

Family Control and Leverage: Australian Evidence

Harijono

Satya Wacana Christian University, Indonesia

Abstract: This paper investigates whether leverage of family controlled firms differs from that of non-family controlled firms. Using data from publicly listed industrial firms in Australia traded over 1998 to 2002, family controlled firms appear to have higher levels of leverage than non-family counterparts. Results indicate that the families' incentive to use debt as a means of concentrating voting power outweighs the need to reduce debt in order to mitigate firm risk.

Keywords: Family Firms, Leverage, Private Benefits of Control

1. Introduction

Myers (2003) suggests that future research in the area of capital structure should be directed towards understanding how differences in incentives among managers and shareholders lead to differences in financial decisions. Holderness and Sheehan (1988) propose that differing capital structure decisions are due to different incentives and motivations which are directly related to risk and control of each type of large shareholder.

Anderson *et al.* (2003) argue that family-control represents a special class of large shareholders that potentially have a unique incentive structure and power. The combination of undiversified family holdings and the desire to pass the firm onto subsequent generations suggest that family shareholders are more likely to have stronger incentives to reduce firm risk while wanting to maintain control. Since debt can be used as a means of reducing risk and concentrating control, this paper proposes that the uniqueness of families will affect capital structure decisions.

Extant research (e.g., Wiwattanakantang 1999; Mishra and McConaughy 1999) on the impact of family control on leverage has provided mixed results. This could be because the research focus primarily has been on large firms that are dominated and controlled by families, such as businesses in Thailand, and on large firms that are widely held and controlled by professional managers, such as businesses in the U.S. For example, Wiwattanakantang (1999) found that levels of leverage were higher among family controlled firms in Thailand, whereas Mishra and McConaughy (1999) found that family firms in the US employed lower levels of leverage. Using LaPorta *et al.*'s (1998) property rights or the *law matters* argument, Claessens and Fan (2002) maintain that these differences are a result of quality of protection investors receive from their property rights environment. In other words, because of Thailand's weak property rights environment, family firms in that country have a stronger desire to control their organizations, and therefore use more debt as a means of concentrating voting power. On the other hand, because investors in the US receive good protection, which is linked to their strong property environment, the families' desire to use debt as means of reducing undiversified investment risk is therefore more dominant among these firms.

This paper examines how the identity of large shareholders affects capital structure decision-making in Australia. Specifically, the study examines whether leverage-related decision-making of family-controlled firms differs from that of non-family controlled firms. Publicly listed firms in Australia provide an interesting and unique testing ground which will shed further light on understanding the association between family control and leverage decisions.

Morck and Yeung (2003) classify Australia as an *in-between* country in terms of its description of the role families play in corporate control. That is, Australia is different to the U.S. and to Thailand as it has a large mixture of firms that are widely held as well as a significant number of firms that are controlled by families. As extant research has provided mixed results on the impact of family control on leverage, possibly because of the focus of these studies, that is, the examination of firms in environments where there is a prevalence of family domination and control or where there is a prevalence of widely held and professional manager control. This study addresses the gap by examining firms in an *in-between* or mixed environment.

2. Impact of Family Control on Leverage

Families represent a special class of large shareholders that potentially have a unique incentive structure and power in the firm (Anderson *et al.*, 2003). There are two main characteristics of families that are likely to have an impact on capital structure decision.

First, the controlling shareholders of family firms are not well-diversified due to financial constraints, whereas the shareholders of non-family firms usually hold well diversified. With substantial wealth at risk, family shareholders tend to be more risk averse than their non-family counterparts.

Second, families have more interest in the firm's long-term survival because they want to pass the business on to the next generation (Anderson *et al.*, 2003). Therefore, controlling shareholders of family controlled firms represent a special class of large shareholders that potentially have a strong incentive to maintain control of their company.

Debt can be used to reduce firm risk because lower debt can reduce the probability of bankruptcy. However, debt can also be used to concentrate voting power as the use of debt financing instead on new equity can avoid the dilution effect. Therefore, it is argued that families' desire to retain control and reduce risk will have an impact on their leverage decisions.

The families' desire to retain control and reduce firm risk has opposing effects on leverage decisions. On the one hand, the desire to concentrate voting power motivates families to use more debt. On the other hand, the desire to reduce risk motivates families to use less debt. The actual leverage decision depends on which effect is more dominant. The property rights literature provides the prediction for this argument.

Australia has strong legal protection for shareholders and creditors (see La Porta *et al.*, 1998). Claessens and Fan's (2002) property rights argument implies that owners of family firms in Australia should have no strong desire for effective control due to a strong property rights environment. Therefore, the desire to reduce firm risk might be more dominant, which leads to the hypothesis that family controlled firms in Australia will employ lower levels of leverage.

Lamba and Stapledon (2001) found that La Porta *et al.*'s (1998) *law matters* hypothesis does not adequately explain corporate ownership structure in Australia. They argue that Bebchuk's (1999) *private benefit of control theory* has more explanatory power than La Porta *et al.*'s (1998) *law matters* hypothesis in explaining corporate ownership structure in Australia. According to Bebchuk's hypothesis, the extent of ownership concentration depends on the size of the private benefit of control. Examples of such benefits are the ability to transfer assets on non-market terms to related parties, the ability to get inside information from the firm and exploit business opportunities through other companies, influence election of the Board of Directors or management positions, power to build business empires, or consume perquisites at the expense of the firm (Nenova, 2003).

