	Med	SD	Min	Max
Dependent variables						
<i>Div</i>	7,214	0.64	1.00	0.48	0.00	1.00
<i>CDiv_ratio</i>	4,878	0.79	1.00	0.31	0.00	1.00
Independent variables						
<i>Bus</i>	7,214	0.40	0.00	0.49	0.00	1.00
<i>Acct</i>	7,214	0.02	0.00	0.14	0.00	1.00
<i>Bus_ratio</i>	7,214	0.46	0.44	0.27	0.00	1.00
<i>Acct_ratio</i>	7,214	0.14	0.09	0.19	0.00	1.00
Control variables						
<i>Asset growth</i>	7,214	0.014	0.05	1.39	-0.78	100.79
<i>Risk</i>	7,214	0.83	0.14	2.85	-24.53	72.97
<i>MKTbook</i>	7,214	1.31	1.09	0.91	0.00	16.49
<i>CAPEXP</i>	7,214	0.05	0.03	0.06	0.00	0.83



Table 2 (cont.). Descriptive statistical analysis

Variables	Sample	Ave	Med	SD	Min	Max
Control variables						
<i>FORE_ratio</i>	7,214	0.07	0.02	0.13	0.00	1.00
<i>Gov</i>	7,214	0.01	0.00	0.03	0.00	0.45
<i>Ins</i>	7,214	0.02	0.00	0.04	0.00	0.51
<i>Div_paid</i>	7,214	0.64	1.00	0.48	0.00	1.00

Notes: The variable definitions: a. *Div* refers to the payment of dividends; b. *CDiv\_ratio* refers to the ratio of cash dividends against the total dividends; c. *Bus\_COB* refers to the board chairman with a business school education or not; d. *Acct\_COB* refers to the board chairman with an accounting professional background or not; e. *Bus\_ratio* refers to the percentage of company's executive management with a business school education; f. *Acct\_ratio* refers to the percentage of company's executive management with an accounting professional background; g. *Asset growth* refers to assets growth; h. *Risk* refers to company risk; i. *MKTbook* refers to company's growth opportunity; j. *CAPEXP* refers to capital expenditure ratio; k. *FORE\_ratio* refers to the ratio of foreign institutional investors' shareholding; l. *Gov* refers to the governmental shareholding ratio; m. *Ins* refers to the shareholding ratio of domestic institutional investors; n. *Div\_paid* refers to the history of the payment of dividends, that is, the payment of dividends in the previous year.

**3.2. Regression analysis.** **3.2.1 Collinearity analysis.** To avoid the bias of the empirical results caused by high degree of collinearity of independent variables, before the regression estimation, this study uses Pearson correlation to analyze the correlation of independent variables. As shown in Table 2, between independent variables and control variables, Pearson

correlation coefficients are not more than 0.4, indicating the collinearity problem is not serious. Meanwhile, this paper uses Variance Inflation Factors (VIF) to test the collinearity problems of variables, and finds that the VIF values are significantly greater than 0. The results are the same with those of the Pearson correlation coefficients.

Table 3. Pearson correlation coefficient

	<i>Div</i>	<i>CDiv</i>	<i>Bus</i>	<i>Acct</i>	<i>Bus_ratio</i>	<i>Acct_ratio</i>	<i>Asset growth</i>	<i>Risk</i>	<i>MKTbook</i>	<i>CAPEXP</i>	<i>FORE_ratio</i>	<i>Gov</i>	<i>Ins</i>	<i>Div_paid</i>
<i>Div</i>	1													
<i>CDiv_ratio</i>	.506**	1												
<i>Bus</i>	-.018	-.028	1											
<i>Acct</i>	.001	-.018	.160**	1										
<i>Bus_ratio</i>	-.047**	-.024	.337**	.045**	1									
<i>Acct_ratio</i>	-.050	-.040**	.001	.163**	.381**	1								
<i>Asset growth</i>	.031**	-.024	-.010	-.040	.010	.016	1							
<i>Risk</i>	.022	-.070**	-.002	.007	-.002	-.002	.000	1						
<i>MKTbook</i>	.182**	.047**	-.022	-.017	.000	.014	.025*	.107**	1					
<i>CAPEXP</i>	.075**	-.106**	-.022	-.011	.021	.073**	.043**	-.008	.027*	1				
<i>FORE_ratio</i>	.139**	.109**	-.33**	-.043**	-.045**	-.050**	-.003	-.014	.132**	.075	1			
<i>Gov</i>	.064**	.035*	.001	.026*	.020	-.023	-.004	-.013	.041**	0.23	.093**	1		
<i>Ins</i>	.099**	.054**	-.025*	-.025*	-.10	-.001	.006	-.004	.027*	.043	.121**	.107**	1	
<i>Div_paid</i>	.621**	.248**	-.014	.005	-.051**	-.056**	-.024*	.000	.120**	.094	.107**	.058**	.121**	1

