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Family Control and Corporate Innovation in Stakeholder Oriented Corporate Governance: Evidence from Japan*

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Abstract

This study investigates the effects of family control on corporate innovation activity in publicly-traded firms in Japan under stakeholder-oriented corporate governance. In a sample of 14,991 firm-year observations in publicly-traded firms in Japan during the period of 2007 to 2016, we tested whether family owners or board members are enhancing research and development investments. While theoretical perspectives of principal-principal conflicts generally assume a negative relationship between family control and research and development intensity, we find a positive relationship, which supports the stewardship theory perspective. Additionally, we find that main bank ownership positively moderates the relationship between family control and research and development, which suggest that the main bank could affect the decision making of family board members in the long-term. This result is supported by the close relationships between the main bank and client firms. Furthermore, our study reveals that the shareholder orientation of foreign shareholders suppress family board members' long-term orientation. We conclude that the exploitation presumed by principal-principal conflict perspectives have not been thoroughly investigated in Japan's stakeholder oriented corporate governance system.

Keywords: Corporate Innovation; Principal-Principal Conflicts; Stewardship Theory; Main Bank

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1. Introduction

Corporate innovation is crucial to a firm's competitive advantage and sustainable development and are often influenced by the corporate expenses of research and development (R&D) activities. Despite a global increase in the number of family-controlled public firms during recent decades (Ahlstrom, 2010; Nordhaus, 1996), the effects of family control on value creation through R&D have not been clearly defined (Peng & Jiang, 2010). From a family control perspective, family owners (instances where the corporate entity is controlled by a specific family due to their large number of shares in the company) tend to maintain control of their firms (Gomez-Mejia et al., 2007). Additionally, family-controlled firms may not always place a lot of emphasis on the importance of investing in R&D (Morck &Yeung, 2003). The objectives of a family-controlled firm is expected to have negative effects on R&D investment (De Massis, Frattini, & Lichtenthaler, 2013). Family owners do not tend to be favor of R&D investment to realize long term growth (Lee & O'Neill, 2003). Conversely, agency theory suggests that concentrated ownership is likely to promote innovation activity because large shareholders have strong incentives to monitor management and to promote innovation strategy and growth.(Jensen & Meckling, 1976)[1]. Several empirical studies find that family-control can affect a positive influence on firm innovation (Lichtenthaler & Muethel, 2012, Naldi et al., 2007).

As discussed above, there are two conflicting theoretical perspectives concerning the effect of family control on R&D investment. Stewardship theory (Davis, Schoorman, & Donaldson, 1997) states that controlling family board members act like stewards, because they have long tenures and socio-emotional relationships with the firm. In their role as stewards, family board members most often focus on the continuity of the business and on maintaining close relationships with the various stakeholders of the firm (Miller, Le Breton-Miller, & Scholnick, 2008). From the perspective of stewardship theory, this responsibility means that R&D investment would likely be facilitated in firms with controlling family board members. Conversely, principal-principal conflicts (Young et al., 2008) imply that possible conflicts between family members and minority shareholders could affect firm decision making, for instance R&D investment decisions. In other words, controlling family members focus on their self-interests and exploit the firm wealth, as well as that of minority shareholders (Block et al., 2013). Furthermore, several empirical studies show that family ownership could discourage innovation due to lower long-term R&D investment (Block, 2012; Block et al., 2013).

Referring to existing literature, the relationship between family control and corporate innovation have mainly been investigated from the perspective of emerging economies. Among developed economies—countries such as the United States and the United Kingdom—previous

[1] The two conflicting perspectives are summarized in Gersick et al. (1997).

studies have focused on dispersed ownership structures (David, Hitt, & Gimeno, 2001; De Massis et al., 2013; Hoskisson, Hitt, Johnson, & Grossman, 2002). There are few studies that have investigated the relationship between stakeholder orientation and corporate governance in countries like Japan.

