

DIVIDENDS AND EXPROPRIATION IN HONG KONG

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ABSTRACT

This study seeks to understand how dividend policy is related to ownership and control structure in Hong Kong, where family-controlled firms are widespread. Using data from a sample of 324 listed Hong Kong firms in 2005, our results show that a firm's propensity to pay dividends and the amount of payout decrease with divergence of the controlling shareholder's cash flow rights from control rights. Small to medium size family-controlled firms are significantly more likely to pay dividends and have higher dividend payouts than large family-controlled firms; however, this is moderated by the discrepancy between the controlling shareholder's cash flow rights and voting rights. This study provides empirical support for the expropriation hypothesis. Important academic implications include the need for a more accurate measure of potential expropriation and the need to control for firm size in tests of the relationship between payout policy and ownership structure and control. This study offers insights to policy makers interested in enhancing the legitimacy of corporate governance within their nation. In particular, it highlights that improvements in corporate governance will be most beneficial in smaller firms, where potential expropriation is greatest.

Keywords: dividends, control rights, cash flow rights, agency conflicts

INTRODUCTION

Recent literature shows that concentrated ownership structures are more widespread worldwide than Berle and Means' (1932) dispersed ownership structures (Morck, Shleifer, & Vishny, 1988; La Porta, Lopez-de-Silanes, & Shleifer, 1999). This is exemplified in Hong Kong. Although Hong Kong is a developed common-law country, the ownership structures of firms are characterised by crony capitalism, with the predominant ownership controlled by a given family that often supplies a top manager (Claessens et al., 2000; Faccio

Claessens, Djankov, & Lang, 2001).¹ The close relationship between managers and the controlling shareholders suggests that managers' interests are highly aligned with those of the large shareholders, thus greatly enhancing the power of the large shareholders.

We investigate this typical ownership and control structure of Hong Kong firms by examining how it relates to corporate dividend policy. The literature offers two competing hypotheses regarding this relationship. The *expropriation hypothesis* predicts that the high level of ownership concentration increases the propensity for expropriation of minority shareholders by large shareholders (Shleifer & Vishny, 1997).² Therefore, the controlling shareholders with substantial power adopt a payout policy that benefits only them at the expense of minority shareholders by paying out less and retaining a larger amount of earnings that they can expropriate. The *substitution hypothesis* (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000), which is based on the assumption that firms need to raise external funds, predicts the opposite. That is, in order to sustain outside equity in the firm, the controlling shareholders establish a good reputation for not expropriating wealth from minority shareholders by paying out more dividends, thereby limiting insider expropriation.

There is no substantial existing evidence regarding ownership concentration and dividend payouts in Hong Kong. Chen, Cheung, Stouraitis, and Wong (2005) found little relationship between family ownership, measured as the fraction of outstanding shares held by the controlling family, and dividend policy. They found that only small firms showed a significant negative relationship between dividend payouts and family ownership of up to 10 percent of the company's stock. For family ownership between 10 and 35 percent, the relationship is positive. Carney & Gedajlovic (2002) found higher dividend payouts when ownership and control are coupled in the hands of individuals and their families.³

¹ Claessens et al. (2000) report that family members take on the role of director or senior manager in 57.1% of family-controlled companies.

² About 70% of large firms and 90% of medium-sized firms are family controlled (La Porta et al., 1999), with controlling families usually having a huge divergence of control rights from cash flow rights. The average cash-flow-to-control-rights ratio in Hong Kong firms is 0.826 (Claessens et al., 2000), making it easier for controlling shareholders to expropriate minority shareholders.

³ They measure the extent to which ownership and control are coupled and vested in the hands of the owner/manager in a firm by the percentage of outstanding shares closely held by officers, directors and their immediate families, shares held in trust and shares held by companies controlled by the same parties.

By focusing on ownership concentration, the above Hong Kong studies do not fully capture the extent of expropriation of minority shareholders since the interests of shareholders with substantial shareholdings may still be aligned with those of the former. La Porta et al. (1999) showed that the degree of the separation of cash flow rights and voting rights is a more accurate measure of the incentive of the controlling shareholder to expropriate minority shareholders. We apply this measure along with other ownership variables in this paper.