Notes: a. Variable definition: As described in Table 2. b. \*\* denotes significance level of 0.01, and correlation significance; \* denotes significance level of 0.05, significant correlation.

**3.2.2. Impact of board chairman with a business school education on dividends policy.** H1 explores the impact of board chairman educational background on dividends policy. The empirical results are as shown in Table 4. Equation (1) finds that *Bus* coefficient is -0.040 while *p*-value is 0.433, being not significant. Therefore, H1 (a): board chairman with a business school education has an impact on the payment of cash dividends, is not supported. Equation (3) finds that *Bus\_COB* coefficient is -0.026, *p*-value is 0.067, being significantly smaller than 0. The empirical results are the same with the hypothesis H1 (b). In the case of board chairman with a business school education, the percentage of paying cash dividends is lower

and thus the two are negatively correlated. Regarding the control variables, equation (1) finds that *MKTbook* and *CAPEXP* coefficients are significantly greater than 0, indicating that company are likely to pay cash dividends when it has growth opportunity. When the ratio of foreign institutional investors (*FORE\_ratio*) is higher, the company is more likely to pay cash dividends. Equation (3) finds that a high company risk (*Risk*) results in lower percentage of cash dividends. When the company has growth opportunity (*MKTbook*), the percentage of cash dividends will be lower. If the percentage of foreign institutional investors (*FORE\_ratio*) is high, the percentage of cash dividends payment is also high.

Table 4. Impact of board chairman with a business school education on dividends policy

$$\alpha + \beta_1 Bus\_COB_{i,t} + \beta_2 Asset\_growth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \varepsilon$$

		Div		CDiv_ratio		
Eq.		(1)		(3)		
Method		Logistic		OLS		
Background	Exp.	$\beta$	p-value	$\beta$	t-value	p-value
Bus_COB	?	-0.040	0.433	-0.026	-1.834	0.067*
Control variables						
Asset growth	-	0.157	0.017	-0.020	-1.442	0.149
Risk	-	0.003	0.745	-0.071	-5.011	0.000***
MKTbook	-	0.593	0.000***	0.042	2.898	0.004***
CAPEXP	-	2.099	0.000***	-0.116	-8.223	0.000***
FORE_ratio	+	2.263	0.000***	0.108	7.560	0.000***
N		7,214		4,878		
R <sup>2</sup>		0.085		0.032		
Adj R <sup>2</sup>				0.031		
F				27.117		

Notes: a. Variable definition: As described in Table 2; b.\* represents it is significant when  $\alpha = 0.10$ ; \*\* represents it is significant when  $\alpha = 0.05$ ; \*\*\* represents it is significant when  $\alpha = 0.01$ .

### 3.2.3. Impact of board chairman with an accounting professional background on dividends policy.

Regarding board chairman with an accounting professional background, this paper uses Eq. (2) and (4) to verify H2, and the empirical results are as shown in Table 5. Eq. (2) finds that *Acct\_COB* coefficient is 0.148, p-value is 0.404, being insignificant. It does not confirm the hypothesis H2 (a). Eq. (4) finds that by using the percentage of cash dividends (*CDiv\_ratio*) as a dependent variable, *Acct* coefficient

is -0.013, being insignificant. Therefore, H2(b) is not supported.

Regarding control variables, the variable of assets growth (*Asset growth*) coefficient in Eq. (2) is 0.158, being significant greater than 0. The results are consistent with the results of the variable of company growth opportunity (*MKTbook*). The results of the rest of control variables are consistent with those as shown in Table 5.

