

Corporate diversification and CEO turnover in family businesses: self-entrenchment or risk reduction?

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Abstract Our study investigates differences in CEO turnover between focused and diversified firms to determine whether diversification strategies are necessarily associated with governance efficiency in family businesses. We find that large family CEO firms are more likely to engage in corporate diversification than are small non-family CEO firms and their CEOs are seldom replaced. Large family CEO diversified firms also have lower turnover sensitivity relative to focused firms. The results imply that the CEOs of diversified firms have entrenched themselves, thereby increasing agency costs within family businesses. However, we fail to find diversification discounts in family businesses. It is interesting that CEOs tend to diversify their businesses in order to decrease firm risk. Founding families favor risk-reducing decisions in order to maintain family wealth and prestige; suggesting that family businesses are more interested in survival than growth. Although family businesses may benefit from risk reduction, a negative relationship between diversification level and CEO turnover is still evidence of poor corporate

governance. Agency theory may not completely account for the adoption of diversification strategies in family businesses and corporate diversification may weaken the effectiveness of internal monitoring mechanisms.

Keywords Corporate governance · Agency theory · Family businesses · Corporate diversification · CEO turnover · Survival analysis

JEL Classification L26

1 Introduction

Several studies have suggested that the prevalence of family firms is evidence of poor corporate governance in most East Asian countries (La Porta et al. 1999; Claessens et al. 2000). Controlling stockholders enhance their power through cross-holdings and pyramids among corporations creating complex ownership structures within family businesses. Family firms affiliated with a business group offer many entrenchment opportunities to controlling stockholders (Claessens et al. 2002). Recent research, however, argues that many family businesses outperform their non-family counterparts (Anderson and Reeb 2003a; Villalonga and Amit 2006); family firms, therefore, should be viewed as effective organizational structures. Conflicting conclusions in the research makes the governance efficiency of family businesses an interesting issue.

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Agency theory, which highlights interest conflicts within organizations, is a major influence in governance research. Jensen and Meckling (1976) view corporate diversification as an important feature when evaluating the agency relationship between stockholders and managers. Diversification strategies are generally seen as poor corporate governance options because they offer opportunities for managerial entrenchment and private benefit (Rose and Shepard 1997; Aggarwal and Samwick 2003). As agency problems between stockholders and managers are related to diversification decisions, diversified firms should employ governance mechanisms that can mitigate agency costs. Though a board of directors has the option to replace the CEO, there is little evidence that replacement of CEOs who perform poorly is due to diversification strategies (Anderson et al. 2000). Diversified firms, like focused firms, have a similar sensitivity to CEO turnover. It is, therefore, important to understand the limitations of agency theory in research on current family business and corporate governance systems.

Recently, several studies have posited the limited application of agency theory to various organizations, particularly in family businesses (Chrisman et al. 2005; Tsai et al. 2006; Anderson and Reeb 2003a). Agency problems are less severe in family firms because there is less likelihood of information asymmetry problems. Family CEOs are also potentially influenced by higher-order cognitive-related motives such as altruism and collectivism. An alternative to agency theory is the resource-based perspective: Carney (2005) suggests that family firms establish a competitive advantage through unique social capital and opportunistic investment processes. Morck and Yeung (2004) further argue that family businesses promote political rent seeking to exploit distinctive resources and protect themselves from government. Corporate diversification is a common strategy for self-entrenchment when firm size expands rapidly. It is also a source of value; especially in emerging markets since large business groups are better able to overcome market imperfections (Khanna and Palepu 1997; Chu 2004). Diversification is not an explanation of agency problems. According to resource-based viewpoint, diversification strategies may be irrelevant as a factor in poor corporate governance.

Our key research questions are: CEO turnover related to corporate diversification? The above criticisms raise two important issues that our study will explore. Does family control influence diversification strategies and CEO replacement decisions? CEO turnover may be affected not only by corporate diversification, but also by differences in organizational structure. Also, do large family firms tend to increase diversification and thereby reduce CEO turnover? It is unclear if corporate diversification increases agency costs since large diversified businesses tend to outperform focused businesses. The relationship between CEO turnover and the level of diversification should be refined by taking into account the above two factors which affect diversification decisions.

Recent evidence has indicated that controlling families typically engage in opportunistic activities and expropriate wealth of minority stockholders (Claessens et al. 2000; Claessens et al. 2002). However, Anderson and Reeb (2003a, b) suggest that family control has a positive effect on firm value because family firms have incentives to engage in long-term investment. Thus, corporate diversification may be motivated by managerial opportunistic behavior or it may be a valuable strategy for firm growth. It is questionable whether minority stockholders in diversified family firms really suffer from poor corporate governance. This is a particularly interesting issue because very little research has focused directly on diversification strategies and governance efficiency in family businesses. We also need to re-examine agency explanations in corporate diversification due to the prevalence of family businesses in emerging markets.

2 Hypothesis development

2.1 Corporate diversification and agency costs

Agency theorists suggest that managers may pursue corporate diversification for other reasons than maximizing stockholder wealth (Hill and Snell 1988). There is evidence that CEO compensation packages of diversified firms tend to be better than focused firms (Rose and Shepard 1997). Aggarwal and Samwick (2003) also associate increased diversification with CEO entrenchment of managerial power

and position. Managers may pursue diversification to increase private benefits and/or enhance position entrenchment.

To mitigate agency costs in diversified firms, several authors have posited enhanced insider ownership as a solution. For example, Denis et al. (1997) suggest that firms with higher insider ownership usually have fewer manager-stockholder agency conflicts and are less likely to diversify. Lins and Servaes (1999) even argue that insiders have a positive effect on the value of diversification; a diversification discount only exists in firms with low managerial ownership (Chen and Ho 2000).

An Alternative for reducing agency costs is to improve management (Huson et al. 2004). Forced management replacement tends to increase managerial quality and restrain incumbent managers. The efficiency of corporate governance is enhanced when a diversification strategy is the result of opportunistic managerial behavior. While a significantly negative relationship between CEO turnover and diversification levels indicates poor corporate governance.

There is, however, some doubt as to whether diversification levels are an indicator of opportunistic managerial behavior, especially given recent evidence provided by Anderson et al. (2000) that turnovers of CEOs with poor performance are not associated with diversification strategies. The application of agency theory has been gradually questioned in a variety of organizations, particularly in family businesses.

The distinction between family/non-family CEO firms and large/small firms is necessary when we evaluate the governance efficiency of family businesses. We focus on the CEO authority supported by controlling families to examine the effect of that power on governance efficiency. Family ties and firm size results in a different kind of controlling power in family firms. Controlling families have more power to influence corporate strategies when a CEO is also a family member. The agency costs are different between family CEO firms and non-family CEO firms. Firm size also has a significant influence on corporate governance; large family businesses generally use more pyramids and cross-holdings to enhance their control than small businesses (Claessens et al. 2000).

We reexamine the relationship between CEO turnover and corporate diversification and evaluate

the agency explanation of diversification decisions in family businesses. First, we examine diversification levels to determine whether controlling families enhance their control power through diversification strategies. We also investigate the relationship between diversification and CEO turnover to determine whether CEOs entrench themselves. Finally, we reexamine the relationship between diversification and CEO turnover by excluding the moderator effect of corporate performance.