When the private benefit of control is larger, control becomes more valuable and the founder is unlikely to relinquish authority after the IPO. Therefore, in countries where private benefits of control are significant, larger block holdings will be relatively prevalent in publicly listed companies. Nenova (2003) found that the value of private benefits of control in Australia is quite high (around 23% of firm value), similar to the value demonstrated in Brazil, Chile, France, and Italy.

Bebchuk also suggests that comparatively large private benefits of control are likely to exist in companies whose controller founded the firm, or whose family has controlled the firm for many years. Here there may be some non-pecuniary benefits from controlling the firm.

Consistent with the private benefit of control theory, it is argued that, although there is strong investor protection in Australia, shareholders desire to maintain control remains very strong. Since private benefit of control in family firms is comparatively large than that in non-family firm, families are more likely to have a stronger incentive to maintain control. As a result, family controlled firms in Australia will have higher levels of leverage.

3. Data Description and Methodology

Sample: The research design includes panel data over a five-year period from 1998 to 2002. The sampling frame comprises a population of 1,214 companies listed as active on the Australian Stock Exchange (ASX) in 1998 (see Mroczkowski and Tanewski, 2002). Of these active companies, 218 companies were financial firms (using the ASX industry classification). These firms were excluded from the sample as they are subject to government regulations, which restrict their discretion in capital structure decisions.

Financial data were collected mainly from *FinAnalysis*, a database which contains pertinent annual report information. As short-term debt, long-term debt and equity are the key variables, all data collected from *FinAnalysis* were validated by conducting cross checks with *Company Analysis*, another database which contains annual report information. If any differences were found, the company's actual annual reports (usually downloaded from the company's internet site) were used to validate the correct figure.

In order to identify family firms, this study used a list of family and non-family controlled firms identified by Mroczkowski and Tanewski (2002) who used several selection criteria to identify firm type. These criteria, which included ownership concentration, members of the board of directors and continuity of control, were important for establishing ownership interest and for tracing continuity of control through indirect (third party) shareholdings.

The panel regression model employed to test whether leverage of family controlled firms differs from that of non-family controlled firms takes the following form: leverage = f (family control, effective tax rate, non-debt tax shield, profitability, business risk, growth opportunity, firm size, industry dummy).

Two measures of leverage were used in this study: book value and market value. Book value leverage is defined as the book value of total interest bearing debt divided by the book value of total assets. Market value leverage is defined as the book value of total interest bearing debt divided by total capital (i.e., the market value of equity plus the book value of total interest bearing debt).

Family control is a key variable of interest in this study and was measured using binary values, that is, one if firm is family controlled and zero otherwise. In addition to firm type, the model also included standard control variables expected to affect leverage decisions such as the firm's effective tax rate, non-debt tax shield, profitability, business risk, firm size, growth opportunity and industry. We expect leverage to be negatively related to profitability, growth opportunity and business risk, whereas it is expected that leverage will be positively related to firm size, but insignificantly related to tax variables (i.e., both effective tax rate and non-debt tax shield).

4. Empirical Results

Table 1 presents regression estimates of the determinants of leverage based on Equation 1. Panel A and Panel B show the results for both market value leverage and book value leverage. The table also shows five types of estimates: pooled regression, random effects panel data regression, between estimator, tobit for panel data (random effects) and logit for panel data (random effects). These various estimation techniques are employed to ensure robustness of results.

As can be seen from Table 1, the coefficient for family control is positive and highly significant regardless of the estimation technique. In particular, Table 3 (Panel A) shows that family firms, on average, use about 25% more debt in their capital structure than non-family firms (see columns 1, 2, and 3). This result is also supported by the tobit regression (see column 4) and the logit regression estimates (see column 5) indicate that family firms are more likely to use debt than non-family firms. Few substantive differences appear to exist between book value and market value estimates of leverage (see Table 1, Panel B).

Overall, the positive association between family control and leverage indicates that, on average, family firms employ higher leverage. This supports the hypothesis that in Australia the families' desire to use of debt as a means of concentrating voting power outweighs the families' desire to use debt as a means of reducing firm risk.

It seems that the impact of family control among Australian firms is similar to that experienced by firms in Thailand (Wiwattanakantang, 1999). Due to weaker investor protection, family firms in Thailand have a stronger desire to consolidate control and therefore use more debt (Claessens and Fan, 2002). Similarly, our results indicate that Australian family firms use more debt than non-family firms. However, the result is contrary to Claessens and Fan's (2002) property rights argument, which implies that Australian family controlled firms should employ lower leverage.

The leverage decisions of family firms in Australia are perhaps more consistent with the argument propounded by Bebchuk (1999), who provides a private benefits of control hypothesis. Bebchuk suggests that comparatively large private benefits of control are likely to exist in family controlled firms. This argument implies that family firms have a stronger desire to control and therefore employ more debt to consolidate their voting power than non family controlled firms. Further support for the private benefits of

control hypothesis was provided when we compared the impact of family control on leverage between firms in the mining and industrial sectors.

