

THE IMPACT OF GROUP ENTERPRISES BOARD CHARACTERISTICS AND FAMILY HOLDINGS ON OPERATING PERFORMANCE

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Abstract

The samples of the study were collected from 387 Taiwan's listed group conglomerates from 2010 to 2023, to investigate the mediating effect of corporate social responsibility, and to verify the impact of group enterprises board characteristics and family holdings on operating performance. Using the two-stage least squares method to estimate the simultaneous equations models and to establish the analyses: (1) Board characteristics of group enterprises affect corporate social responsibility. (2) Family holdings in group enterprises affect corporate social responsibility. (3) Group corporate social responsibility positively affects operating performance. (4) Board characteristics of group enterprises exert its influence on operating performance. (5) Family holdings in group enterprises influence operating performance. According to the definition of Corporate Social Responsibility by the World Business Council for Sustainable Development, it is emphasized that while contributing to economic development, enterprises need to commit to strictly abiding by ethical norms proactively. To improve employees' quality of life, as well as their families; to ameliorate living standards in local community, or even society; enterprises take sustainable management as their core goal, which also echoes the empirical results of the study. Using the mediating effect of corporate social responsibility to study the impact of group enterprises board characteristics and family holdings on operating performance.

Keywords

Board characteristics, Family holdings, Corporate Social Responsibility, Operating performance

1. Introduction

Jensen and Meckling (1976) proposed that in group enterprises, if there is an agency conflict between shareholders representing family businesses and business managers with management rights, according to agency theory, the proportion of conflicts will be less than that of non-family-owned conglomerates. Rafael La Porta et al. (1999) mentioned in 1995 the financial data of the top 20 conglomerates ranked by local stock market capitalization. After observing the ownership structure data of group conglomerates in 27 wealthy countries or economies, they found that the final controlling shareholders of approximately 30% of group conglomerates are families that influence the operating performance of local enterprises through cross-holding of stocks between enterprises or a stable investment structure similar to a pyramid structure. Ghoul et al. (2016) found that from 2002 to 2011 there were 9 rich countries or economies in East Asia. The ownership of the ultimate controlling shareholders of 94 family-controlled conglomerates was compiled from the data of 335 listed conglomerates. The common characteristic is that family-controlled conglomerates will exhibit less corporate social responsibility performance than non-family-controlled conglomerates. This also echoes the agency theory view that ultimately controlling shareholders can relatively easily direct the transfer of corporate resources from corporate social responsibility activities to other projects that are beneficial to corporate performance.

Corporate Social Responsibility, which has engaged business owners and professional managers in recent years, is the responsibility that business owners and professional managers should fulfill towards all the stakeholders of the enterprise. When enterprises strive to pursue business performance, they also need to take into account the common growth of society and enterprises. Still, making a living is a real merit, and the obligation of making a living is the obligation of the enterprise. The goal is to satisfy the value activities of the stakeholders. The

real virtue is that when the enterprise takes active steps towards revenue, it also considers the social goals of environmental friendliness and caring for public welfare and charity and achieves sustainable integration into corporate governance and business development for mutual benefit.

In Taiwan, the structure of the economic ecosystem is mainly supported by small-sized or medium-sized companies run by families. Around the 1980s, free market competition brought a large amount of investment from retail investors to small scale companies in Taiwan. Therefore, small scale family companies transformed into group enterprises. When there are two or more listed companies in the group, the listed enterprises together will be considered a listed group enterprise. In Taiwan's securities market, family-owned group enterprises generally have directors or senior managers who are family members, have decision-making power, and their shareholding ratio exceeds 0.5%. The ratio is much higher than that in the United States, Germany, and the neighboring Japan. In order to comprehensively explore the implementation of corporate social responsibility right now, the study re-verified whether family holdings of listed conglomerates affect corporate performance through corporate social responsibility in Taiwan. The extent to which the important supervisory mechanism of board characteristics affects corporate performance through corporate social responsibility; at the same time, the study also explores whether group corporate social responsibility has an affirmatory effect on operating performance; Furthermore, the study mainly integrates the literature on corporate social responsibility of group enterprises to examine the board characteristics of group enterprises and the operating performance of family holdings of group enterprises, so as to facilitate subsequent interested researchers to produce relevant insights and practices that will help. Therefore, the study explores five hypotheses. First, do the board characteristics of group enterprises affect corporate social responsibility? Secondly, do the family holdings in group enterprises affect corporate social responsibility? Furthermore, do the group corporate social responsibility positively affect operating performance? And do the board characteristics of group enterprises exert its influence on operating performance? Finally, do the family holdings in group enterprises have influence operating performance?