2.2 Family control and agency explanation of diversification

Many businesses have other motives to diversify rather than the agency considerations, especially in family businesses. Anderson and Reeb (2003b) argue that the undiversified character of family stockholdings may provide sufficient incentive to reduce firm risk. Unlike general investors, founding families do not adjust their portfolio but have power to influence a firm's investment decisions. Thus, controlling families can be averse to the risk and pursue projects with imperfectly correlated cash flow relative to existing projects. Shleifer and Vishny (1986) as well as Anderson and Reeb (2003b) further posit that controlling families may seek to reduce firm-specific risk by influencing a firm's diversification decisions. The level of diversification in a family CEO firm may be greater when family ties motivate family CEOs to diversify to reduce idiosyncratic risk. In the event that information asymmetry is high, boards of directors highlight outcome-oriented control and transfer risk to non-family CEOs (Eisenhardt 1989). The cost of transferring risk becomes increasingly expensive when non-family CEOs are more risk averse than boards of directors controlled by families. Aggarwal and Samwick (2003) suggest that a closer association between managerial rewards and corporate performance may cause a stronger entrenchment effect, e.g., high compensation. McConaughy (2000) argues that higher pay for non-family CEOs may be a risk premium for their drastically variable compensation and low job security. To mitigate agency threats to performance, non-family CEOs are more likely to reduce corporate diversification than family CEOs, which brings us to our first hypothesis:

Hypothesis 1_a: Family CEO firms are more likely to engage in corporate diversification than non-family CEO firms.

Holding a CEO position and maintaining a majority of director seats are two main paths by which a family can exert control over a firm (Anderson and Reeb 2003b). Family control is greatest when a family member acts as a CEO. In addition, family CEOs may be less restricted by performance requirements in executing strategies made by the entire family (Tsai et al. 2006). With less information asymmetry, directors of family businesses seldom directly infer family CEO from realized performance. As a result, family CEOs have less responsibility to enhance firm performance through diversification strategies (Eisenhardt 1989). With non-family CEOs, poor performance is an indicator of low managerial quality (Huson et al. 2004). We therefore expect that the turnover rate of family CEOs is likely to be less sensitive to diversification compared to non-family CEOs. On the basis of these arguments, we propose the following hypothesis:

Hypothesis 1_b: Family CEOs are replaced less when they adopt diversification strategies compared to non-family CEOs.

Whether diversification can enhance profit or reduce risk depends on the competitive advantage it creates. However, risk reduction may occur at the expense of profit discounts. Although the objective of diversification is unidentified, we expect a higher sensitivity of turnover to performance if the goal is to make a profit; conversely, there is lower sensitivity of turnover to performance if the goal is risk reduction.

Some research has posited that higher operating performance may be realized through closely related diversification; and risk reduction through unrelated diversification. It follows that family CEOs have stronger incentives and greater power to reduce firm-specific risk than non-family CEOs. Risk reduction motivates family CEOs to diversify in more unrelated businesses. Conversely, non-family CEOs prefer related diversification to increase profits. Given this situation, we hypothesize that the turnover rate of family CEOs is more likely to be less performance sensitive when compared to non-family ones.

Another factor that influences performance-turnover sensitivity is the different governance mechanisms of family and non-family CEO firms. The agents, CEOs, have to manage and enhance the competitive power of companies while the principals, owners, evaluate their managers' performance and fulfill control functions. If diversification is associated with managerial opportunism, the interests between owners and managers will diverge; yet, these conflicts of interest can be mitigated by two governance mechanisms: behavior- and outcome-oriented contracts (Eisenhardt 1989).

When considering the problem of high information asymmetry, boards of directors usually employ outcome-oriented governance for non-family CEOs. Yet, replacement mechanisms are infrequent in family CEO firms (Tsai et al. 2006). In the absence of agency conflicts, behavior-oriented contracts will encourage family CEOs to be influenced by the higher motives of altruism and collectivism. We anticipate insignificant performance-related turnover in family CEO firms but outcome-oriented monitoring for non-family CEOs.

Hypothesis 1_c: Turnovers in family CEO firms are more likely to be less sensitive to poor performance when adopting diversification strategies than turnovers of non-family CEO firms.

2.3 Firm size and agency explanation of diversification

Several authors have suggested that diversified firms sell at a discount compared to their focused counterparts (Berger and Ofek 1996; Denis et al. 1997). Graham et al. (2002) argue that diversified firms may trade at a discount prior to diversification. However, diversification in itself does not diminish value. The diversification discount is an artifact of data selection (Villalonga 2004). According to Villalonga (2004), there is a discount in unrelated diversification and a premium for related diversification. For emerging markets in particular, conglomerates could create synergy even if member businesses are completely unrelated (Khanna and Palepu 1997).

From a resource-based theory viewpoint, several researchers have recently suggested that differences in business size may explain diversification effects.

Group-affiliated firms in emerging markets are significantly more profitable than non-group firms because they are better able to overcome market imperfections such as capital, labor, or product market failures (Khanna and Palepu 1997; Khanna and Palepu 2000; Chang and Hong 2002). Chu (2004) argues that group-affiliated firms have a diversification advantage over non-affiliated ones; but the size of the business group is an important factor. The stronger entrepreneurship and greater flexibility of small businesses are a competitive advantage; however, both corporate expansion and group affiliation are more important for competitiveness in emerging economies (Chu 2004). This implies that large firms affiliated with business groups have sufficient competitive advantages when adopting diversification strategies than do small businesses, as expressed in Hypothesis 2_a.¹

Hypothesis 2_a: Large firms exhibit significantly higher levels of diversification than small firms.

CEOs may engage in opportunistic activities (e.g., diversification) in order to entrench themselves. There may be severe agency conflicts between managers and stockholders when CEOs diversify their firms; yet, these agency conflicts can be reduced when diversification strategies lead to enhanced firm value. The agency costs for large diversified firms affiliated with a business group will be low if diversification strategies increase firm value.

Diversification strategies are not only driven by profitability, but also by agency costs. Liebeskind and Opler (1994) find that privately held firms are less diversified than publicly owned ones and that a lower level of diversification in private firms is a result of reduced agency costs associated with their concentrated ownership structure. Small firms with concentrated ownership tend to focus their businesses if agency costs can be measured by observing the

level of diversification. Contrarily, small firms may signal severe agency problems when CEOs diversify their businesses. Large companies often have more dispersed ownership than small companies; this implies that there may be more diversification in large companies. We predict that agency conflicts in large diversified firms will be lower than those of small diversified firms.

Agency conflicts in large firms may be lower than small firms if CEOs diversify. Under vigilant supervision of directors, CEO turnover in small firm will be higher when CEOs adopt diversification strategies. This brings us to our next hypothesis:

Hypothesis 2_b: CEO turnover in large diversified firms is lower than small diversified firms.

The preceding arguments have posited that agency conflicts in large firms may be lower than those in small firms when CEOs diversify. We hypothesize that there should be a weaker performance-turnover link in large firms and a stronger one in small firms. Due to diversification, CEO turnover in large firms is more likely to be less sensitive to performance than in small firms:

Hypothesis 2_c: Turnovers in large firms are more likely to be less sensitive to poor performance when adopting diversification strategies than turnovers of small firms.

To examine the efficiency of corporate governance in family businesses, our study focuses on three issues: i) the level of diversification; ii) the effect of diversification on CEO turnover; and iii) the effect of performance on the diversification-turnover sensitivity. Under different organizational types, classified by the controlling power of families (large family CEO firms, small family CEO firms, large non-family CEO firms and small, non-family CEO firms), a three-model research framework is developed (see Fig. 1).