We are aware of only one other study that uses this measure of potential expropriation in relation to dividend policy in Hong Kong. Faccio et al. (2001) examine the association between dividend rates⁴ and the separation of cash flow rights and voting rights for a sample of large firms in East Asia, including Hong Kong, and Western Europe from 1992-1996. Their single-country analysis shows that in Hong Kong the separation of ownership and control is insignificantly related to dividend rates for group-affiliated firms whose control links exceed 20%. The same holds true in the case of multiple large owners ($\geq 10\%$ ownership) in the firm.

In light of recent Hong Kong evidence (Chen et al., 2005), we re-examined the relationship between the divergence of the controlling shareholder's control and cash flow rights and dividend behaviour using a much larger⁵ and recent sample of Hong Kong listed firms. We perform the tests in two stages. In the first stage, we ask whether a firm's *propensity* to pay dividends is related to its ownership and control structure using a binary choice model. In the second stage, we ask how ownership and control structure is related to the *amount* of dividend paid out. Our paper therefore adds to the Faccio et al. (2001) evidence in terms of both scope and substantive findings.

Our results show that a firm's propensity to pay dividends and the amount paid out decrease with the divergence of the controlling shareholder's control and cash flow rights. Thus, our findings support the expropriation hypothesis for Hong Kong, contrary to Faccio et al. (2001), due in part to differences in sample firms. Specifically, when the controlling shareholder has control rights in excess of cash flow rights, and has incentives to extract rents from firms at the expense of minority shareholders by paying out less dividends and retaining a larger amount of earnings that they can expropriate.

⁴ Four dividend rates are examined: dividend/cash flows, dividend/earnings, dividend/sales and dividend/market capitalisation.

⁵ Faccio et al. (2001) have 120 firms in their regression analysis. We have 324 firms in our analysis.

Consistent with past evidence (Chen et al., 2005), the voting rights of the controlling shareholder are insignificant. We identified the controlling owners of our sample firms and tested the effect on the firms' dividend policies. Our data show that about two-thirds of the firms are controlled ($\geq 10\%$ ownership) by a family group, followed by corporations (24.7%), states (4.94%), and financial institutions (2.78%). For small- to medium-size firms only, we found that family-controlled firms have a greater propensity to pay dividends and pay higher dividends than other firms.

In addition to the largest controlling shareholders, we also tested whether the presence of other large shareholders has an influence on dividend policy. Edwards & Weichenrieder (2004) argue that other large shareholders have an incentive to control and monitor the largest shareholder. Under pressure from other large shareholders, the controlling shareholder is typically expected to pay out more. Faccio et al. (2001) showed that the presence of multiple large shareholders increases dividend ratios in Europe but reduces them in Asia; however, the association is insignificant in Hong Kong. The latter is suggested by our results, in that the presence of the second largest shareholder has no significant influence on dividend policy.

Firms with greater board independence (as measured by the percentage of independent directors on the board) pay significantly lower dividends, irrespective of firm size. Thus, our evidence points to a substitution effect between board independence and dividend payments in controlling agency problems.

DATA

Our initial sample consisted of all companies listed on the Hong Kong Stock Exchange (HKSE) in 2005.⁶ We excluded firms with missing data and with non-positive earnings. For all variables, observations below 1% and above 99% of the distribution were removed. This resulted in a final sample of 324 firms. The frequency distribution of sample firms by industry sector in Table 1 shows that the majority of firms come from the diversified industries (24.38%) and durable household products (22.53%) sectors, followed by the real estate (16.98%), retailers and tourism (14.20%), telecommunication and technology (8.95%), oil equipment and services (7.72%), pharmaceuticals (2.78%) and utility (2.47%) sectors.

⁶ We examined only one year to keep the data collection task manageable. Ownership structure, particularly in Hong Kong firms, is highly stable over time (Chen et al., 2005).

Table 1
Frequency Distribution of 324 Sample Hong Kong Firms by Industry Sectors, 2005.