This study focuses on Japanese publicly-listed family-controlled firms to discover whether family owners or board members are enhancing R&D investments. According to Yoshikawa and Rasheed (2010), a higher dividend payout in Japanese family-controlled firms imply that there might be no exploitation of family owners. Their study supports the stewardship theory in Japanese family firms, but does not reveal whether or not corporate innovation is promoted within family-controlled Japanese firms. This provides another reason for this study to focus on the effect of Japanese family owners towards R&D investment. Furthermore, two major principals in Japanese corporate governance are addressed—main bank and foreign shareholders—to monitor for the behavior of family board members (Yoshikawa & Rasheed, 2010). There are many ways in which family board members can exploit other shareholders, such as higher executive salaries and perks for family executives, self-dealing, and investments in other family-owned firms. Therefore, the monitoring of family board members is an important task which falls to monitors such as the main bank and foreign shareholders.

This study uses panel data of Japanese publicly listed firms during a study period of ten-years, 2007 to 2016. In the analysis, we adopt R&D intensity as the source of corporate innovation. The results provide three insights. First, R&D expenses are higher in family-controlled firms. This suggests that family board members are stewards for these publicly listed firms and do not exploit it. Second, the main banks contribute to the increase in R&D expenses in their family-controlled client firms. This could be due to main banks having privileged information concerning client firms and supporting the long-term orientation of family board members. Third, foreign shareholders profit distribution rather than higher R&D expenses for the future growth of the firms, because they want higher dividend payouts (Sakawa and Watanabel, 2018a).

The remainder of this study is organized as follows. The next section explains the theoretical background and the development of our hypotheses. We then explain the data and methodology of the study. The following section presents descriptive statistics and estimation results, followed by a discussion of the findings. Finally, we conclude the study.

2. Theory and Hypothesis Development

2.1. Theoretical background

Corporate governance is closely related to corporate innovation activity. Corporate innovations are facilitated by the disciplines of shareholder-oriented corporate governance (Hill & Snell, 1988; Hoskisson & Hitt, 1988; Lee & O'Neill, 2003; Fama & Jensen, 1983). La Porta, Lopez-de-Silanes,

Shleifer, and Vishny (1998) showed that family board members within family-controlled firms tend to exploit their wealth and do not realize appropriate resource allocations because of insufficient monitoring mechanisms within the firm. This type of exploitation by family board members is characterized as principal-principal conflicts and are observed in many emerging economies (Young et al., 2008).

Principal-Principal conflicts is a matter of concern from the perspective of corporate strategy, since it leads to lower firm performance (Chen & Young, 2010, Young et al., 2008). In the case of family board members being risk averse or when they use firm resources for their own private benefit, a firm's R&D investment would not be adequately developed. This may result in underinvestment, which will, in turn, lead to financial underperformance problems (Le Breton-Miller et al., 2011). Concerning large publicly-traded Japanese firms, these types of conflicts in family-controlled firms have not been appropriately investigated (Yoshikawa & Rasheed, 2010). This implies that family-controlled leadership in Japan functions well according to the monitoring mechanisms of stakeholder orientation in corporate governance.

2.2. Research Context

There are context-dependent corporate governance systems in strategic management (Chang, Chung, & Mahmood, 2006; Oliver, 1997; Peng, Wang, & Jiang, 2008). The Japanese economy is largely known as a capitalist economy but has been characterized differently from other developed economies, such as the United States. The Japanese system is based on debt-financing and is connected by bank systems and tightly interconnected networks among firms, their trading partners, and other financial institutions (Ahmadjian & Robbins, 2005). These features are sources of different strategic preferences and the resultant resource development of Japanese companies (Neelankavil & Alganar, 2003; Porter, 1992). This system means that market-based corporate governance systems are not always managed effectively. However, their disciplinary mechanisms largely contribute towards improving firm performance. Although family-controlled firms could be criticized due to their perceived expropriation (La Porta et al., 1998; Young et al., 2008), it is a relevant function, as strategic future investment is induced by their long-term orientations.