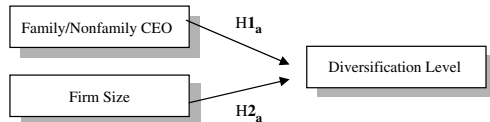
3 Methodology

3.1 Data sources

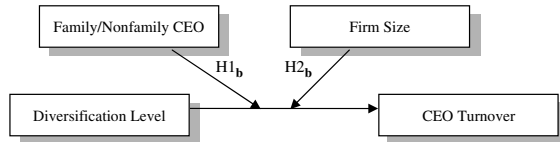
The financial information on Taiwanese firms (shareholdings of major stockholders, long-term

¹ All samples in our database are family businesses affiliated with family business groups. Following the research of Khanna and Palepu (2000), we analyze business groups based on firm-level observations. There are several reasons for doing this: (1) each firm is a separate legal entity responsible to their stockholders; (2) the disclosure of financial information should be made by each firm, not by a business group; (3) a great deal of potential information may be lost when individual firm's measures are aggregated into group measures.

Research Model 1



Research Model 2



Research Model 3

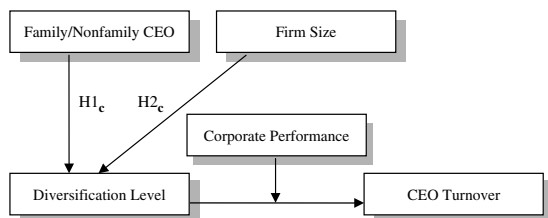


Fig. 1 Three-model research framework

investment and stockholdings of CEOs) comes from the Taiwan Economic Journal database, a leading credit analysis agent equivalent to S&P's in the US. To identify family control, we collect information on family ties, board composition and cross-stockholdings from company prospectuses and the publication 'Business Group in Taiwan' from the China Credit Information Services.

Our data covered the period 1998–2002. We decide on a 5 year time span because of the following consideration. It is difficult to evaluate managers' performance when the research period is too short. Also, Gabarro (1987) argues that it takes CEO's 2.5–4 years to establish their authority within a firm. We should choose a period greater than 4 years to measure managerial performance properly. If the period is relatively long, there is a large sample of firms with CEO changes but a small sample of firms that did not change CEOs during the same period. Many researchers adopt a 6-year research period (Huson et al. 2001; Shen and Cannella 2002a). We therefore choose a 5-year time span from Jan. 1, 1998 to Dec. 31, 2002. Finally, we collect data on 424 non-financial companies.

3.2 Family businesses affiliated with a business group

There are several definitions of a family business. Anderson and Reeb's (2003a, b) expansive definition uses the fractional ownership of the founding family and/or the presence of family members on the board of directors. They assume family ownership represents family control but omit management involvement. Astrachan et al. (2002) propose an F-PEC scale using power, experience, and culture to measure family involvement.² Astrachan and Shanker (2003) further develop a typology of family business based on the extent of family involvement in terms of ownership and management. Villalonga and Amit (2006) identify nine different types of family businesses based on ownership, management, and the extent of control; these ranges from the most flexible definition (where a family owns any shares) to the most restrictive definition, under which a family is the largest vote-holder, has at least 20% of the voting rights as well as family officers and family directors with multi generational-involvement. Regardless of the variety of definitions, distinctions between family and non-family firms are generally made on the basis of family ownership, management and transgenerational sustainability (Chua et al. 1999).

Due to the private and undisclosed character of most family businesses, detailed information about them is still unavailable. There are, however, clear differences between family and non-family firms. Although Astrachan et al. (2002) suggest that the extent to which a firm is family-controlled should be determined by how their involvement influences the business. Our study focuses on family ownership and direction of strategy control.

We use the extent of family ownership to define the family business. Burkart et al. (2003) suggest that the national fiscal laws influence the type of family that prevails in a country. In Taiwan, legal representatives can serve as directors but institutional investors cannot be directors of boards. This provision benefits family control. Many Taiwanese businesses are affiliated with business groups having pyramids and cross-holdings as well as direct and indirect ownership links with member corporations.

² Chrisman et al. (2005) suggest that family influence is a necessary but insufficient condition for familiness.

Table 1 Sample characteristics*Panel A: predominance of family control in a sample of Taiwanese businesses*

	Sample size	Cutoff points			
		5%	10%	15%	20%
Our study	424	319 [75.2%]	267 [63.0%]	201 [47.4%]	150 [35.4%]
Claessens et al. (2000)	141	NA	92 [65.6%]	NA	68 [48.2%]
Yeh et al. (2001)	208	NA	169 [81.4%]	NA	107 [51.4%]

Panel B: description of sub-samples

	Family CEO		Non-family CEO		Total	
	Number	%	Number	%	Number	%
TSE	116	52.7	104	47.3	220	100.0
OTC	57	57.6	42	42.4	99	100.0
Total	173	54.2	146	45.8	319	100.0

Note: According to the 5% voting right cutoff, 319 firms out of the 424 firms (75.2%) can be defined as family businesses

In such a business group, a family business controls other member corporations, which control others and so on.³ Group-affiliated corporations with complex ownership structures seem to increase opportunities for entrenchment of controlling stockholders compared to independent corporations (Claessens et al. 2002). It seems that controlling families exert control with minimal fractional ownership in most Taiwanese family firms and entrenchment effects are significantly severe in group-affiliated businesses.

A family firm is determined to be a business affiliated with a business group via the chains of control. To avoid a downward bias in our estimates of family ownership, cross-holdings between parent corporations and their member corporations or subsidiaries are assessed. Family stockholdings are defined by shares owned by all family members (direct ownership) and the shares cross-owned by affiliated companies (indirect ownership). Adopting the methods of Claessens et al. (2000), we calculate both control and cash flow rights of the ultimate owner. Using 5, 10, 15, and 20% cutoff points for control rights, the samples are divided into two subgroups: family and non-family firms. We choose the 5% voting right cutoff point in our study to

present results. In most large Taiwanese family business with a low level of voting and cash flow rights, wealth expropriation is more desirable through pyramids and cross-holdings to enhance family control. Thus, we prefer the 5–10% voting rights in our sample. We also provide information using the 10, 15, and 20% levels because these are usually reported in other studies. If the cutoff for largest family ownership is 5%, we say that 319 firms out of the 424 firms (75.2%) can be defined as family businesses (see Panel A of Table 1). We also display the predominance of family control in our sample which is compared with the results found in Claessens et al. (2000) and Yeh et al. (2001). 63.0% of our samples are classified as family firms according to the 10% cutoff point, and this is lower than 65.6% estimated by Claessens et al. (2000) and 81.4% estimated by Yeh et al. (2001). Although results are not directly comparable, the evidence shows that family firms prevail in Taiwan.

3.3 Data splitting

3.3.1 Subgroups: family and non-family CEO firms

As mentioned in Sect. 3.2, the observation of strategic direction control may be considered family influence. Controlling families have the greatest power to influence corporate strategies if the CEO

³ For descriptions of family businesses belonging to pyramid groups in most countries see La Porta et al. (1999), Claessens et al. (2000), and Claessens et al. (2002).

is also a family member. Boards of directors dominated by family members have power to decide CEO tenures. To evaluate the strength of family control, family firms are further subdivided into two groups, i.e., family and non-family CEO firms. Family CEO firms are run by family CEOs; non-family CEO firms are family firms with outside CEOs. Only 45.8% of all family firms are managed by outside CEOs, which may indicate a lack of professional leadership in family firms (see Panel B of Table 1). The latter analysis is based on a 5% cutoff point of largest family ownership. The results are robust to the 10, 15, and 20% classifications of ultimate control.