Industry	Frequency	Percentage
Diversified industrials	79	24.38
Durable household products	73	22.53
Real estate	55	16.98
Retailers and tourism	46	14.20
Telecommunication and technology	29	8.95
Oil equipments and services	25	7.72
Pharmaceuticals	9	2.78
Utility	8	2.47
Total	324	100.00

Ownership data were extracted from the company annual reports available on the HKSE's website. We measured ownership using three variables: the voting rights of the largest (ultimate) controlling shareholder (VOTING1), the voting rights of the second largest shareholder (VOTING2), and the voting rights of all large shareholders other than the largest shareholder (VOTHER). In all cases, only shareholders with at least 5% ownership in the firm were considered. We used a 5% cut-off since it provides a significant threshold of control rights (La Porta et al., 1999; Claessens et al., 2000; Faccio et al., 2001) and is also consistent with the Securities and Futures Ordinance of Hong Kong, which, since 2003, mandates disclosure of shareholdings in excess of 5% in the firms' annual reports.

We focused on both direct and indirect voting rights and were careful in tracing the control chain to identify the largest owner of each sample firm. We identified the ultimate owners as belonging to one of the following groups: families, corporations, financial institutions or states. Based on the 10% and 20% cut offs for voting rights of the largest ultimate owner (La Porta et al., 1999; Claessens et al., 2000), 214 (66.05%) and 202 (63.27%) firms are controlled by families, respectively. These are followed by corporations, which control 80 (24.69%) and 78 (24.07%) firms in the sample, based on the 10% and 20% cut offs respectively. Less than 5% of the firms are controlled by states, and about 3% are controlled by financial institutions, irrespective of the cut off. By applying the 10% and 20% cut offs, only 23 (7.1%) and 20 (6.17%) of the sample firms are considered to be widely held, respectively. Therefore, the "control" measure was not sensitive to the cut off used due to the high ownership concentration in Hong Kong firms.

We measured the separation of voting and control rights as in past studies. For example, let shareholder Q own x percent of the shares of firm X, which owns y percent of firm Y, which in turn owns z percent of firm Z. Provided that Q

has "control" at each layer of the pyramid,⁷ her voting rights in Z can be measured as $VOTING = z$, the last direct stake in the pyramidal chain. Her cash flow rights are measured as the product of the percentages in all layers, i.e., $CASH = xyz$. Our measure of potential expropriation of outside shareholders by the controlling shareholder, the separation between control rights and cash flow rights (CRVR), is the ratio of cash flow rights (CASH) over the voting rights (VOTING1) of the controlling shareholder. The larger the CRVR, the smaller is the potential for expropriation.

In testing how ownership and control structure relates to dividend policy, we controlled for a number of variables. Firm size was controlled for since larger firms, which tend to be more diversified and thus less risky, are expected to have a more fluid access to credit. Larger firms are also more mature, with less investment opportunities. All of these characteristics suggest that larger firms are more willing to pay dividends (Fama & French, 2001) and to pay out in greater amounts. Firm size was measured as total assets (ASSETS). We also included a direct proxy for growth opportunities, measured by the market-to-book ratio of common equity (GROWTH), in the tests. Firms with higher growth potentials are less likely to pay dividends; however, if they do, a smaller amount is expected.

Following Jensen's (1986) free cash flow argument, debt and dividends are substitutes in controlling the agency problem of free cash flow. Increased borrowing increases firms' fixed interest commitments, thus reducing the level of free cash flow. The higher cost of external finance and default risk of highly leveraged firms implies that these firms are less likely to commit to high dividend payments. The ability to pay dividends by highly leveraged firms is also restricted by protective covenants in debt contracts. Thus, we controlled for leverage, measured by the ratio of total debt to total assets (DEBT).

Recent regulatory changes, which have greatly enhanced the corporate governance in Hong Kong firms, should restrict the potential for expropriation by the controlling shareholders. Thus, we controlled for firms' corporate governance features: duality and the fraction of independent directors on the board. Finally, we controlled for industry-specific effects since the degree of free cash flow problems and consequently payout ratios are likely to vary considerably across industry sectors (Moh'd, Perry, & Rimbey, 1995).