This study focuses on large publicly listed family-controlled firms. Despite their efforts, previous studies have not been able to determine whether the German-Japanese model with a concentrated ownership structure can alleviate principal-principal conflicts (Young et al., 2008). Considering stakeholder oriented corporate governance in Japan (Yoshimori, 1995), bank monitoring may be able to prevent the possible exploitation of firm resources and dividends caused by under-investment.

This study also analyzes the interaction effect of foreign shareholders on the relationship between the family control of a firm and its R&D investments. We suggest that foreign shareholders

could play an institutional reformative role to mitigate principal-principal conflicts (Young et al., 2008). From this perspective, foreign shareholders play the role of enhancing firm value in Japanese firms, as they are interested in financial performance, have a shareholder-oriented view that focuses on maximizing firm value (Desender et al., 2016), and influence managerial decisions concerning firm restructuring (Ahmadjian and Robbins, 2005). The presence of foreign shareholders with shareholder-oriented views have increased since the financial deregulation in Japan. This is known as the transition era of corporate governance in Japan (Chizema and Shinozawa, 2012).

2.3. Family Control

A firm's ownership heterogeneity can influence its business strategy due to different degrees of risk aversion and incentive (Chrisman & Patell, 2012). According to the stewardship theory (Davis et al., 1997), controlling family board members tend to act like stewards. These family board members will manage the organization with its best interest in mind, because they subordinate their personal goals and promote family goals, abiding by relational contracts that determine family firm management (Corbetta & Salvato, 2004). Family board members also build long-term relationships with the various stakeholders of the company, which in turn promotes improved R&D investments and corporate innovation (Miller et al., 2008). Tsai et al. (2006) stated that the agency theory perspective is not suitable for Taiwanese family firms. Asian collectivism and Western individualism cultures are opposed (Hofsted, 2007). In addition, long-term orientation is strongly observed in Asian countries like China, Hong Kong, Taiwan, Japan, and Korea (Hofsted, 2007). Therefore, family members adopting stewardship roles are expected in Asian collectivism cultures like Taiwan and Japan (Sakawa and Watanabel, 2018b).

On the other hand, family firms may be exploited by principal-principal conflicts, as previously stated (Young et al., 2008). When family members appropriate resources from the firm, the resources available for building the capabilities of the firm decrease (Le Breton-Miller & Miller, 2009). Furthermore, nepotistic tendencies in controlling family members may cause severe agency problems within a firm, which can harm corporate innovation. Nepotism in family-controlled firms refers to board members appointing family members as CEOs or executives in the boards. Due to nepotism, highly talented employees offering knowledge and experience in R&D may leave and talented individuals from outside the firm many hesitate to join the firm (Chen & Hsu, 2009). Concentrated ownership structures are very common in in Japanese family-controlled business groups and these structures are arranged to enhance the family members' collective economic welfare (Dela-Rama, 2016, Colpan and Hikino, 2010).

Whether family members in management positions are agents or stewards has been the subject of several studies (Anderson & Reeb, 2004; Chrisman, Chua, Kellermanns, & Chang, 2007). Additionally, evidence of agency problems in family firms—where family members act as agents

rather than stewards—are reported by Gomez-Mejia, Nunez-Nickel, and Gutierrez (2001) and Schulze et al. (2001). Family influence, involvement, and control—resulting from the partial ownership of a firm—are indeed factors which are part of a complex phenomenon with both positive and negative consequences for the organization in question (Eddleston & Kellermanns, 2007).

Japanese corporate governance is known as a stakeholder-oriented system (Yoshimori, 1995), and—more often than not—in a family-controlled firm, family board members do not exploit the firm, but rather contribute toward the growth of the firm (Yoshikawa & Rasheed, 2010, Sakawa & Watanabel, 2018b). Therefore, the long-term plans of Japanese top managers in family-controlled firms would include the development of the firm's R&D. Based on the above, we present the following Hypothesis:

Hypothesis 1: Firms with family board representation are more likely to increase R&D expenses than firms that are not family-controlled.