3.3.2 Subgroups: TSE and OTC firms

Although there appears to be little consensus on the most appropriate classification for relative size of family businesses, a generally accepted definition takes both quantitative and qualitative approaches (Daily and Dollinger 1993; O'Regan and Ghobadian 2004). The quantitative definition uses various indicators, such as number of employees, total sales, and sales turnover to measure firm size; the qualitative approach focuses on privatization, ownership concentration, liquidity of stockholdings, stage of development, and the strategic profile emphasized by a firm, etc. The qualitative method for identifying large and small family businesses is typically employed because this classification often proves to be the easiest access for research purposes. The objective of our study is to investigate the corporate governance of family businesses as different organizational types; we thereby divide total sample into TSE and OTC subgroups.⁴ TSE firms are defined as

large firms and OTC firms as small (and median-sized) ones. We use the identification of firm size for dichotomizing the sample because the difference between TSE and OTC seems to have a significant impact on corporate governance. For example, Claessens et al. (2000) suggest that smaller businesses are more likely to be controlled by a single shareholder. Their evidence also shows that larger family businesses tend to use more pyramids and cross-holdings to separate ownership and control. This may be the result of ownership concentration and stockholding liquidity. TSE firms differ significantly from OTC firms in these two characteristics. We adopt these classifications because they are closely related to our research purpose and meet typical quantitative requirements. OTC firms in our sample tend to be younger than TSE firms and their market capitalization is typically less. In fact, the listing thresholds of capital issued are considerably different in these two markets.⁵ Moreover, OTC firms usually have fewer than 300 employees (the average is 296) and their sales are less than 200 million NTD. On average, TSE firms have 1083 employees. The quantitative distinctions between TSE and OTC are also consistent with official SME criteria and empirical research of other authors.⁶ Based on this, OTC firms are viewed as small businesses and listed companies in TSE are classified as large firms.

Panel B of Table 1 shows the description of subsamples. Of the 319 firms, 220 are classified as large businesses listed on TSE, with the remaining 99 being small firms listed on OTC. Of the 99 OTC firms, 57 (57.6%) are family CEO businesses, while the remaining 42 (42.4%) CEOs are not family

⁴ The Taiwan Stock Exchange (TSE) Corporation founded in 1961 is the sole centralized securities market in Taiwan. The Over-the-Counter (OTC) market was named Gre Tai Securities Market (GTSM), and formally established on November 1, 1994; like most stock exchanges it is a part of the market for the circulation of securities. As for Taiwan's primary market, the 696 companies listed on the TSE in Sep. 2005 possessed a total market capitalization of NT\$14,441 billion (US\$438 billion). Meanwhile, the number of GTSM-listed companies in Sep. 2005 also increased to 501; the corresponding total capital amount increased to NT\$1,131 billion (US\$34 billion). In addition, the total trading value on the TSE is about 8 times larger than that of GTSM. More information can be found at <http://www.tse.com.tw> and <http://www.otc.com.tw>

⁵ The capital issued of each IPO (Initial Public Offering) on the TSE should be greater than 600 million NTD (US\$18 million); that on the OTC should meet the listing requirement of 50 million NTD (US\$1.5 million).

⁶ The classifications of SMEs may vary from time to time and from country to country. The Taiwanese Ministry of Economic Affairs definitions of SMEs are enterprises with less than 200 employees (1992) and firms with less than 400 employees (1999). This threshold of SMEs was redefined due to revenue changes. The definition also varies country to country. For example, in the US, a small business must meet numerical size standards as defined in the Small Business Size Regulations, 13 CFR 121—less than 500 employees. Based on this requirement, a small family business chosen in Daily and Dollinger's (1993) study is a firm with fewer than 500 employees and sales less than 30 million USD.

members. 52.7% of TSE firms are family CEO firms; 47.3% of the CEOs of TSE firms are not family members. Family members serving as CEOs are prevalent in family businesses.

3.4 Corporate diversification

First, we identify the four-digit CSIC (Chinese Standard Industry Classification) codes of all products for each firm in the sample and then calculate the proportion of sales to determine the specialization ratio of a firm. This ratio is determined by a firm's sales attributable to its largest four-digit CSIC group of businesses. Following Rumelt (1982), our classifications for diversification are three: single, dominant and diversified businesses. Single businesses are those with a specialization ratio larger than 0.95; dominant businesses are those with a specialization ratio smaller than 0.95 but larger than 0.70; diversified businesses are those with a specialization ratio smaller than 0.70.

On average, 34.8% of the samples are classified as diversified businesses. In total, 39.6% of TSE companies are identified as diversified businesses (see Panel A of Table 2). This is higher than the 24.2% estimated for the OTC samples. TSE-company stockholders may tend to support diversification decisions in order to derive greater benefits from firm growth, innovation, and survival. We also find that family CEO firms exhibit about 11% (63/173 vs. 48/146) more corporate diversification than do non-family ones. Family CEO firms are actually more diversified than are non-family CEO firms, indicating that CEOs from controlling families have more influence on corporate decisions to diversify.

3.5 CEO turnover

CEO turnover is determined based on the information from the TSE and OTC website.⁷ For each CEO, we collect the dates and reasons for the change from replacement announcements. Utilizing the classification method proposed by Parrino (1997), forced or voluntary turnovers are identified. The reasons for forced turnover include resignation, demotion, M&A,

personal factors, and in some cases no reason at all is given. Retirement, promotion and sole duty of board chairman are voluntary types of turnovers. The Appendix lists the reasons for CEO turnovers reported in press releases. Previous work has noted that publicly stated reasons for CEO changes are generally unreliable (Engel et al. 2003; Warner et al. 1988; Defond and Park 1999). Therefore, our tests include all turnovers regardless of the reported leaving reasons. CEO tenure is a dependent variable used to estimate the survival model. It is measured between January 1, 1998 and the CEO departure date. CEO appointment dates prior to January 1, 1998 are subject to left-truncation. For consistent estimates, tenure information for all the left-truncated CEOs is collected according to Tuma and Hannan (1984). All CEO tenures beginning in 1998 are included in our study.

Panel B of Table 2 shows that the average family CEO turnover rate (24.9%) is significantly lower than non-family CEO turnover rate (38.4%), indicating that family CEOs become entrenched easily. We also find that the CEO turnovers for TSE firms are slightly lower than those of OTC firms (30.0% vs. 33.3%).

Altogether, CEO turnovers are not reasonably low in diversified businesses (see Panel C of Table 2). After further dividing of the sample, differences in CEO turnover between diversified and focused firms are correlated to family control and firm size. An interesting finding is that CEO turnovers in TSE diversified firms are significantly lower than those in OTC diversified firms (23.0% vs. 50.0%); suggesting that CEOs in TSE listed firms may use diversification to entrench their positions. If family CEOs choose to diversify, they also have a lower turnover rate than do non-family CEOs (23.8% vs. 35.4%). The results suggest that if family CEOs adopt diversification strategies, they may receive family support and effectively decrease turnovers. It is, however, necessary to use more analytical methods to ensure our expectation and test hypotheses.