2. Literature Review

2.1 Board Characteristics and Corporate Social Responsibility

Pfeffer and Salancik (1978) proposed the Resource Dependence Theory, which proved that the composition of the board characteristics is an important bridge between the enterprise and the extraneous environment. According to the above theory, the composition size of the board characteristics will affect the function. Diversified members of the board characteristics can provide the enterprise with more resources and become the chairman's advisory group or supporters. The board characteristics were subdivided into separate sections and then we can explore the relationship with corporate social responsibility from the size of board characteristics, the independent directors, and the Chairmen concurrently as general managers. Pfeffer (1972) also supports that the more diverse the board characteristics, the closer the network of relationships between enterprises and outside world, which means that the more connections the enterprises have, the more resources it can integrate and have a positive impact on operating performance. Dalton et al. (1999), Chen and Ye (2002), Kiel and Nicholson (2003) also agree that the more diverse the board characteristics, the larger the size of the board characteristics. The larger the enterprises, the more diversified the professional knowledge, background and technical experience the board members have, and they can provide business owners and professional managers with diverse business decisions and suggestions. The enterprises can also grasp changes in the external environment and utilize rich industrial resources, which will help improve corporate operating performance, so there is a harmonious connection between board characteristics and corporate operating performance.

Liao et al. (2006) also considered the impact of the correlation with the structural characteristics of the board of listed companies in Taiwan and the operating performance of group enterprises. Empirical results show that in the non-family-owned group enterprises, the size of the board characteristics has no momentous effect on business performance, but in the family-owned group enterprises, the size of the board characteristics has a critical negative connection with business performance. The above research shows that regardless of whether it is family-owned or not. For enterprises, because the size of the board characteristics is too enormous, it is difficult for board members to reach consensus, which does not help ameliorate business performance. That is to say, the supervisory mechanism of the board of directors is significantly influenced by whether the enterprise is a family-owned conglomerate. In addition, in most family-owned group enterprises, in order to promote family interests and promote the efficiency of business decision-making, the chairman or most of the directors are family members, and the opinions of experts in multiple fields are rarely accepted. Furthermore, family-owned group enterprises attach great importance to the harmony of family members, and family members rarely express different opinions on board resolutions. In this regard, family factors will weaken the effect of board characteristics on corporate performance.

Johnson and Greening (1999) found that there is a positive correlation between the number of outside independent directors and the company's corporate social responsibility, which means that outside directors are not only more independent and have stronger supervisory functions, but are also more willing to invest corporate

resources in social responsibility. Zahra et al. (1993) believe that independent directors perform internal audit and can exert supervisory functions, improve corporate operating performance, and promote corporate implementation of social responsibilities. Based on the above, the independence of outside directors enables them to play a better supervisory and management role. They can not only avoid insider conflicts of interest, but also provide professional advice, pay attention to the company's image, and are willing to participate in social responsibilities. Therefore, the hypotheses established are as follows:

Hypothesis 1: Board characteristics of group enterprises affect corporate social responsibility.

2.2 Family Holdings and Corporate Social Responsibility

Morck and Yeung (2004) pointed out that family-controlled enterprises are motivated by protecting the personal interests of family members. In addition to the possibility of illegal bribery, they also lack incentives to improve the social connection within the enterprises and stakeholders. Lins et al. (2013) used a sample of 35 countries and found that during 2008 to 2009 financial crisis, family-owned group enterprises performed poorly. Regarding corporate social responsibility performance, Bartkus et al. (2002) analyzed the data of 66 US enterprises and found that large shareholders restricted corporate philanthropy. Dam and Scholtens (2013) conducted a practical analysis using a sample of 700 European enterprises and found that ownership concentration is pessimistically connected to corporate social responsibility presentation. In summary, the discussion suggests that family-owned enterprises have greater incentives to divert the enterprise's resources invested in CSR activities to other projects by exploiting minority shareholders, resulting in poor CSR performance of family-owned group enterprises.