2.4. Bank Ownership Monitoring and Family Control

Most Japanese firms pursue diversification as a growth strategy. The success of Japanese firms in the post war period depended on their sustained commitment to R&D (Kono, 1984). Commitment to R&D depends upon both a long-term orientation and a willingness to bear the risks involved in R&D strategies. Their commitment to long term business relationships are likely to mitigate the importance of profit as well as a decline in current profits (David, O'Brien, Yoshikawa, & Delios, 2010). These short-term outcomes are supported by long and stable ownership structures that do not seek short-term profitability, compared to companies from the United States (Porter, 1992). Specifically, the main banks have a close relationship with their client firms and have always played an active monitoring role concerning Japanese firms (Aoki, 1990; Sheard, 1989). The main banks gather information by utilizing bank-appointed monitors and their incentives are provided (Colpan & Yoshikawa, 2012). These banks gather enough information concerning the financial health of client firms to enable them to prompt their client firms regarding investment for future growth by the family board members of the firms. This means that the main banks want their client firms to increase their R&D investment to promote future growth.

Furthermore, banks provide credit to their client firms under the Japanese stakeholder orientation corporate governance system. Therefore, banks can influence firms' decisions through capital supply to the family-controlled firms. The positive relationship that we suggested between increasing family control within firms and R&D investment will become stronger as bank ownership increases. Hence, we present our next Hypothesis.

Hypothesis 2: Main banks positively moderate the relationship between family control and R&D expenses.

2.5. Foreign Ownership Monitoring and Family Control

Japanese ownership structures divide shareholders into two different types called "relational owners" and "transactional owners." These two groups hold different views concerning corporate strategy (David et al., 2010). The former group represents banks and domestic investors that have close relationships with their firms. The latter group consists of foreign shareholders who have a "shareholder-oriented" viewpoint and a more distant relationship with the company. This group is expected to mitigate agency conflicts in publicly-traded corporations (Desender et al., 2016).

The attitudes of foreign shareholders differ from those of the main banks, as they prefer a higher current dividend payout instead of future profits (Gedajlovic, Yoshikawa, & Hashimoto, 2005). As stated above, foreign shareholders have an "arm's-length" relationship with the firms in which they are stakeholders and require higher investment returns (Jackson & Moerke, 2005). Therefore, foreign shareholders provide managerial incentive to the firm for shorter term financial performance (Sakawa, Moriyama, & Watanabel, 2012). Thus, the managers of firms with higher foreign shareholdings are continuously under pressure to improve financial performance. It is quite clear that foreign shareholders are not likely to advocate an increase in R&D investment for the future growth of firms, meaning that the negative relationship we implied between increasing family control and R&D investment will become stronger as foreign ownership increases. This leads to our Hypothesis.

Hypothesis 3: Foreign shareholders negatively moderate the relationship between family control and R&D expenses.

3. Data and Methodology

The data were gathered from the Nikkei Needs CGEs database, which contains corporate governance methods and characteristics of firms listed in the Tokyo Stock Exchange (TSE). The sample consists of publicly listed firms in the first section of the Tokyo Stock Exchange and excludes financial firms. Our final sample consists of 14,991 firm-year observations during the period of 2007 to 2016. Our dependent variable is R&D intensity, calculated by the ratio of R&D expenditure to total sale.

In our attempt to prove our hypotheses, we measure family control dummy variables using the same criteria used by Yoshikawa and Rasheed (2010). We adopt family board representation as a proxy for family control. Next, we looked for the largest number of family shareholder names among the general top 10 shareholder names, after which we searched for the names of directors with the same family name as that of the largest family shareholders. Based on this method, we assume that family-controlled firms are those firms that have a director (or directors) that share a family name with family shareholders on the board, for the purposes of this study.