3.6 Analytical methods

3.6.1 ANOVA

One-way ANOVA is utilized for the analysis of mean differences among four types of organizations (e.g., TSE non-family, TSE family, OTC family, and OTC non-family CEO firms) in our study. We also use

⁷ Relevant information can be found at http://emops.tse.com.tw/emops_all.htm

Table 2 Description of corporate diversification and CEO turnover*Panel A: diversification levels of family businesses*

	Sample Size	Diversification types		
		Single business	Dominant business	Diversified business
TSE				
Family CEO firms	116	35	37	44
Non-family CEO firms	104	26	35	43
	220 [100%]	61 [27.7%]	72 [32.7%]	87 [39.6%]
OTC				
Family CEO firms	57	18	20	19
Non-family CEO firms	42	19	18	5
	99 [100%]	37 [37.4%]	38 [38.4%]	24 [24.2%]
All firms				
Family CEO firms	173	53	57	63
Non-family CEO firms	146	45	53	48
	319 [100%]	98 [30.7%]	110 [34.5%]	111 [34.8%]

Panel B: CEO turnovers by sub-sample

	Family CEO		Non-family CEO		Average	
	Number	%	Number	%	Number	%
TSE	26/116	22.4	40/104	38.5	66/220	30.0
OTC	17/57	29.8	16/42	38.1	33/99	33.3
Average	43/173	24.9	56/146	38.4	99/319	31.0

Panel C: CEO turnover by diversification type

	Sample Size	Diversification types		
		Single business	Dominant business	Diversified business
All Firms	99/319 [31.0%]	29/98 [29.6%]	38/110 [34.5%]	32/111 [28.8%]
TSE Firms	66/220 [30.0%]	18/61 [29.5%]	28/72 [38.9%]	20/87 [23.0%]
OTC Firms	33/99 [33.3%]	11/37 [29.7%]	10/38 [26.3%]	12/24 [50.0%]
Family CEO Firms	43/173 [24.9%]	15/53 [28.3%]	13/57 [22.8%]	15/63 [23.8%]
Non-family CEO Firms	56/146 [38.4%]	14/45 [31.1%]	25/53 [47.2%]	17/48 [35.4%]

Scheffe's comparison test to examine the difference between TSE family CEO and OTC non-family CEO firms.

3.6.2 Survival model

For the multivariate analysis, we use survival analysis to test hypotheses. Several authors have used survival analysis to investigate CEO turnover because it has

many advantages over other methods, such as logistic regression and discriminant analysis. (Shen and Cannella 2002b). For example, event-history models incorporate more time series variation into parameter estimates (Cox and Oakes 1984) and resolve sample selection problems resulting from censoring (Allison 1995). Departures are unusual events; thus, survival analysis is especially suitable for examining turn-overs (Furtado and Karan 1990). Cox regression, assuming a proportional transition rate, uses partial

likelihood to estimate hazard rates. In our data set, the hazard rate is the probability of CEO replacement. The determinants for CEO turnover, such as diversification level, the type of family control, firm size, corporate performance $\times$ diversification type, and control variables, are transformed to estimate the hazard rate and to examine the efficiency of corporate governance. Given a vector of proxy variables for these j determinants, x_j , the turnover hazard function can be expressed as $h(t/x_{j,i,t-1})$

Cox Proportional Hazard Model

$$h(t/x_{j,i,t-1}) = h(t/0) \cdot \exp\{x_j'\beta\}$$

where i and t represent the firm and the time, respectively, and $h(t/0)$ denotes the baseline hazard rate.

Many control variables are included in survival models for the following reasons: Boards of directors are more likely to dismiss CEOs with poor performance and less likely to replace those with good performance (Coughlan and Schmidt 1985; Shleifer and Vishny 1997); so, Stock return is added to our study. Shleifer and Vishny (1997) also suggest that increased managerial ownership reduces the efficiency of monitoring mechanisms. We use CEO ownership to measure the effect of entrenchment. The monitoring ability of boards of directors, however, reduces managerial opportunism. The largest stockholders with the greatest control rights effectively monitor CEOs that perform poorly (Lausten 2002). In addition, the deviation between voting and cash flow rights of controlling shareholders results in significant agency costs between majority and minority shareholders (La Porta et al. 2002). Greater deviation between voting and cash flow rights of controlling families may decrease CEO turnover. Firm size has a negative influence on CEO turnover. Both high financial leverage and firm growth increase CEO turnover. Consequently, we control the differences in these variables among firms for survival analysis.

4 Results

4.1 Univariate analysis

ANOVA is utilized to determine whether these related variables vary in a meaningful way across

organization categories (e.g., TSE family CEO, TSE non-family CEO, OTC family CEO and OTC non-family CEO firms). Table 3 displays the results of the four category comparison. First, difference in CEO tenure is statistically significant at the 1% level. TSE family CEOs have a significantly longer mean tenure (4.573 years) than OTC non-family CEOs (3.944 years), suggesting that they may have a greater capacity to entrench. Specialization ratios capture the essential differences among the four categories. There are more TSE family CEO firms in four-digit industries than there are OTC non-family CEO firms. Given the diversified business dummy, we also find that OTC non-family CEOs tend to be relatively more focused than any other category. These results of Table 3 support Hypothesis 1_a and 2_a. Family CEO firms exhibit significantly higher levels of diversification than non-family CEO firms. Large firms are more likely to engage in corporate diversification than small firms. Higher diversification implies opportunistic managerial behavior but it also suggests enhanced competitive advantages. We need strong evidence of poor governance when diversification level may be a weak indicator of agency problems.

The stock return mean for the TSE family CEO samples is 3.458%. The results show that family CEO firms have the highest stock returns in spite of an insignificant mean difference in the F statistics. This may be a favorable indication for the diversification premium. The differences in CEO ownership among the four categories are statistically significant at levels lower than 1%, indicating that CEO ownership is an important variable for explaining turnover. From the ownership perspective, CEO ownership has a considerably stronger entrenchment effect than family voting rights. We also find that family CEO firms have a considerably smaller sales growth and firm size. However, the financial leverage of the four types of firms is almost identical. Interestingly, less diversified OTC family CEO firms have relatively lower stock return and shorter tenures than do the other three categories. We need to explore further the effect of diversification on CEO turnover and the relationship among diversification levels, CEO turnover, and corporate performance in order to evaluate the agency explanation of diversification and governance efficiency under different organizational categories.

Table 3 Descriptive statistics and ANOVA

Variables	Mean				F-statistics [Ho: $\mu_1 = \mu_2 = \mu_3 = \mu_4$]	Scheffe's comparison of mean difference [Ho: $\mu_1 = \mu_4$]
	TSE firms		OTC firms			
	Family CEOs [μ_1]	Non-family CEOs [μ_2]	Family CEOs [μ_3]	Non-family CEOs [μ_4]		
CEO tenure (years)	4.573	4.063	4.183	3.944	4.114***	0.629*
Specialization ratios	0.761	0.755	0.797	0.870	3.692**	−0.109**
Dominant business	0.319	0.337	0.351	0.429	0.559	−0.110
Diversified business	0.379	0.414	0.333	0.119	4.184***	0.260**
Stock return (%)	3.458	−0.734	−1.540	−13.442	1.067	16.900
CEO ownership (%)	7.774	5.236	8.080	2.279	7.741***	5.495***
Family voting rights (%)	23.046	20.770	25.350	23.394	1.485	−0.348
Control right deviation	0.957	0.941	0.962	0.956	0.327	0.001
Sales growth (%)	−5.912	6.956	−4.220	−3.892	4.124***	−2.020
Debt ratio (%)	41.244	38.564	41.673	41.315	0.725	−0.071
Firm size (Natural log)	7.829	8.459	6.891	6.884	27.182***	0.945***