Table 5. Impact of board chairman with an accounting professional background on dividends policy

$$\alpha + \beta_1 Acct\_COB_{i,t} + \beta_2 Asset\_growth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \varepsilon$$

		Div		CDiv_ratio		
Eq.		(2)		(4)		
Method		Logistic		OLS		
Background	Exp.	$\beta$	p-value	$\beta$	t-value	p-value
Acct_COB	?	0.148	0.404	-0.013	-0.908	0.364
Control variables						
Asset growth	-	0.158	0.017**	-0.020	-1.412	0.158
Risk	-	0.003	0.755	-0.071	-5.011	0.000***
MKTbook	-	0.593	0.000***	0.042	2.963	0.003***
CAPEXP	-	2.114	0.000***	-0.116	-8.183	0.000***
FORE_ratio	+	2.274	0.000***	0.108	7.564	0.000***
N		7,214		4,878		
R <sup>2</sup>		0.085		0.032		
Adj R <sup>2</sup>				0.031		
F				26.680		

Notes: a. Variable definition: As described in Table 2; b.\* represents it is significant when  $\alpha = 0.10$ ; \*\* represents it is significant when  $\alpha = 0.05$ ; \*\*\* represents it is significant when  $\alpha = 0.01$ .

### 3.2.4. Impact of percentage of executive management with a business school education on dividends policy.

H3 explores the impact of the company's percentage of executive management with a business school education on the dividends policy decisions. The empirical results are as shown in Table 6. Eq. (5) finds that *Bus\_ratio* coefficient is -0.203, and p-value is

0.089, which supports the hypothesis that if the percentage of executive management with a business school education is higher, the company is more unlikely to pay cash dividends. Eq. (7) finds that when *CDiv\_ratio* is dependent variable, although *Bus\_ratio* coefficient is -0.006, H3 (b) is not verified as the significance is insufficient.

Table 6. Impact of percentage of executive management with a business school education on dividends policy

$$\alpha + \beta_1 Bus\_ratio_{i,t} + \beta_2 Asset\_growth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \beta_7 Gov + \beta_8 Ins + \beta_9 Div\_paid + \varepsilon$$

		Div		CDiv_ratio		
Eq.		(5)		(7)		
Method		Logistic		OLS		
Background	Exp.	$\beta$	p-value	$\beta$	t-value	p-value
Bus_ratio	-	-0.203	0.089*	-0.006	-0.450	0.653
Control variables						
Asset growth	-	0.326	0.000***	-0.004	-0.266	0.790
Risk	-	0.011	0.335	-0.065	-4.721	0.000***
MKTbook	-	0.434	0.726	-0.155	-8.332	0.000***
CAPEXP	-	0.1792	0.000***	0.098	6.980	0.000***
FORE_ratio	+	1.63	0.000***	0.025	1.802	0.072*
Gov	+	0.479	0.023**	0.018	1.282	0.200
Ins	+	71.375	0.110	0.019	1.372	0.170
Div_Paid	+	2.940	0.000***	0.238	17.194	0.000***
N		7,214		4,878		
R <sup>2</sup>		0.480		0.089		
Adj R <sup>2</sup>				0.088		
F				53.134		

Notes: a. Variable definiton: As described in Table 2; b.\* represents it is significant when  $\alpha = 0.10$ ; \*\* represents it is significant when  $\alpha = 0.05$ ; \*\*\* represents it is significant when  $\alpha = 0.01$ .

3.2.5. *Impact of the percentage of executive management with accounting educational background on dividends policy.* H4 explores the impact of the company's percentage of executive management with accounting educational background on the dividends policy decision. The empirical results are as shown in Table 7. Eq. (6) finds that *Acct\_ratio* coefficient is -0.320, p-value is

0.053, which supports the hypothesis that if the percentage of executive management with accounting educational background is higher, the company is more unlikely to pay cash dividends. Eq. (8) finds that *Acct\_ratio* coefficient is -0.09. However, the significance is 0.116, and the inference of H4 (b) is not verified due to insufficient significance.