Our independent variables are as follows: we define the main banks as the largest lenders to their client firms (Aoki, Patrick, & Sheard, 1994). Therefore, the main bank shareholding represents the

shareholdings of the largest lenders divided by total outstanding shares, following Hoshi et al. (1990) and Morck et al. (2000). Foreign ownership is measured as the shareholdings of foreign shareholders divided by the total outstanding shares. Leverage is measured as the debt to asset ratio, which controls for the firm's interest payment cost produced by larger amounts of debt. Firm size is defined by the logarithm of a firm's assets. Growth rate of sale (*Growth Sales*) is adopted as a proxy of firm growth. *Cross Ownership* is the percentage of shares of mutual shareholdings. Our study also includes year dummies and industry dummies based on the industry classification of the TSE to capture time variation and cross industry variation.

4. Empirical Results

Our descriptive statics and the correlation of the variables are shown in Table 1. The results of our empirical analyses concerning family board representation and interaction terms are given in Table 2 and Table 3 respectively. Table 2 indicates the estimated results of family control on R&D intensity. Table 2 also shows that family board representation would enhance R&D intensity, consistent with Hypothesis 1. This means that family board members are more likely to contribute to the future growth of the firm by promoting R&D intensity. It also implies that family board members function as stewards in the family-controlled firm, rather than agents.

Insert Table 1 and Table 2 about here

Additionally, we find a positive relationship between main bank ownership and family board representation, which confirms Hypothesis 2. This finding suggests that the main bank would contribute toward an increase in R&D intensity proposed by family board members. Particularly, the long-term relationship between the main bank and family-controlled firms would support a family board member's long-term plans. Concerning the relationship between foreign shareholders and family board representation, we find a significant and negative relationship, which is consistent with Hypothesis 3. This suggests that foreign shareholders would advocate more frequent dividend payouts, rather than the uncertainty of R&D investment for future growth.

We also confirmed the robustness of results concerning the GFC (Global Financial Crisis) period of 2007-2008, since the significant corruption of the global financial market during the GFC era might affect our results. Sun, Lee, and Phan (2018) analyzed the impact of the Global Financial Crisis on the R&D expenditure of family firms in the United States, pointing out that family firms tended to increase their investment in R&D compared to non-family firms during the crisis.

Similar to Table 2, Table 3 also indicates that family board representation contributes to the enhancement of R&D intensity, which is consistent with Hypothesis 1. The interaction terms of main bank ownership and family board representation are significantly positive, which confirms

Hypothesis 2. Furthermore, the interaction terms of foreign shareholders and family board representation are significant and negative, consistent with Hypothesis 3. These results confirm that our estimated results are stable during the GFC period.

Insert Table 3 about here

5. Discussion

This study analyzes the effects of family control on R&D intensity in publicly listed firms in Japan. First, we found that family board members in Japan are generally not engaged in possible expropriation, but that they function as stewards of their firms, focusing on enhancing future growth. Second, we found that main bank ownership reinforces the positive relationship between R&D intensity and family control. This implies that the monitoring of main banks is effective and that their close relationship with their client firms supports decision making concerning the increase of R&D expenses within family-controlled firms. Third, we discovered that foreign shareholders are in favor of immediate wealth distribution rather than investment in the future growth of family-controlled firms.

In addition to the above findings, this study also examined the relationship between the R&D intensity and the growth opportunities of family-controlled firms in Japan. This additional analyses revealed that foreign shareholders suppress R&D intensity more in family-controlled firms. This implies that foreign shareholders prefer immediate capital gain, especially in firms with higher growth opportunities.

This study makes several theoretical contributions. First, we investigated the relationship between R&D intensity and family-control in Japan, a stakeholder-oriented corporate governance country. Our results imply that instead of the potential expropriation by family members—which was a possibility—a higher R&D intensity is maintained by the long-term orientation of family board members. Second, we discovered that foreign shareholders—representing one of the shareholder-oriented scopes—advocate current profit distribution, rather than R&D investment for future growth opportunities in family-controlled firms.