CEO tenure: the dependent variable for estimating the survival model measured between January 1, 1998 and the departure date of a CEO; *Specialization ratios*: the ratio of a firm's sales attributable to its largest four-digit Chinese Standard Industry Classification group of businesses; *Dominant businesses*: 1 if the specialization ratio is smaller than 0.95 but larger than 0.70, 0 otherwise; *Diversified businesses*: 1 if the specialization ratio is smaller than 0.70, 0 otherwise. *Stock Return*: stock return is measured by turnover between the year and the year preceding turnover as a proxy for firm performance; *CEO Ownership*: proportion of stocks held by CEOs to total outstanding shares; *Family voting rights*: the number of (direct and indirect) votes held by the controlling family to the total outstanding votes; *Control right deviation*: the difference between voting and cash flow rights of controlling shareholders. Cash flow rights are computed as the product of all the equity stakes along the control chain; *Sales growth*: ratio of net sales in the turnover year over net sales in the year preceding turnover minus one; *Debt ratio*: debt-to-asset ratio; *Firm size*: logarithm of market value (\$ in millions) of the firm's outstanding common stocks

***Significant at 1%

**Significant at 5%

*Significant at 10%

4.2 Survival analysis

Table 4 presents the results of the Cox proportional hazard regressions. As expected, the negative stock return coefficients show that all firms have a similar replacement rate for poorly performing CEOs. CEOs in all four categories are more likely to be replaced when firm performance is poor, suggesting the effectiveness of the outcome-oriented monitoring mechanism. The entrenchment effect exists. The coefficients for CEO ownership are significantly negative in both non-family CEO firms and TSE listed firms. Increased CEO ownership provides greater entrenchment opportunities for non-family and/or TSE firm CEOs. Family voting rights have an impact on entrenchment in both OTC and family CEO firms: that is, they are negatively related to CEO

turnover. Our results suggest that the monitoring of family CEOs by family control rights in family businesses may be less stringent even though performance requirements still exist. The coefficients on control right deviation, however, are all insignificant; it is doubtful whether the controlling family expropriates minority-stockholder wealth. Therefore, it is difficult to investigate whether entrenchment effects exist in family businesses by directly observing ownership structures. As discussed earlier, we need to use diversification as a proxy for corporate strategy in measuring agency costs.

Poor corporate governance is associated with diversification strategy when the decision to diversify is the result of opportunistic managerial behavior. However, the specialization ratio coefficients are insignificant. We further find that for the

Table 4 Estimates of Cox PH models—diversification levels and CEO turnovers

Independent variables	Panel A		Panel B	
	TSE firms Model 1	OTC firms Model 2	Family CEO firms Model 3	Non-family CEO firms Model 4
Stock return t_{-1}	−0.018 [0.000]***	−0.018 [0.000]***	−0.018 [0.000]***	−0.017 [0.000]***
CEO ownership t_{-1}	−0.075 [0.006]***	−0.013 [0.838]	−0.040 [0.263]	−0.088 [0.014]**
Family voting rights t_{-1}	0.002 [0.881]	−0.036 [0.029]**	−0.025 [0.079]*	−0.006 [0.609]
Control right deviation t_{-1}	1.398 [0.157]	0.731 [0.589]	1.628 [0.219]	0.810 [0.353]
Specialization ratios t_{-1}	0.886 [0.221]	−1.848 [0.187]	−1.306 [0.244]	−1.861 [0.200]
Family t_{-1}	−1.331 [0.162]	−0.690 [0.647]		
Family $\times$ specialization ratios t_{-1}	1.191 [0.303]	0.693 [0.691]		
TSE t_{-1}			−3.097 [0.012]**	−2.710 [0.046]**
TSE $\times$ Specialization ratios t_{-1}			2.865 [0.054]*	2.741 [0.094]*
Sales growth t_{-1}	0.003 [0.375]	0.011 [0.092]*	0.013 [0.038]**	0.003 [0.345]
Debt ratio t_{-1}	0.002 [0.816]	−0.020 [0.110]	−0.022 [0.051]**	0.003 [0.809]
Firm size t_{-1}	0.398 [0.000]***	0.949 [0.000]***	0.288 [0.026]**	0.541 [0.000]***
Chi-Square [<i>p</i> -value]	67.538 [0.000]***	54.092 [0.000]***	50.317 [0.000]***	55.744 [0.000]***
Turnover N	66	33	43	56
Sample N	220	99	173	146

The dependent variable is the hazard rate of CEO turnover. See Table 3 for definitions of independent variables. Figures in parentheses are *p*-values

***Significant at 1%

**Significant at 5%

*Significant at 10%

TSE and/or OTC firms, the dummy variables of family are insignificantly negative. In contrast to prior expectations, these results reject Hypothesis 1_b. We fail to find evidence that family CEOs are given less responsibility but more protection. Regardless of family ties, CEO turnover is not related to diversification strategies. However, the dummy variables of TSE listed firms are significantly negative. Hypothesis 2_b is supported. The negative coefficient in Model 3 indicates that TSE CEOs significantly decrease the probability of turnover on average by 95.5% ($= e^{-3.097} - 1$) compared to OTC CEOs. The result shows that boards of directors of TSE firms seldom dismiss their CEOs. To further explore the relationship between diversification and CEO turnover, and to explain the governance efficiency of diversified firms, we identify differences in firm size. By adding the interaction terms between the specialization ratio and the TSE dummy into the Cox regression, we can examine how firm size affects the relationship between CEO turnover

and corporate diversification. A positive coefficient on the interaction term indicates that when TSE CEOs adopt focus strategies (i.e. high specialization ratios), their turnovers are increased (diversification decreases their turnovers). The results support Hypothesis 2_b, suggesting that turnover of TSE CEOs is reduced in diversified firms because CEOs in diversified firms are more likely to entrench themselves. This shows that diversification strategies may increase agency costs, after the other factors affecting diversification and CEO replacement decisions are controlled.

Consistent with the argument that diversification raises agency costs, CEOs in diversified firms have a lower turnover rate than do ones in focused firms. If diversified firms could employ effective monitoring mechanisms, CEOs that perform poorly will be replaced. Therefore, we observe the relationship between performance and turnover to examine the efficiency of corporate governance. It is Important to exclude the intervention of corporate performance,

Table 5 Estimates of Cox PH model—the sensitivity of turnover to performance

Independent variables	TSE firms		OTC firms	
	Family CEOs Model 1	Non-family CEOs Model 2	Family CEOs Model 3	Non-family CEOs Model 4
Stock return $\times$ dominant business $t-1$	-0.008 [0.603]	-0.009 [0.343]	-0.003 [0.871]	-0.018 [0.160]
Stock return $\times$ diversified business $t-1$	0.018 [0.094]*	0.003 [0.764]	-0.012 [0.238]	0.000 [0.999]
Stock return $t-1$	-0.025 [0.001]***	-0.016 [0.070]*	-0.025 [0.005]***	-0.002 [0.874]
CEO ownership $t-1$	-0.040 [0.342]	-0.099 [0.015]**	-0.026 [0.740]	0.028 [0.854]
Family voting rights $t-1$	-0.026 [0.187]	0.015 [0.224]	-0.045 [0.063]*	-0.068 [0.028]**
Control right deviation $t-1$	-0.037 [0.982]	1.599 [0.203]	4.436 [0.134]	-0.128 [0.936]
Sales growth $t-1$	0.027 [0.007]***	0.001 [0.772]	0.013 [0.136]	0.123 [0.389]
Debt ratio $t-1$	-0.027 [0.087]*	0.020 [0.116]	-0.003 [0.889]	-0.029 [0.142]
Firm size $t-1$	0.057 [0.699]	0.543 [0.000]***	1.291 [0.000]***	1.132 [0.002]***
Chi-square [<i>p</i> -value]	28.392 [0.001]***	47.523 [0.000]***	39.589 [0.000]***	24.615 [0.003]***
Turnover N	26	40	17	16
Sample N	116	104	57	42

The dependent variable is the hazard rate of CEO turnover. See Table 3 for definitions of independent variables. Figures in parentheses are *p*-values

***Significant at 1%

**Significant at 5%

*Significant at 10%

which is a strong moderator in the relationship between CEO turnover and diversification strategy.