Table 1: Impact of Family Control on Leverage

Panel A: Leverage (Market Value)					
Variable	Pooled Regression (Huber-White)	Random Effects	Between Estimator	Tobit (Random Effects)	Logit (Random effects)
	(1)	(2)	(3)	(4)	(5)
Family control	0.0473** (2.29)	0.0527*** (2.93)	0.0495*** (2.73)	0.0731*** (4.05)	1.5408*** (3.80)
Effective tax rate	-0.0018 (-0.95)	0.0006 (0.32)	0.0001 (0.02)	-0.0015 (-1.19)	-0.0586 (-0.83)
Non debt tax shield	-0.0001 (-0.94)	-0.0008 (-0.83)	-0.0031* (-1.72)	0.0001 (0.54)	-0.0793*** (-2.66)
Profitability	-0.0097*** (-4.11)	-0.0468*** (-5.16)	0.0119 (0.48)	-0.0077*** (-3.75)	-0.3113 (-1.32)
Firm size	0.0259*** (6.62)	0.0318*** (9.93)	0.0291*** (6.46)	0.0398*** (13.01)	1.2701*** (10.79)
Growth opportunity	-0.0129*** (-3.35)	-0.0138*** (-7.89)	-0.0114*** (-3.56)	-0.0117*** (-6.44)	0.0233 (0.54)
Business risks	-0.0002** (-2.08)	-0.0001 (-1.30)	-0.0002** (-2.40)	-0.0001 (-1.26)	-0.0036* (-1.83)
R ²	0.21	0.22	0.22		
Panel B: Leverage (Book Value)					
Variable	Pooled Regression (Huber-White)	Random Effects	Between Estimator	Tobit (Random Effects)	Logit (Random effects)
	(1)	(2)	(3)	(4)	(5)
Family control	0.0509** (2.24)	0.0593*** (2.90)	0.0644*** (3.11)	0.0983*** (3.90)	1.5408*** (3.80)
Effective tax rate	-0.0018 (-1.46)	-0.0015 (-0.62)	-0.0041 (-0.42)	-0.0016 (-0.83)	-0.0586 (-0.83)
Non debt tax shield	-0.0001 (-0.69)	0.0003 (0.30)	-0.0003 (-0.17)	0.0001 (0.43)	-0.0793*** (-2.66)
Profitability	-0.1059** (-2.46)	-0.1116*** (-9.47)	-0.0630** (-2.22)	-0.1060*** (-37.33)	-0.3113 (-1.32)
Firm size	0.0251*** (4.36)	0.0255*** (6.69)	0.0347*** (6.76)	0.0383*** (7.93)	1.2701*** (10.79)
Growth opportunity	0.0221 (0.73)	0.0051** (2.29)	0.0164** (4.48)	-0.0152*** (-6.85)	0.0233 (0.54)
Business risks	-0.0001 (-1.31)	-0.0000 (-0.25)	-0.0002* (-1.78)	-0.0000 (-0.16)	-0.0036* (-1.83)
R ²	0.20	0.10	0.10		

***p<.01; **p<.05; *p<.10

Bebchuk (1999) argues that some industries have larger private benefits than other industries and that these private benefits increase the shareholder's desire to maintain control. Lamba and Stapledon (2001) point out the mining industry has higher private benefits of control compared to firms in the industrials sectors. They argue that the inherent nature of mining operations provide relatively more opportunities for controlling shareholders to engage in self-dealing transactions and to take up corporate business opportunities. These arguments suggest that family firms in the mining industry will use debt as a means of consolidating voting power more extensively compared with family firms in the non-mining industry.

To test this hypothesis, we divided the sample into two groups: Mining and Industrials, and then re-estimated regression for the two groups. As expected, the coefficient estimates for family controlled firms in the mining sector are generally higher than that experienced by family controlled firms in the industrials sectors. These results are consistent across the different estimation techniques. Interestingly, the coefficient

estimates for family controlled firms in the industrials sectors are only statistically significant when the random effects model is used. Nevertheless, the results provide support to Bebchuk's (1999) private benefits of control hypothesis that controlling families in the mining sector have a stronger incentive to concentrate voting power and thus use more debt. The results are similar when we repeat the analysis using book value of leverage.

We also conducted several sensitivity analyses using different key variables of interest and to ensure that influential observations did not distort our results and that there was no survivorship bias. In general, our robustness analyses suggest that the results reported above are insensitive to various alternative specifications.

5. Summary and Conclusion

We provide evidence that family controlled firms in Australia have higher levels of leverage than their non family counterparts, suggesting that the families' incentive to use debt as a means of concentrating their voting power outweighs their incentive to use debt as a means of reducing firm risk. The result is consistent with the view that comparatively large private benefits of control are likely to exist in companies whose controller founded the firm, or whose family has controlled the firm for many years. Further analyses show that the desire to use debt to concentrate control is stronger for smaller family firms and family firms operate in mining sector.

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