Table 7. Impact of the percentage of executive management with accounting educational background on dividends policy

$$\alpha + \beta_1 Acct\_ratio_{i,t} + \beta_2 Asset\_growth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \beta_7 Gov + \beta_8 Ins + \beta_9 Div\_paid + \varepsilon$$

		Div		CDiv_ratio		
Eq.		(6)		(8)		
Method		Logistic		OLS		
Background	Exp.	$\beta$	p-value	$\beta$	t-value	p-value
Acct_ratio	?	-0.320	0.053*	-0.009	-0.624	0.533
Control variables						
Asset growth	-	0.326	0.000***	-0.004	-0.261	0.794
Risk	-	0.011	0.339	-0.065	-4.720	0.000***
MKTbook	-	0.436	0.000***	0.025	1.814	0.070*
CAPEXP	-	0.240	0.641	-0.144	-8.262	0.000***
FORE_ratio	+	1.638	0.000***	0.098	6.963	0.000***
Gov	+	2.402	0.027**	0.017	1.265	0.206
Ins	+	1.396	0.105	0.019	1.366	0.172
Div_Paid	+	2.939	0.000***	0.237	17.161	0.000***
N		7,214		4,878		
R <sup>2</sup>		0.481		0.089		
Adj R <sup>2</sup>				0.088		
F				53.157		

Notes: a. Variable definiton: As described in Table 2; b.\* represents it is significant when  $\alpha = 0.10$ ; \*\* represents it is significant when  $\alpha = 0.05$ ; \*\*\* represents it is significant when  $\alpha = 0.01$ .

3.2.6. In the case of board chairman and CEO duality, the impact of educational background on dividends policy. (1) Correlation between board chairman with a business school education and dividends policy.

According to previous literature, in the case of board chairman and CEO duality, the CEO plays the dual roles of decision-maker and supervisor and the corporate governance mechanism will be weakened. Therefore, the samples are divided into companies with board chairman and CEO duality and without CEO duality to explore the impact of educational background on dividends policy in the case of board chairman and CEO duality.

The empirical results of impact of educational background on dividend policy in the case of board chairman without or with CEO duality are as shown in Table 8 and Table 9. Eq. (1) finds that in the case of board chairman and CEO duality, board chairman with a business school education, *Bus\_COB* coefficient significance is -0.254, suggesting that the company is more unlikely to pay cash dividends. Eq. (3) finds that *Bus\_COB* coefficient is -0.075, representing board chairman and CEO duality, the percentage of companies of board chairman with a business school education to pay cash dividends is relatively lower.

The empirical results in Table 14 suggest that in Eq. (8), *Acct\_ratio* coefficient significance is -0.053, indicating that a high percentage of executive management with an accounting professional background can result in lower percentage of companies paying cash dividends in the case of board chairman and CEO duality. The clustering regression results of Eqs. (2), (4), (5), (6), and (7) suggest that *Bus\_COB*, *Acct\_COB*, *Bus\_ratio*, *Acct\_ratio* coefficients are not significant. Therefore, in the case of board chairman and CEO duality, it cannot verify that board chairman with an accounting professional background, the percentage of executive management with business or accounting education background have an impact on dividends policy. It can neither verify, in the case of board chairman without CEO duality, board chairman with a business or accounting education background, the percentage of executive management with a business school education have an impact on the dividends policy.

This study divides the samples by the educational background of board chairman into business, law, engineering and other, and finds that the board chairmen with educational background other than business have no significant impact on the formulation of dividends policy.

Table 8. Impact of board chairman with a business school education on dividends policy (Board chairman with CEO duality)

$$\alpha + \beta_1 Bus\_COB_{i,t} + \beta_2 Asset\_growth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \varepsilon$$

		Div		CDiv_ratio		
Eq.		(1)		(3)		
Method		Logistic		OLS		
Background	Exp.	$\beta$	p-value	$\beta$	t-value	p-value
<i>Bus_COB</i>	?	-0.254	0.017**	-0.075	-2.410	0.016**
Control variables						
<i>Asset growth</i>	-	0.002	0.960	-0.072	-2.158	0.031**
<i>Risk</i>	-	-0.006	0.790	-0.004	-0.132	0.895
<i>MKTbook</i>	-	0.386	0.000***	0.030	0.905	0.366
<i>CAPEXP</i>	-	-0.226	0.793	-0.055	-1.706	0.088*
<i>FORE_ratio</i>	+	1.462	0.002***	0.050	1.579	0.115
<i>N</i>		1,620		982		
<i>R<sup>2</sup></i>		0.049		0.018		
<i>Adj R<sup>2</sup></i>				0.012		
<i>F</i>				3.126		

Notes: a. Variable definiton: As described in Table 2; b.\* represents it is significant when  $\alpha = 0.10$ ; \*\* represents it is significant when  $\alpha = 0.05$ ; \*\*\* represents it is significant when  $\alpha = 0.01$ .