We divide the sample into four categories and replace the specialization ratios with dummy variables of the diversification types (Rumelt 1982). Adding an interaction term between stock return and the diversification dummy into the Cox regressions, we investigate how performance affects the sensitivity of CEO turnover to diversification levels. The coefficient on the interaction term between stock return and diversified business is a measure for the marginal impact of performance on turnover in diversified firms. Given the inverse relation between corporate performance and CEO turnover, when the interaction term has a positive coefficient, sensitivity is comparatively less for diversified businesses than for focused ones. First, in Model 1 of Table 5, the coefficient for stock return is significantly negative; one standard deviation decline in stock return increases the probability of CEO turnover by 2.5% ($= e^{-0.025} - 1$) in TSE family CEO firms. As expected, the estimated coefficient for interaction between stock return and diversified business dummy is significantly positive, suggesting that, for diversified

businesses, one standard deviation decline in corporate performance increases the likelihood of CEO turnover by only 0.7 percentage points (2.5–1.8%). Only in TSE family CEO firms does performance reduce sensitivity of diversification–turnover; and we fail to find entrenchment effects in the other three categories.⁸ Hypotheses 1_c and 2_c are supported in TSE family CEO firms, implying that the turnovers in large family CEO firms are more likely to be less sensitive to poor performance when adopting diversification strategies than turnovers of non-family CEO firms.

4.3 Why do CEOs diversify their firms?

Our results in Sect. 4.2 confirm the agency theory explanation for large family CEO firms. In contrast to

⁸ To compare with other studies, our investigation also examines the robustness of the main findings to different classifications for CEO change. Considering that CEOs leave their jobs for diverse reasons, this difference seems slightly small. The signs of the coefficients on independent variables are generally consistent with Tables 4 and 5.

the above arguments, controlling families could have sufficient reasons to diversify their businesses. For example, diversification strategies may not force CEO dismissal if large group-affiliated firms can enhance firm value by efficient diversification investment. This implies that a weak link between CEO turnover and level of diversification may not be a symptom of inefficient governance if diversification premium exists in large diversified family firms. Our study finds that diversification decisions are associated with agency problems but we need more research into the reasons for diversification to confirm its association with governance efficacy. Contrary to our expectations, we find that, if we do not consider family control and/or firm size effects, corporate diversification is not significantly related to firm value. Several measures, such as ROA, Tobin's Q and ROE, are used to ensure the robustness of the results. At the least, our results indicate that diversification discounts do not exist in family businesses. We do not present the results in order to conserve space.

CEOs have strong incentives to reduce firm-specific risk by implementing diversification decisions that do not necessarily maximize stockholder wealth. Based on the research of Anderson and Reeb (2003b), we use two different proxies for measuring firm risk. Equity risk is simply represented by the standard deviation of a firm's 240 daily returns and the systematic risk obtained from the Capital Asset Pricing Model. For robustness, we consider three measures in the level of corporate diversification in the regressions (specialization ratio, diversification dummy variable and the number of four-digit different segments). Table 6 presents the OLS regression results. The coefficients of the diversification proxies in Models 1, 3, and 6 are statistically significant, indicating that corporate diversification is associated with significantly less firm risk. Firm risk should bear a negative relation to diversification because in family firms there is greater incentive to reduce operational risk beyond their core industry.

5 Discussion

Numerous agency theorists have argued that diversification decisions are indicators of poor corporate governance; this perspective has been challenged by some recent studies that point out the excellent

performance of family businesses that are diversified. In order to examine the effectiveness of corporate governance in family businesses, our study investigates i) differences in diversification levels for the respective organizational types and ii) the effect of diversification on CEO turnover.

Why do family CEO firms tend to diversify? Family CEO firms do not have significant diversification discounts. Also, family businesses produce conditions favorable to the pursuit of long-term investment strategies, e.g., diversification, for family CEOs (James 1999; Stein 1988). Finally, controlling families have a much greater need to engage in risk-reducing activities because their firms' primary objective is the attainment of wealth across generations. It has been found that family businesses favor investments in generic rather than specialized assets (Redding 1982) and are more interested in survival and succession than in growth and innovation (Landes 1949). We find that family CEO firms have greater incentive to reduce firm-specific risk than do non-family CEO firms in order to maintain family prestige and wealth.

Diversification strategies are not necessarily the effect of self-entrenchment (i.e., the agency explanation). Agency problems are not the only possible explanation as to why firms decide to diversify; diversification can also be a value-maximizing strategy for controlling stockholders. Therefore, we cannot determine whether managerial opportunistic behavior exists in family businesses by directly observing diversification levels. We need further evidence to determine whether the entrenchment effect is enhanced when CEOs diversify their firms. Finally, our results show that diversified firms have lower performance-turnover sensitivities than focused firms. We therefore concur with the argument that corporate governance in Taiwanese family firms is inefficient.

Risk-reducing diversification strategies alone cannot guarantee corporate survival. This is especially important to keep in mind since family businesses have unique organizational characteristics that may mitigate governance efficiency. Family ties tend to increase altruism, co-ownership and family member involvement, to feed the family business; but there may be adverse side effects, such as free riders, moral hazards, or even entrenchment of ineffective managers. These factors may create other agency problems for stockholders and lead to the failure of a family

Table 6 Regression results of firm risk and corporate diversification

Independent variables	Dependent: beta		Dependent: total risk			
	3 Proxies of diversification		3 Proxies of diversification			
	Specialization ratio Model 1	Diversification dummy Model 2	No. of four-digit segments Model 3	Specialization ratio Model 4	Diversification dummy Model 5	No. of four-digit segments Model 6
Constant	-0.110 [0.810]	0.459 [0.167]	0.479 [0.146]	3.386 [0.000]	3.953 [0.000]	3.950 [0.000]
Family	0.136 [0.589]	-0.024 [0.765]	-0.061 [0.585]	0.360 [0.310]	-0.116 [0.300]	-0.163 [0.302]
TSE	0.352 [0.237]	-0.163 [0.068]*	-0.023 [0.803]	-0.117 [0.779]	-0.151 [0.229]	-0.043 [0.742]
Diversification	0.623 [0.088]*	-0.262 [0.106]	-0.077 [0.006]***	0.579 [0.260]	-0.313 [0.171]	-0.069 [0.079]*
Family × diversification	-0.142 [0.648]	0.026 [0.846]	0.038 [0.307]	-0.512 [0.241]	0.238 [0.212]	0.054 [0.299]
TSE × diversification	-0.514 [0.150]	0.299 [0.058]*	-0.004 [0.869]	0.003 [0.996]	0.111 [0.618]	-0.031 [0.322]
CEO ownership	0.006 [0.167]	0.006 [0.148]	0.004 [0.341]	0.017 [0.008]***	0.017 [0.006]***	0.016 [0.014]**
Family voting rights	-0.009 [0.000]***	-0.009 [0.000]***	-0.009 [0.000]***	-0.013 [0.000]***	-0.013 [0.000]***	-0.013 [0.000]***
Control right deviation	0.064 [0.763]	0.059 [0.780]	0.074 [0.723]	0.290 [0.332]	0.279 [0.351]	0.289 [0.332]
Sales growth	-0.002 [0.159]	-0.002 [0.170]	-0.002 [0.112]	-0.001 [0.609]	-0.001 [0.642]	-0.001 [0.584]
Debt ratio	0.003 [0.168]	0.002 [0.241]	0.004 [0.042]**	0.002 [0.581]	0.001 [0.702]	0.002 [0.485]
Firm size	0.073 [0.006]***	0.076 [0.004]***	0.077 [0.004]***	-0.087 [0.020]**	-0.085 [0.022]**	-0.082 [0.027]**
F-value [p-value]	2.432 [0.006]***	2.483 [0.005]***	3.053 [0.001]***	2.936 [0.001]***	2.910 [0.001]***	3.065 [0.001]***