Block and Wagner (2014) showed that although family holdings are negatively related to corporate social responsibility performance, they are surely connected to the diversity, employees, environment, and products of corporate social responsibility. Ghoul et al. (2016) suggested that different results may be obtained if countries other than the United States are considered, especially countries with less protection for minority shareholders. Therefore, data from nine East Asian regions were used to re-examine the effect of family possession on corporate society responsibility performance. The reason Ghoul et al. (2016) chose Southeastern countries for analysis is that family control is the dominant form of possession in East Asia, and previous research on the effect of family control on financial presentation found that the results in the United States and East Asia showed opposite situations. In addition, controlling families in East Asian family businesses often exercise control through pyramid ownership structures or cross-shareholdings, which may have greater incentives and abilities to expropriate the interests of minority shareholders. The research results pointed out that there is a negative correspondence with family control and corporate social responsibility. Although Ghoul et al. (2016) considered data from Taiwan, they only studied 8 family businesses in Taiwan and may not be able to comprehensively explore the effect of family control on social responsibility in Taiwan. Therefore, the study re-verified the effect of family ownership in listed enterprises on corporate social responsibility in Taiwan. The research submits the following hypotheses:

Hypothesis 2: Family holdings in group enterprises affect corporate social responsibility.

2.3 The Mediating Effect of CSR on Corporate Performance

High-quality corporate social responsibility can create an excellent reputation and can also be used as an important intangible asset of the company. Liu et al. (2021) mentioned that when the external legitimacy and reputation of the company are improved, it can help the company achieve internationalization. Corporate social responsibility helps improve corporate reputation. Reputation has an important effect on an enterprise's economic performance, and an enterprise's social responsibility actions help build reputation (McWilliams et al., 2006), and Deephouse (2000), Fombrun (1996, 2005), Gardberg and Fombrun (2006), Love and Kraatz (2009), Pfarrer et al. (2010), Lange et al. (2011), Stuebs and Sun (2011) and Zhu et al. (2014) all put forward similar views and found that A company's investment in social responsibility is positively related to its reputation. The greater the reputational capital an enterprise has built due to social responsibilities, the more it tends to focus on reducing succession disturbances, establishing a succession system, and carefully selecting successors to reduce situations that may harm the company's reputation in the process. This allows companies that fulfill their social responsibilities to continue their legacy and to have lower levels of negative impact. In addition, existing research Peloza (2006) and Minor and Morgan (2011) pointed out that corporate social responsibility actions accumulate the reputation mentioned earlier and establish a good image, and then when adverse events occur in the company, social responsibility will build more reputational capital as a buffer, reducing the negative impact of adverse events and producing the so-called insurance effect. Lins et al. (2017) mentioned that a company's social responsibility can build more social capital and accumulate society's trust in the company, so that when the company faces the public's loss of confidence in the financial market (such as 2008-2009), its operating results were better than those of other companies.

Cochran and Wood (1984) found that a company's social responsibility presentation is positively related to financial performance. Luce et al. (2001), Brammer and Millington (2005), Hull and Rothenberg (2008) and Liang et al. (2019) all have similar findings. Waddock and Graves (1997) found that an enterprise's social responsibility

performance is positively related to return on assets, return to shareholders and return on sales. Chi Xiangxuan et al. (2014) pointed out that corporate social responsibility is like a double-edged sword. If the operating strategy is properly used, the company's social responsibility actions will improve performance through reputation effects. Based on the above discussion, so the following hypothesis is proposed:

Hypothesis 3: Corporate social responsibility positively affects operating performance.

2.4 Board Characteristics Affect Corporate Performance

Fama and Jensen (1983) believe that the main responsibility of the board of directors is to approve managers' decisions and supervise managers' performance, and it has legal authority to hire and fire professional managers. Fama (1980) and Williamson (1983) advocate that the board characteristics mechanism can help reduce agency problems and is responsible for protecting corporate interests and supervising management. Hermalin and Weisbach (2003) explain why the board characteristics has the value of existence and explain the importance of the existence of the audit committee. Past research supports that an efficient board characteristics is an important factor in determining corporate financial performance (Core et al., 1999; Core et al., 2006). Therefore, in addition to executing the company's business on behalf of minority shareholders, the board characteristics also has the function of supervising the operators. However, the majority of group enterprise equity is centralized by a few families, and it is quite common for family members to serve as business owners or managers, resulting in a high degree of overlap in ownership and management rights, which in turn prevents the board of directors from operating effectively. Therefore, the study focuses on the connection with board characteristics and corporate performance. Board composition may influence the execution of decisions. In family-owned conglomerates, cultivating trust between insiders and outsiders is difficult because business owners are mostly reluctant to share internal information, and the board characteristics is mostly family-owned. Furthermore, the paternalistic decision-making style is also reflected in the high concentration of management power. However, the resource dependence and strategic change perspectives believe that the board characteristics in effectively supervising and serving corporate operating performance usually depends on factors such as the characteristics of the board characteristics and the ratio of independent directors on the board of directors. A fourth hypothesis is proposed here:

Hypothesis 4: Board characteristics of group enterprises exert its influence on operating performance.