⁷ Shareholder Q has control if she owns more than 5% of the votes and is the largest shareholder in each layer. Due to the high ownership concentration of sample firms, using a higher cut off (10%) makes no material difference in our findings.

Table 2
Descriptive Statistics for 324 Hong Kong Firms, 2005.

	Average	Median	Std Dev	Min	Max
DIVIDEND	0.2500	0.1925	0.2469	0.0000	0.9778
CASH	0.4470	0.4710	0.1894	0.0373	0.9712
VOTING1	0.5032	0.5182	0.1715	0.0720	0.9712
CRVR	0.8982	1.0000	0.2219	0.1130	1.0001
VOTING2	0.0971	0.0749	0.1087	0.0000	0.7080
VOTHER	0.1470	0.0914	0.1639	0.0000	0.7080
FAMILY	0.6605	1.0000	0.4688	0.0000	1.0000
STATE	0.0494	0.0000	0.2170	0.0000	1.0000
CORP	0.2469	0.0000	0.4319	0.0000	1.0000
INSTITUTION	0.0278	0.0000	0.1646	0.0000	1.0000
DUALITY	0.4520	0.0000	0.4985	0.0000	1.0000
BOARD	0.3729	0.3750	0.1029	0.1600	0.8333
ASSETS (HK\$ million)	15.5717	2.1510	62.4822	0.0143	778.0670
GROWTH	1.2023	0.9550	0.9468	0.1600	6.1100
DEBT	0.1587	0.1400	0.1354	0.0000	0.7291

Notes: DIVIDEND is dividends as a percentage of earnings after interests and taxes but before extraordinary items; CASH is the cash flow rights of the largest shareholder; VOTING1 is the voting rights of the largest shareholder; CRVR is the ratio of the cash flow rights over voting rights of the largest shareholder; VOTING2 is the voting rights of the second largest shareholder; VOTHER is the voting rights of all large shareholders ($\geq 5\%$) other than the largest shareholders; FAMILY, STATE, CORP and INSTITUTION take a value of one if the controlling owner belongs to a family group, state, corporation or financial institution, respectively and zero otherwise; DUALITY takes a value of one if the CEO also holds the chairman position and zero otherwise; BOARD is the fraction of non-executives on the board; ASSETS is total assets; GROWTH is the ratio of market value over book value of equity; and DEBT is the ratio of total debt to total assets

Table 2 contains the descriptive statistics for our sample firms. Dividend payout rates were measured by total dividend payouts divided by earnings.⁸ Dividend data were obtained from Datastream. The average (median) firm pays out 25.00% (19.25%) of its earnings in dividends, lower than the average amount (38.71%) reported by Faccio et al. (2001) for their sample of Hong Kong firms. This may be due to differences in sample size, with Faccio et al.'s (2001) sample firms being larger than those studied here.

The largest ultimate shareholder controls about half of the voting rights (VOTING1), which is higher than the cash flow rights (CASH), of the sample firms. Based on these two rights measures, we can compute the separation between cash flow rights and voting rights ($CRVR=CASH/VOTING1$). Table 2 shows an average ratio of cash flow rights to voting rights (CRVR) of 0.898,

⁸ As in Faccio et al. (2001), we also scaled dividends by cash flows, sales, market capitalisation and share price and used these alternative dividend rate measures in the tests. We do not report the results since differences in accounting convention are less likely to be of an issue in a single-country analysis such as this. Furthermore, the results are generally similar although less significant than those reported.

similar to the 0.887 reported by Faccio et al. (2001). The average (median) voting rights of the second largest shareholder (VOTING2) is 9.71% (7.49%), while that for other large shareholders (VOTHER) is 14.70% (9.14%). These other large shareholders are present in about two-thirds of the sample.

Our average (median) sample firm has \$HK15.57 (2.15) million worth of assets and a debt to asset ratio (DEBT) of 0.159 (0.140). The average (median) market to book value of equity (GROWTH) for the sample is 1.202 (0.955). In less than half of the sample, the CEO holds the chairman position (DUALITY), while the average (median) percentage of non-executive directors on the board of the sample firms is 37.29% (37.50%).