Beta: the systematic risk obtained from the CAPM; *Total risk*: the standard deviation of the firm's 240 daily returns; *Specialization ratios*: the ratio of a firm's sales attributable to its largest four-digit CSIC group of businesses; *Diversification dummy*: 1 for diversified businesses defined as those with a specialization ratio smaller than 0.70, 0 otherwise; *No. of four-digit segments*: the number of different four-digit CSIC codes under which the firm operates. See Table 3 for definitions of other variables. Figures in parentheses are *p*-values

***Significant at 1%

**Significant at 5%

*Significant at 10%

business. Schulze et al. (2001) posit that altruism may bias the perceptions of founders regarding the performance of their successors in the family, making replacement for poor performance less likely. The entrenchment of controlling families and non-arm's-length transactions between related companies may be detrimental when family firms are involved with a business group (Claessens et al. 2000). Ocasio (1994) also argues that power contests among potential successors for CEO position may ensue. These problems reduce firm value. We suggest that diversification benefits of risk reduction may be large but are not enough to offset agency costs in family businesses. Lower performance-turnover sensitivities in diversified firms are still a symptom of poor corporate governance.

Although our study attempts a better understanding of the corporate governance in family businesses and discusses the agency literature, there is still need for more extensive research on this topic. Some implications, both theoretical and practical, for the field of family business management are presented.

5.1 Suggestions for further research

We have addressed the issue of corporate governance in family businesses; however, a better understanding of the influence of controlling families is needed to establish a more rigorous analysis of family firm operations. The agency theory has been applied in our study but the agency costs differ significantly between family and non-family CEO businesses. The assumption of information asymmetry particularly limits the applicability of agency theory when applied to the behavior of family businesses (Tsai et al. 2006). Also, large family businesses appear more likely have distinctive resources to compete with non-group small businesses. From the resource-based perspective, Carney (2005) suggests that family firms establish their competitive advantage in environments of scarcity, utilize social capital, and engender opportunistic investment processes. The freedom to invest on intuitive criteria in family firms is beneficial to product and organizational innovation, particularly in emerging markets (Carney 2005). Recently, the economic rent-seeking potential of family businesses has been studied. Morck and Yeung (2004) suggest that family control promotes

political rent seeking thereby retarding economic growth and other aspects of development. Political rent seeking may be the highest return investment for a family business; however, it destroys value on a social level since it is not wealth creation but wealth transfer. It is easier for controlling families to enhance their wealth and influence through political rent seeking rather than through innovation and entrepreneurship (Chrisman et al. 2005). Future research may draw on such theories to further our understanding of the value of family businesses. We believe that a combination of these perspectives will result in a better understanding of the influence of family involvement on the society and economic development.

5.2 Implications for practice

Our results offer some advice for family business owners and managers. First, family businesses may benefit in terms of greater risk reduction when managing diversified businesses, but a family business group also has sufficient incentives to protect its member firms. This may induce internalization of over-investment within business groups. For example, Morck and Yeung (2003) posit that family business groups can blunt their incentive to innovate by internalizing the costs of Schumpeterian creative destruction. Controlling families should manage diversification cautiously. Moreover, agency problems are more serious in large family business groups than in small businesses. The government needs to set policies that protect small enterprises, maintain fair competition and avoid oligarchic family control. Also, CEOs appointed by controlling families might alleviate agency conflicts between owners and managers, but family businesses are not completely immune to the agency problem between minority and majority stockholders (Villalonga and Amit 2006). Professional management leads to agency problems between owners and managers and it may impede corporate growth; the suitability of professional management is an important issue. Tradeoff problems of entrenched oligarchic family control and professional management becomes especially complicated in family businesses when controlling families face a succession situation. On the other hand, it is difficult for small family businesses to

employ professional outside managers due to their limited resources. Finally, CEOs make diversification decisions in order to achieve strategic goals of controlling families, which indicates that they act on specific interests of controlling families to entrench themselves. This may signal poor governance to outside investors because of the potential for information asymmetry. Taking this into consideration, family businesses could face higher disciplinary pressure from external markets. The effectiveness of corporate governance is essential to sustain family businesses' competitive advantage.

6 Conclusions

We have examined whether the CEOs in family businesses are entrenched by diversification strategies. Our results show that monitoring and entrenchment effects coexist in family businesses but the estimated coefficient on control right deviation is insignificant; it is doubtful that controlling families expropriate minority-stockholder wealth by diversification decisions.

We fail to find consistent evidence of CEO entrenchment in our observation of the relationship between CEO turnover and ownership structure; therefore, we examined agency conflicts within family businesses through an investigation of CEO turnover differences in both diversified and focused firms. Two proxies were used to measure corporate diversification: the specialization ratio and Rumelt's (1982) classification method. Our univariate analysis results show that family CEOs are less likely to be replaced than non-family ones. Boards of directors in large firms relative to small firms also seldom replace their CEOs. However, family CEOs in large firms engage in more corporate diversification than do small non-family ones. As hypothesized, we find a negative relation between diversification level and CEO turnovers in large family CEO firms. The results indicate that large family CEOs in diversified firms could effectively entrench themselves and increase agency costs. We investigate whether differences in family control are related to the efficiency of corporate governance. The sensitivity of turnover to performance in large family CEO businesses is significant which suggests that family control inhibits turnovers for CEOs with poor performance.

Although we fail to find a systematic relationship between diversification and value discounts, we find it interesting that CEOs can diversify their firms to reduce firm risk. Risk reduction assists the maintenance of family wealth and prestige. Agency theory does not completely explain the relationship between governance efficiency and diversification decisions in family businesses. It is also important to consider that minority stockholders in family businesses may suffer from the consequences of diversification strategies due to poor corporate governance.

Appendix

Appendix Principal reasons for CEO departure

Part A: voluntary turnover

Year	1998	1999	2000	2001	2002	Total
Retirement	1	3	5	3	5	17
Sole duty of board chairman	2	3	8	4	1	18
Promotion (chairman, president, etc.)	2	3	5	3		13
Health reasons		1		2		3
Total	5	10	18	12	6	51

Part B: forced turnover

Year	1998	1999	2000	2001	2002	Total
Resignation		3	1	1		5
Personal reasons	1	2		3		6
Position change		3	7	8	5	23
Control change			1		1	2
No reason given	1	1	6		1	9
No announcement		1	1	1		3
Total	2	10	16	13	7	48

Sample size is 319. 99 firms experience CEO turnover

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