2.5 Family Holdings Affect Business Performance

Jensen and Meckling (1976) first proposed the "Convergence of Interest Hypothesis", which pointed out that the more shares a manager holds, the greater the proportion of losses in corporate value caused by his spending preference behavior will increase, so the more likely he is to bear the loss, the less likely he will make decisions that harm the company's value; on the contrary, Jensen and Ruback (1983) proposed the "Entrenchment Hypothesis". When the manager's shareholding ratio is higher, the equity is more concentrated in his hands, and there will be enough voting rights maximize their utility. Therefore, managers will strongly oppose mergers or acquisitions because it will undermine their power, prestige, and positions.

Fan et al. (2008) pointed out that when family-owned group enterprises transfer ownership and control to successors, they tend to reduce the value of the business. Many intangible assets, such as important employees of the previous generation, may follow the previous entrepreneur and leave the business. During the succession period, it is also easy to have conflicts with stakeholders, which may lead to loss of corporate reputation. Molly et al. (2010) pointed out that although there is no evidence that the profitability of family-owned group enterprises will be negatively affected by successor succession, corporate debt ratios tend to increase when succession occurs; Bennedsen et al. (2015) pointed out that ownership and the loss of enterprise value could be caused by management succession related to family assets and obstacles. In addition, research by Chiang and Yu (2018) pointed out that the problem of succession of top corporate power is inevitable. Succession will reduce the market value and accounting performance of the enterprise. If we further distinguish between external and internal successors, we will find that , although internal succession is better than external succession, operating performance still tends to be negatively affected by succession; research by Xiao (2014) shows that succession has a negative effect on corporate presentation, but if the new successor is the family member of the old leader, the family members are better able to have the network relationship between the old leaders and the board characteristics, and can more easily control resources and power, thus reducing the negative effect of succession on corporate presentation.

Based on the above literature, whether domestic or foreign family inheritance research, most point out that when a family inheritance occurs in a business, although it will be affected by the entire family structure, property transfer, resource network, corporate culture, operation and management style, as well as the successor's values and the results of training, the impact on operating performance tends to be negative (Guan et al., 2012; Ghee et al., 2015; Weng et al., 2019). Anderson and Reeb (2003) studied the connection between family founder equity and corporate performance. The sample was S&P 500 companies in 1992, using ROA to measure corporate performance; the research results found that family shareholding is very common, and the corporate performance of

family enterprises is better than that of non-family enterprises. Further analysis of the connection between family shareholding proportion and corporate performance shows that the connection between family shareholding and corporate presentation is non-linear, in other words, the higher the family shareholding proportion, the worse the corporate performance. Filatotchev et al. (2005) used data from 228 listed conglomerates on the Taiwan Stock Exchange to study the effect of family ownership structures and board characteristics on the performance of family-controlled enterprises. After taking into account possible endogeneity issues, it is found that there is no connection between family ownership and corporate performance measured by accounting ratios, earnings per share, and price-to-book ratio. The study proposes the following hypothesis based on this:

Hypothesis 5: Family holdings in group enterprises influence operating performance.

3. Research Methods

3.1 Samples and Data Sources

The samples of the study are mainly non-financial industry companies listed on the Taiwan Stock Exchange from 2010 to 2023, excluding the financial holding industry, securities industry, bill industry, banking industry, property and casualty insurance industry and life insurance industry. The reason for the above exclusion is that the financial industry's operating and regulatory standards are unique and significantly different from the structure of non-financial industries, including accounting system (standards, systems, subjects), performance evaluation indicators, and government regulations, which are more comprehensive and strict than other industries. The data used in the study are all annual data. The financial data about the group's family businesses are extracted from the Taiwan Stock Exchange Public Information Observatory and the Taiwan Economic Journal database, including enterprise annual reports, financial information and the data of board characteristics, excluding enterprises with negative financial data, missing data, and enterprises that did not fully disclose information. There were a total of 387 enterprises and 713 samples.