Table 9. Impact of board chairman with a business school education on dividends policy (Board chairman without CEO duality)

$$\alpha + \beta_1 Bus\_COB_{i,t} + \beta_2 Asset\_growth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \varepsilon$$

		Div		CDiv_ratio		
Eq.		(1)		(3)		
Method		Logistic		OLS		
Background	Exp.	$\beta$	p-value	$\beta$	t-value	p-value
<i>Bus_COB</i>	?	0.041	0.563	-0.029	-1.518	0.129

Table 9 (cont.). Impact of board chairman with a business school education on dividends policy (Board chairman without CEO duality)

Background	Exp.	$\beta$	$p$ -value	$\beta$	t-value	$p$ -value
Control variables						
<i>Asset growth</i>	-	0.482	0.001***	-0.012	-0.642	0.512
<i>Risk</i>	-	-0.006	0.615	-0.078	-4.026	0.000***
<i>MKTbook</i>	-	0.622	0.000***	0.075	3.818	0.000***
<i>CAPEXP</i>	-	2.592	0.000***	-0.108	-5.548	0.000***
<i>FORE_ratio</i>	+	2.458	0.000***	0.089	4.551	0.000***
<i>N</i>		3,806		2,449		
<i>R<sup>2</sup></i>		0.095		0.032		
<i>Adj R<sup>2</sup></i>				0.029		
<i>F</i>				141.136		

Notes: a. Variable definiton: As described in Table 2; b.\* represents it is significant when  $\alpha = 0.10$ ; \*\* represents it is significant when  $\alpha = 0.05$ ; \*\*\* represents it is significant when  $\alpha = 0.01$ .

Table 10. Impact of board chairman with an accounting professional background on dividends policy (Board chairman with CEO duality)

$$\alpha + \beta_1 Acct\_COB_{i,t} + \beta_2 Asset\_growth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \varepsilon$$

		<i>Div</i>		<i>CDiv_ratio</i>		
Eq.		(2)		(4)		
Method		<i>Logistic</i>		<i>OLS</i>		
Background	Exp.	$\beta$	$p$ -value	$\beta$	t-value	$p$ -value
<i>Acct_COB</i>	?	-0.476	0.174	-0.037	-1.187	0.236
Control variables						
<i>Asset growth</i>	-	-0.001	0.986	-0.074	-2.206	0.028**
<i>Risk</i>	-	-0.006	0.776	-0.004	-0.113	0.910
<i>MKTbook</i>	-	0.382	0.000***	0.030	0.898	0.369
<i>CAPEXP</i>	-	-0.325	0.706	-0.059	-1.806	0.071*
<i>FORE_ratio</i>	+	1.489	0.001***	0.053	1.665	0.096*
			0.280			
<i>N</i>		1,620		982		
<i>R<sup>2</sup></i>		0.046		0.014		
<i>Adj R<sup>2</sup></i>				0.008		
<i>F</i>				2.384		

Notes: a. Variable definiton: As described in Table 2; b.\* represents it is significant when  $\alpha = 0.10$ ; \*\* represents it is significant when  $\alpha = 0.05$ ; \*\*\* represents it is significant when  $\alpha = 0.01$ .

Table 11. Impact of board chairman with an accounting professional background on dividends policy (Board chairman without CEO duality)

$$\alpha + \beta_1 Acct\_COB_{i,t} + \beta_2 Asset\_growth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \varepsilon$$

		<i>Div</i>		<i>CDiv_ratio</i>		
Eq.		(2)		(4)		
Method		<i>Logistic</i>		<i>OLS</i>		
Background	Exp.	$\beta$	$p$ -value	$\beta$	t-value	$p$ -value
<i>Acct_COB</i>	?	0.313	0.217	-0.030	-1.549	0.122
Control variables						
<i>Asset growth</i>	-	0.482	0.001***	-0.012	-0.613	0.540
<i>Risk</i>	-	-0.006	0.611	-0.079	-4.038	0.000***
<i>MKTbook</i>	-	0.621	0.000***	0.076	3.870	0.000***
<i>CAPEXP</i>	-	2.569	0.000***	-0.105	-5.424	0.000***
<i>FORE_ratio</i>	+	2.474	0.000***	0.088	4.484	0.000***
<i>N</i>		3,806		2,449		
<i>R<sup>2</sup></i>		0.095		0.032		
<i>Adj R<sup>2</sup></i>				0.030		
<i>F</i>				14.152		