It is important to note that our study is restricted to publicly-listed firms. There are many small and medium-sized family-controlled firms in Japan. Therefore, the implications of this study cannot simply be applied to small and medium sized firms in Japan, because they face different corporate governance challenges.

6. Conclusions

This study revealed that family control contributes to increased R&D investments in large publicly traded firms in Japan. The results also imply that family control enhances R&D intensity in family-

controlled firms, consistent with the stewardship theory perspective. Additionally, we found that bank monitoring also plays a role in enhancing R&D intensity as effective monitors under stakeholder orientation corporate governance. Moreover, the results showed that foreign shareholders would rather decrease R&D intensity in family-controlled firms in favor of short-term profit, rather than the long-term growth of their firms.

The exploitation presumed by principal-principal conflict perspectives have not been thoroughly investigated in Japan's stakeholder oriented corporate governance system. In other words, the increase of R&D intensity in family-controlled firms would reflect long-term orientation in Japanese firms. This finding would reflect long-term orientation under collectivism cultural aspects in Japan which is different from Western countries (Hofsted, 2007). The stewardship theory perspective is also supported by previous studies done in similar collectivism cultures like Taiwan (Tsai et al., 2006). Lastly, this study contributes to the literature in terms of the important link between the cultural aspects of a country and its corporate governance mechanisms.

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Table 1: Descriptive Statistics

Variable	Mean	Std. Dev.	1	2	3	4	5	6	7	8
1 R&D	1.90	3.20								
2 Family Dummy	0.30	0.46	-0.06							
3 Family Members	0.38	0.66	-0.06	0.88						
4 Main Bank Ownership	0.95	1.63	-0.07	-0.09	-0.08					
5 Foreign Ownership	14.13	12.41	0.20	-0.10	-0.10	-0.22				
6 Leverage	49.42	19.81	-0.26	-0.18	-0.16	0.23	-0.16			
7 ln(Assets)	11.55	1.46	0.12	-0.34	-0.29	-0.09	0.52	0.27		
8 Growth Sales	0.04	0.23	-0.03	0.06	0.04	-0.05	0.07	0.01	-0.02	
9 Cross Ownership	8.06	8.68	-0.02	-0.28	-0.25	0.30	-0.15	0.08	0.06	-0.04

Note: N = 14,991. *R&D* is the percentage of R&D expenditure of total sales. *Family Dummy* is equal to 1 when a firm has family directors. *Family Members* refer to the number of family directors. *Main Bank Ownership* is the percentage of shares of total outstanding shares owned by main banks. *Foreign Ownership* is the percentage of total outstanding shares owned by foreign investors. We calculate the *Leverage* as the ratio of total debt to total assets. We control firm size by using the log of total assets (*ln(Assets)*). *Growth Sales* refers to the ratios of the year-on-year change divided by total sales. *Cross Ownership* is the percentage of shares of mutual shareholdings.