3.2 Variable Definition

3.2.1 Dependent Variables

There are many different methods to evaluate corporate operating performance, which can generally be divided into accounting indicators and market indicators: Kesner and Johnson (1990) and Ayadi et al (1996) use return on asset: ROA), return on equity (ROE), and earnings per share (EPS) to understand corporate operating conditions through financial information. The study refers to Shen and Zhang (2008) and Weng et al. (2019), and divides enterprise performance into two categories: accounting-based and market-based. The former includes return on assets (ROA), which is defined as the recurring net profit before tax, interest, and depreciation divided by the enterprise's average total assets for the year; return on equity (ROE) is defined as the net profit after tax divided by the enterprise's average shareholders' equity for the year.; Earnings per share (EPS) is defined as net profit after tax divided by the number of shares of common stock outstanding. The latter include annual stock return (SR), defined as the annual stock return of a specific enterprise in a specific year; annual stock excess return (ECTM), defined as the annual stock return minus the market's annual return.

3.2.2 Independent Variables

(1) Board Characteristics (BC)

The study measures board characteristics based on three indicators: director shareholding ratio, independent director ratio, and chairman concurrently serving as general manager. Director shareholding ratio (DIREDD) is defined as the total number of shares held by all directors divided by the number of outstanding shares, independent director ratio (IDR) is defined as the number of independent directors divided by the total number of board members. DUAL is defined as 1 if the chairman concurrently serves as general manager, and 0 otherwise.

(2) Family Holdings (FCBG)

The group enterprises in the study are divided into two categories according to their control rights, one is family-controlled enterprises (family controlled business groups; family-owned companies) and the other is non-family-controlled enterprises. Furthermore, according to data from the Taiwan Economics Journal, enterprises can be divided into four categories according to their control rights, including: single-family dominance, co-governance, public equity dominance, and professional manager governance. A business in which family members hold at least 5% of the shares can be defined as a family business. According to research by Chen and Xie (2015), if a company's control structure and dominance are in a single family in a specific year, it can be classified as a family enterprise or a family-controlled enterprise. In addition, according to the research by Weng et al. (2019), among family-controlled enterprises, if in a specific year (1)the current chairman or general manager resigns from the leadership position (including management); (2)the successor is a family member (Including: blood relatives,

marriage relatives, siblings or brother-in-law relationships); (3) if it involves the takeover or transfer of ownership and management rights, it can be defined as family inheritance. To sum up, the study will use the dummy variable (FCBG) to distinguish whether the phenomenon of family holding occurs. An FCBG of 1 indicates a family-controlled enterprise with family inheritance, and an FCBG of 0 indicates that the phenomenon of family holding does not occur in the family enterprise.

(3) Corporate Social Responsibility (CSR)

The study intends to refer to the social responsibility index standard formulated by the "China Shanghai Stock Exchange" as the basis for evaluation, and calculate the amount of social welfare created by each enterprise in the study sample for the core stakeholders of the enterprise in a specific year, which is called social contribution value (SCV). Generally speaking, social contribution value is a comprehensive indicator that mainly reflects the economic contribution of an enterprise to all aspects of society in a specific year. It includes: 1. Surplus (profit created in the year) 2. Taxes (payment to the government's finances) 3. Employees Economic support (salaries and benefits, etc.) 4. Interest (financial payments to creditors) 5. Donations (indirectly or directly invested in social welfare). After adding up the above economic contributions, we take the natural logarithm to express the value. In addition, we consider excluding the impact of company size and calculate the social contribution value per share (SCVPS), which is the social contribution value divided by the number of outstanding shares. To sum up, the higher the social contribution value per share, the better the company's social responsibility performance. Through these quantitative indicators, the company's social responsibility performance can be evaluated more objectively.

3.2.3 Control Variables

According to existing research, there are still some variables that may affect corporate performance. Therefore, the study takes variables such as revenue growth rate, debt ratio, company size, and R&D expense rate into consideration as control variables that affect corporate performance. By controlling these influencing variables, impact on business performance of the independent variables that the study focuses on can be more accurately examined. Company size (SIZE) is defined as the natural logarithm of total assets. Debt ratio (LEV) is defined as total liabilities divided by total assets. Research and development expense ratio (RD) is defined as research and development expenses divided by net operating income. Revenue growth Ratio (FG) is defined as the current period's revenue minus the previous period's revenue divided by the previous period's revenue.