Notes: a. Variable definiton: As described in Table 2; b.\* represents it is significant when  $\alpha = 0.10$ ; \*\* represents it is significant when  $\alpha = 0.05$ ; \*\*\* represents it is significant when  $\alpha = 0.01$ .

Table 12. Impact of percentage of executive management with a business school education on dividends policy (Board chairman with CEO duality)

$$\alpha + \beta_1 Bus\_ratio_{i,t} + \beta_2 Asset\_growth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \beta_7 Gov + \beta_8 Ins + \beta_9 Div\_paid + \varepsilon$$

		Div		CDiv_ratio		
Eq.		(5)		(7)		
Method		Logistic		OLS		
Background	Exp.	$\beta$	p-value	$\beta$	t-value	p-value
<i>Bus_ratio</i>	-	-0.241	0.319	-0.026	-0.867	0.386
Control variables						
<i>Asset growth</i>	-	0.035	0.471	-0.042	-1.296	0.195
<i>Risk</i>	-	0.032	0.217	0.018	0.588	0.557
<i>MKTbook</i>	-	0.308	0.000***	0.008	0.248	0.804
<i>CAPEXP</i>	-	-1.743	0.109	-0.060	-1.931	0.054*
<i>FORE_ratio</i>	+	1.019	0.044**	0.049	1.585	0.113
<i>Gov</i>	+	8.178	0.161	-0.008	-2.70	0.787
<i>Ins</i>	+	7.101	0.002***	0.066	2.093	0.037**
<i>Div_Paid</i>	+	2.781	0.000***	0.275	9.007	0.000***
<i>N</i>		1,620		982		
<i>R<sup>2</sup></i>		0.455		0.097		
<i>Adj R<sup>2</sup></i>				0.089		
<i>F</i>				12.032		

Notes: a. Variable definition: As described in Table 2; b. \* represents it is significant when  $\alpha = 0.10$ ; \*\* represents it is significant when  $\alpha = 0.05$ ; \*\*\* represents it is significant when  $\alpha = 0.01$ .

Table 13. Impact of percentage of executive management with a business school education on dividends policy (Board chairman without CEO duality)

$$\alpha + \beta_1 Bus\_ratio_{i,t} + \beta_2 Asset\_growth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \beta_7 Gov + \beta_8 Ins + \beta_9 Div\_paid + \varepsilon$$

		Div		CDiv_ratio		
Eq.		(5)		(7)		
Method		Logistic		OLS		
Background	Exp.	$\beta$	p-value	$\beta$	t-value	p-value
<i>Bus_ratio</i>	-	-0.188	0.256	-0.003	-0.157	0.876
Control variables						
<i>Asset growth</i>	-	-0.004	0.000***	0.004	0.190	0.849
<i>Risk</i>	-	0.540	0.794	-0.073	-3.815	0.000***
<i>MKTbook</i>	-	0.501	0.000***	0.067	3.476	0.001***
<i>CAPEXP</i>	-	1.782	0.489	-1.06	-5.591	0.000***
<i>FORE_ratio</i>	+	1.945	0.000***	0.080	4.094	0.000***
<i>Gov</i>	+	-1.177	0.138	0.012	0.638	0.524
<i>Ins</i>	+	2.899	0.292	0.026	1.362	0.173
<i>Div_Paid</i>	+	-1.880	0.000***	0.204	10.682	0.000***
<i>N</i>		3,806		2,449		
<i>R<sup>2</sup></i>		.471		0.074		
<i>Adj R<sup>2</sup></i>				0.071		
<i>F</i>				22.882		

Notes: a. Variable definition: As described in Table 2; b. \* represents it is significant when  $\alpha = 0.10$ ; \*\* represents it is significant when  $\alpha = 0.05$ ; \*\*\* represents it is significant when  $\alpha = 0.01$ .