Table 2: R&D Intensity and Family Control

	(1)	(2)	(3)	(4)	(5)
	Dependent Variable: R&D				
Family Dummy		0.026 **		0.032 **	
		(3.96)		(3.05)	
Family Members			0.028 **		0.031 **
			(6.29)		(4.65)
Main Bank		-0.011 **	-0.011 **	-0.016 **	-0.013 **
Ownership (MB)		(-6.25)	(-5.84)	(-7.19)	(-6.44)
Foreign		0.002 **	0.002 **	0.002 **	0.002 **
Ownership (FO)		(5.46)	(5.94)	(5.72)	(6.01)
Family Dummy				0.022 **	
*MB				(5.63)	
Family Dummy				-0.002 **	
*FO				(-3.41)	
Family Members					0.015 **
*MB					(4.79)
Family Members					-0.002 **
*FO					(-4.30)
Leverage	-0.012 **	-0.011 **	-0.012 **	-0.012 **	-0.012 **
	(-62.66)	(-54.62)	(-55.79)	(-53.64)	(-56.99)
ln(Assets)	0.162 **	0.148 **	0.149 **	0.148 **	0.152 **
	(64.22)	(50.19)	(50.97)	(48.40)	(52.38)
Growth Sales	-0.065 **	-0.059 **	-0.060 **	-0.047 *	-0.020
	(-3.35)	(-2.97)	(-3.02)	(-2.32)	(-0.98)
Cross	-0.008 **	-0.007 **	-0.007 **	-0.007 **	-0.007 **
Ownership	(-23.36)	(-19.04)	(-18.18)	(-19.04)	(-18.55)
Constant	-1.008 **	-0.964 **	-0.969 **	-0.956 **	-0.997 **
	(-45.85)	(-35.25)	(-37.61)	(-34.96)	(-39.22)
Industry Dummies	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes
Number of sample	14991	14991	14991	14991	14991
Wald chi2	128175.9 **	647203.8 **	428426.3 **	443454.5 **	1862302.0 **

+ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$

Note: We use a cross-sectional time-series feasible generalized least squares (FGLS) regression model to control panel-level heteroscedasticity (Wooldridge, 2002), following Yoshikawa and Rasheed (2010). We adopt lagged variables for all of the independent and control variables to avoid endogeneity problems. *Z*-statistics are shown in parentheses.

Table 3: Additional analysis of R&D intensity and Family Control (GFC)

	(1)	(2)	(3)	(4)	(5)
	Dependent Variable: R&D				
Family Dummy		0.059 **		0.064 **	
		(8.74)		(6.06)	
Family Members			0.057 **		0.051 **
			(19.40)		(7.07)
Main Bank		0.001	0.002	-0.010 **	-0.008 **
Ownership (MB)		(0.59)	(1.19)	(-4.75)	(-3.85)
Foreign		0.007 **	0.007 **	0.010 **	0.009 **
Ownership (FO)		(19.89)	(19.02)	(24.34)	(18.82)
Family Dummy				0.055 **	
*MB				(13.64)	
Family Dummy				-0.005 **	
*FO				(-9.38)	
Family Members					0.029 **
*MB					(8.67)
Family Members					-0.003 **
*FO					(-4.54)
Leverage	-0.015 **	-0.014 **	-0.013 **	-0.015 **	-0.014 **
	(-54.63)	(-49.40)	(-47.82)	(-52.66)	(-51.23)
ln(Assets)	0.199 **	0.168 **	0.167 **	0.170 **	0.169 **
	(52.57)	(47.79)	(45.49)	(46.62)	(45.37)
Growth Sales	-0.343 **	-0.399 **	-0.392 **	-0.410 **	-0.451 **
	(-11.07)	(-12.60)	(-12.12)	(-13.34)	(-14.52)
Cross	-0.011 **	-0.009 **	-0.009 **	-0.010 **	-0.010 **
Ownership	(-26.22)	(-21.73)	(-20.68)	(-21.80)	(-22.67)
Constant	-1.196 **	-1.047 **	-1.055 **	-1.003 **	-1.017 **
	(-37.34)	(-33.49)	(-31.56)	(-29.57)	(-29.51)
Industry Dummies	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes
Number of sample	2904	2904	2904	2904	2904
Wald chi2	1467452.8 **	87958.8 **	178822.2 **	289802.0 **	1739553.0 **

+ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$

Note: We use a cross-sectional time-series feasible generalized least squares (FGLS) regression model to control panel-level heteroscedasticity (Wooldridge, 2002), following Yoshikawa and Rasheed (2010). We adopt lagged variables for all of the independent and control variables to avoid endogeneity problems. *Z*-statistics are shown in parentheses.