3.3 Empirical Model

Since the empirical model involves two least squares regression equations, in order to test whether there is interdependence between variables, the two-stage least squares method is proposed to estimate the simultaneous equations. The two-stage least squares method uses all information, and a measurement method that estimates all structural formulas. The method first uses the ordinary least squares method to obtain consistent estimated formulas of parameters, so that the structural equations are converted into reduced formulas, and the estimated values of endogenous variables are obtained according to the least squares method. Then, the estimated values are used as instrumental variables of the endogenous explanatory variables of the structural equation, and then introduced using the generalized least squares method to obtain the asymptotically efficient best estimator. Therefore, the study adopts simultaneous equations as the research model, which not only has the good properties of impartiality and consistency, but also satisfies the validity. The simultaneous equations are hereby established as follows:

$$CSR_{i,t} = \alpha_0 + \alpha_1 BC_{i,t} + \alpha_2 FCBG_{i,t} + \varepsilon_{i,t} \quad (1)$$

$$BP_{i,t} = \beta_0 + \beta_1 CSR_{i,t} + \beta_2 BC_{i,t} + \beta_3 FCBG_{i,t} + \beta_4 OC_{i,t} + \varepsilon_{i,t} \quad (2)$$

Where BP is the corporate performance variable, BC is the board characteristic variable, FCBG is the family holding variable, CSR is the corporate social responsibility variable, and OC is the control variable.

4. Empirical Results

4.1 Empirical Results of Accounting Basics

According to Table 1, family holdings have a significant positive impact on corporate social responsibility, and corporate social responsibility also has a significant positive impact on operating performance, so Hypothesis 2 and Hypothesis 3 are established; the estimated coefficient of the independent director ratio is significantly positive, so Hypothesis 1 is established. In the control variables section, the debt ratio significantly affects the company's performance, the revenue growth rate and the R&D expense rate both significantly and positively affect the company's performance, but the company's size significantly and negatively affects the company's performance.

The empirical results of corporate social responsibility and various operating performance show that regarding return on assets (ROA), return on equity (ROE), and earnings per share (EPS), the coefficients are all positive and significant at the 1% level, which indicates a positive correlation. It can be seen that the better the

performance of a company in corporate social responsibility, it will have a certain positive relationship with its overall company performance. In other words, family holdings and board characteristics can further improve company performance indirectly through corporate social responsibility, and it can be indirectly inferred that, when a family business is passed down, companies which invest in innovative activities at a higher level will perform better than companies that do not invest in innovative activities, as measuring operating performance on an accounting basis.

In the direct effect part, since the director's shareholding ratio, the independent director ratio and the chairman's concurrent role as general manager have a significant direct positive impact on ROA and EPS, the fourth hypothesis of the study is supported. However, family shareholding does not significantly affect ROA, ROE and EPS, so hypothesis five is not established. In summary, innovation activities perform better and will be regarded as a key indicator to examine whether the company's performance is good or not. Therefore, hypothesis two of the study is supported.

To sum up, although the empirical results do not support research hypothesis 5, because existing literature shows that inheritance of most family businesses tends to have a negative impact on operating performance, the study has new findings that family holdings indirectly improve corporate performance through corporate social responsibility. It means the company's corporate social responsibility performance not only has the effect of alleviating negative impacts to maintain and stabilize corporate performance, but also brings additional positive benefits and plays a positive reinforcing role. It can be seen that if a company fulfills its corporate social responsibilities, it will help improve its corporate reputation and establish a good image. It will also have a relatively complete risk management thinking and insurance mechanism, so it can serve as a protective barrier for the inheritance of family businesses, and then play a role in protecting the family business, alleviating the impact or influence caused by crisis moments. To sum up, when family businesses are passed down, companies with better corporate social responsibility performance will have less negative impact on the company and can also improve company performance. Therefore, the empirical results support the second and third hypotheses of the study.