Table 14. Impact of the percentage of executive management with accounting educational background on dividends policy (Board chairman without CEO duality)

$$\alpha + \beta_1 Acct\_ratio_{i,t} + \beta_2 Asset\_growth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \beta_7 Gov + \beta_8 Ins + \beta_9 Div\_paid + \varepsilon$$

		Div		CDiv_ratio		
Eq.		(6)		(8)		
Method		Logistic		OLS		
Background	Exp.	$\beta$	p-value	$\beta$	t-value	p-value
Acct_ratio	?	-0.212	0.547	-0.053	-1.742	0.082*
Control variables						
Asset growth	-	0.035	0.473	-0.037	-1.147	0.252
Risk	-	0.032	0.223	0.018	0.590	0.555
MKTbook	-	0.308	0.000***	0.007	0.218	0.828
CAPEXP	-	-1.780	0.102	-0.062	-1.991	0.047**
FORE_ratio	+	1.021	0.043	0.049	1.585	0.113
Gov	+	8.137	0.167	-0.009	-0.287	0.774
Ins	+	7.163	0.002***	0.065	2.046	0.041**
Div_Paid	+	2.784	0.000***	0.273	8.977	0.000***
N		1,620		982		
R <sup>2</sup>		0.455		0.099		
Adj R <sup>2</sup>				0.091		
F				12.313		

Notes: a. Variable definition: As described in Table 2; b.\* represents it is significant when  $\alpha = 0.10$ ; \*\* represents it is significant when  $\alpha = 0.05$ ; \*\*\* represents it is significant when  $\alpha = 0.01$ .

Table 15. Impact of the percentage of executive management with accounting educational background on dividends policy (Board chairman without CEO duality)

$$\alpha + \beta_1 Acct\_ratio_{i,t} + \beta_2 Asset\_growth_{i,t} + \beta_3 Risk_{i,t} + \beta_4 MKTBook_{i,t} + \beta_5 CAPEXP_{i,t} + \beta_6 FORE\_ratio_{i,t} + \beta_7 Gov + \beta_8 Ins + \beta_9 Div\_paid + \varepsilon$$

		Div		CDiv_ratio		
Eq.		(6)		(8)		
Method		Logistic		OLS		
Background	Exp.	$\beta$	p-value	$\beta$	t-value	p-value
Acct_ratio	?	-0.250	0.276	0.009	0.469	0.639
Control variables						
Asset growth	-	0.635	0.000***	0.003	0.176	0.860
Risk	-	-0.004	0.806	-0.073	-3.826	0.000***
MKTbook	-	0.541	0.000***	0.066	3.456	0.001
CAPEXP	-	0.586	0.423	-0.108	-5.616	0.000***
FORE_ratio	+	1.794	0.000***	0.080	4.131	0.000***
Gov	+	1.878	0.153	0.012	0.628	0.530
Ins	+	-1.162	0.298	0.026	1.365	0.172
Div_Paid	+	2.896	0.000***	0.204	10.695	0.000***
N		3,806		2,449		
R <sup>2</sup>		0.471		0.074		
Adj R <sup>2</sup>				0.071		
F				22.906		

Notes: a. Variable definition: As described in Table 2; b.\* represents it is significant when  $\alpha = 0.10$ ; \*\* represents it is significant when  $\alpha = 0.05$ ; \*\*\* represents it is significant when  $\alpha = 0.01$ .

## Conclusion and suggestions

With listed and OTC companies in Taiwan as samples, this paper used the Logistic regression and OLS regression to explore whether the decision making behaviors can affect the dividends policy and whether it can affect the percentage of the cash

dividends against the total dividends in the case of board chairman and executive management with business and accounting education background.

The results indicate that board chairman with a business school education affects the percentage of cash dividends against the total dividends. The

percentage of the company's executive management with a business school education can affect the payment of cash dividends. In the case of board chairman and CEO duality, board chairman with a business school education affects the payment of cash dividends or not and the percentage of cash dividends against the total dividends. On the other hand, higher percentage of executive management

with an accounting professional background will affect the percentage of cash dividends against total dividends.

The findings of this study can provide a reference for investors favoring cash dividends. In addition, the empirical results can be a reference for hiring board chairman and executive management.

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