	CSR	ROA	CSR	ROE	CSR	EPS
FAMILY	0.35 *** (2.65)	0.03 (0.20)	0.35 *** (2.65)	-0.19 (-0.78)	0.35 *** (2.65)	0.48 (1.20)
DIRED	0.00 (1.28)	0.01 * (1.77)	0.00 (1.28)	0.01 (1.40)	0.00 (1.28)	0.05 *** (5.28)
IDR	0.52 *** (4.86)	0.23 * (1.69)	0.52 *** (4.86)	-0.21 (-1.07)	0.52 *** (4.86)	0.87 *** (2.67)
DUAL	0.01 (1.45)	0.00 (0.60)	0.01 (1.45)	0.00 (0.21)	0.01 (1.45)	0.04 *** (2.73)
CSR		1.35 *** (18.24)		2.27 *** (21.67)		1.60 *** (9.34)
LEV		- 0.01 *** (-2.71)		0.05 *** (6.81)		- 0.01 (-0.73)
FG		0.00 * (1.82)		0.00 *** (7.01)		-0.00 (-0.36)
SIZE		- 1.67 *** (- 17 . 14)		- 2.54 *** (-18 . 41)		- 1.80 *** (-8.01)
RD		0.20 *** (3.49)		0.17 ** (2.14)		0.68 *** (5.15)
Adj R ²	0.4050		0.4561		0.2138	

Table 1. Empirical Results of Accounting Basics

Note : The value in () is t-value. The significant levels of 1%, 5% and 10% are expressed in ***, ** and * respectively.

4.2 Empirical Results of Market Basics

According to Table 2, family holdings have a significant positive impact on corporate social responsibility, and corporate social responsibility also has a significant positive impact on operating performance, so Hypothesis 2 and Hypothesis 3 are established; the estimated coefficient of the independent director ratio is significantly positive, so Hypothesis 1 is established. In terms of control variables, debt ratio and revenue growth rate have a significant positive impact on company performance, while company size and R&D expense rate both have a significant negative impact on company performance.

Similar to the empirical results of accounting basics, family holdings have no significant direct impact on company performance, but board characteristics directly and positively affect company performance. Therefore, hypothesis five is not established, while hypothesis four is established. According to the empirical results of corporate social responsibility and company performance, it is found that the coefficient is significantly positive

and reaches the 1% significance level. Regardless of the company's accounting performance or market performance, the empirical results show that the company's family holding and board of directors characteristics will improve business performance indirectly through the company's social responsibility, especially when market data is used as an indicator to measure company performance.

If we compare the impact of control variables on accounting and market performance indicators, first of all, R&D expense rate positively affects accounting performance, but negatively affects market performance. Generally speaking, R&D expenses will reduce current accounting performance, but will help improve future market performance, so the findings of the study are inconsistent with past literature. Secondly, company size negatively affects accounting and market performance, while debt ratio and revenue growth rate have inconsistent effects on operating performance.

	CSR	ETCM	CSR	SR
FAMILY	0.35 *** (2.65)	4.42 (0.95)	0.35 *** (2.65)	5.81 (1.21)
DIRED	0.00 (1.28)	0.28 ** (2.36)	0.00 (1.28)	0.22 * (1.80)
IDR	0.52 *** (4.86)	7.45 ** (1.97)	0.52 *** (4.86)	5.54 (1.41)
DUAL	0.01 (1.45)	0.09 (0.56)	0.01 (1.45)	0.15 (0.89)
CSR		2.01 *** (3.66)		9.31 *** (4.48)
LEV		0.60 *** (4.48)		0.66 *** (4.78)
FG		0.01 ** (2.14)		0.02 ** (2.46)
SIZE		-13.44 *** (-5.11)		- 14. 15 *** (-5.18)
RD		-3.93 ** (-2.56)		-4.63 *** (-2.91)
Adj R ²	0. 0824		0. 0871	

Table 2. Empirical Results of Market Basics

Note : The value in () is t-value. The significant levels of 1%, 5% and 10% are expressed in ***, ** and * respectively.

5. Conclusion

The inheritance of family-controlled group enterprises may cause the assets accumulated by the successor or family members to disappear, thus reducing the business performance; however, by helping the company accumulate reputational capital, the visibility effect and insurance effect generated by good corporate social responsibility will help mitigate the negative impact of family business succession on operating performance. Since the fulfillment of corporate social responsibilities is an important indicator of corporate image development and sustainable management, in addition to pursuing maximizing profits and protecting the rights and interests of shareholders, how companies take into account the environmental and social aspects has become an additional consideration when operating. Therefore, the study conducts an empirical study based on the data of 387 conglomerates in the non-financial industry of the Taiwan Stock Exchange. In addition to analyzing the direct impact of family holdings and board characteristics on operating performance, the study is different from past studies. The study also extends the examination of mediating effect of corporate social responsibility.

According to the empirical results of the study, board characteristics positively affect corporate social responsibility, supporting the first hypothesis of the study. That is, the higher the proportion of directors who do not hold management positions and have no family relationships, when the management rights and ownership rights are separated, the higher the proportion of directors who are independent of the company or outside directors, the better the decision-making power of corporate social responsibilities, and the lower the abuse of power by major shareholders and directors at the expense of the rights and interests of small shareholders. Internal auditing can play a supervisory role, improve corporate operating performance, and promote corporate social responsibility (Zahra et al., 1993; Johnson and Greening, 1999; Beasley and Petroni, 2001). Secondly, family holdings also positively affect corporate social responsibility, thus supporting the second hypothesis of the study. Family holdings have a positive impact on corporate social responsibility, echoing the argument of Stewardship Theory. Reputation is very important to family-owned group enterprises, because it not only affects business performance, but also affects the

reputation of family-owned group enterprises. Therefore, family-owned group enterprises are better than non-family-owned group enterprises at being more socially responsive (Dyer and Whetten, 2006). Controlling shareholders of family-owned group enterprises regard themselves as stewards of the enterprise. Since they may worry that a poor reputation of the enterprise will damage the reputation of their family and themselves, they are willing to invest in corporate social responsibility activities to improve the reputation of the enterprise among stakeholders (Whetten and Mackey, 2002).

In terms of corporate social responsibility and business performance, the empirical results support research hypothesis three. Corporate social responsibility positively affects business performance. In addition to being obviously reflected in accounting performance such as ROA, ROE and EPS, it is also specifically reflected in market performance such as SR and ECTM, etc. (Waddock and Graves, 1997; Luce et al., 2001; Brammer and Millington, 2005; Hull and Rothenberg, 2008; Liang et al., 2019). Fulfilling corporate social responsibilities can build more social capital and accumulation of society's trust in the company enables the company to perform better than other companies when the public loses confidence in the financial market. Finally, in terms of the direct effects of board characteristics and family holdings on operating performance, the empirical results show that board characteristics have a significant positive impact on performance, while family holdings do not contribute to accounting and market performance at all, so only research hypothesis four is supported while research hypothesis five is not established. It implied that the more diversified the characteristics of the board composition, the larger the board size, the more diverse the professional knowledge background and technical experience of the board members, the better they are able to provide business owners and professional managers with diversified business decisions and suggestions, and the more capable the company will be. Grasping changes in the external environment and utilizing abundant industrial resources will help improve business performance (Dalton et al., 1999; Chtourou et al., 2001; Kiel and Nicholson, 2003; Xie et al., 2003).

According to the analysis of direct and indirect effects, corporate social responsibility performance helps to enhance the positive impact of family holdings and board characteristics on business performance, which is not only reflected in accounting performance, but also in market performance. It can be seen that family-controlled businesses investing in corporate social responsibility will help reduce possible negative impacts during the inheritance process. Following the research of Waddock and Graves (1997), it is found that good corporate social responsibility performance can help improve the company's overall performance, including return on assets and shareholder returns. Actively fulfilling corporate social responsibilities and demonstrating excellent performance can help reduce the negative impact that family inheritance may have on business performance. If an enterprise makes positive contributions and attaches great importance to different aspects, such as employee well-being, community development and participation, and environmental protection, it will enhance its positive image in society and improve its reputation, thereby gaining more stakeholders' support and trust. Existing literature and scholars have put forward similar arguments, agreeing that when companies face crisis moments or negative events, the reputational capital and trust previously accumulated through corporate social responsibility can serve as a protective barrier and then play a protective role to alleviate the impact caused by a crisis. It is the insurance effect (Peloza, 2006; Minor & Morgan, 2011). To sum up, the government should formulate and standardize relevant policies and incentives to encourage companies to pay attention to and actively promote corporate social responsibility, which will help companies expand their vision to the overall interests of relevant stakeholders, not just the family business itself. The consideration of interests will promote and deepen the support and affirmation by the public and relevant stakeholders. The higher the emphasis on corporate social responsibility, the more likely it is to consider the company's overall performance and possible risks and impacts, make complete plans in advance, reduce the risk of family inheritance, and maintain the stability of the company's operations.

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