RESULTS

We first examine how ownership structure and control are related to firms' propensity to pay dividends. Since the dependent variable is a binary variable, taking a value of one for payers and zero otherwise, we applied a logistic regression model. The results are reported in Table 3. Logit 1 shows that the propensity to pay dividends increases with the voting rights of the controlling shareholder, as shown by the significantly positive coefficient on VOTING1. However, in the presence of other variables in subsequent regressions, the significance of this variable disappears.

Of particular interest is our measure of potential expropriation by the controlling shareholder, CRVR, which is significantly positive in the absence of its interaction terms. That is, the greater the threat of expropriation of outside shareholders by the controlling shareholder (lower CRVR), the lower the firm's propensity to pay dividends.

The likelihood of dividend payout appears to be independent of the voting rights of the second largest (VOTING2) shareholder. Although not reported in detail, similar results are obtained when we substitute VOTING2 by VOTHER, the percentage of voting rights of all other large shareholders ($\geq 5\%$ shareholdings).

In subsequent regressions, we included other determinants of firms' propensity to pay dividends. The first is whether the controlling shareholder belongs to a family group. Our data show that of the 214 family-dominated firms, 158 (73.83%) firms are dividend payers. Logit 2 shows that firms whose controlling shareholder belongs to a family group (FAMILY takes a value of one) have a significantly greater propensity to pay dividends than those belonging to

Table 3
Logit Regressions of Firms' Propensity to Pay Out Dividends for 324 Hong Kong Firms, 2005.

	Logit1	Logit2	Logit3	Logit4	Logit5
VOTING1	0.8543 (0.0722)	0.5190 (0.3217)	0.4512 (0.3924)	0.5295 (0.3131)	0.4908 (0.3510)
CRVR	0.5852 (0.0851)	0.6388 (0.0905)	0.6272 (0.0942)	0.1289 (0.7366)	0.0892 (0.8211)
CRVR × FAMILY				0.6176 (0.0066)	0.7610 (0.0019)
CRVR × FAMILY × LARGE					-0.6421 (0.0897)
FAMILY		0.5654 (0.0080)	0.6945 (0.0026)		
FAMILY × LARGE			-0.5590 (0.1079)		
VOTING2	0.4642 (0.5250)	0.7241 (0.3347)	0.7231 (0.3408)	0.7380 (0.3296)	0.7602 (0.3205)
LOG (ASSETS)		0.5239 (0.0000)	0.5879 (0.0000)	0.5234 (0.0000)	0.5865 (0.0000)
DEBT		-2.0674 (0.0018)	-1.9478 (0.0022)	-2.0584 (0.0019)	-1.9470 (0.0020)
GROWTH		0.1324 (0.1480)	0.1448 (0.1220)	0.1358 (0.1397)	0.1492 (0.1116)
BOARD > 0.5		-0.1186 (0.6856)	-0.1203 (0.6813)	-0.1302 (0.6532)	-0.1281 (0.6579)
DUALITY		-0.0508 (0.7776)	-0.0375 (0.8367)	-0.0543 (0.7634)	-0.0465 (0.7988)
Constant	-0.3714 (0.3912)	-8.0271 (0.0000)	-8.9728 (0.0000)	-7.5556 (0.0000)	-8.4720 (0.0000)
Probability (LR stat)	0.1976	0.0000	0.0000	0.0000	0.0000

Notes: The dependent variable is a dummy, which takes the value of one if firms pay dividends and zero otherwise. CRVR is the ratio of cash flow rights to voting rights of the largest shareholder; VOTING1 and VOTING2 are the voting rights of the largest and second largest shareholder respectively; FAMILY takes a value of one if the largest ultimate shareholders belongs to a family groups and zero otherwise; ASSETS is total assets; DEBT is the ratio of total debt to total assets; GROWTH is the ratio of market value to book value of equity; DUALITY takes a value of one if the CEO holds the position of the chairman and zero otherwise; BOARD is the fraction of non-executive directors on the board; LARGE is a dummy variable that takes the value of one if the company has assets > HK\$4.63 million and zero otherwise. Industry dummies are included but not reported. P-values from Huber/White's corrections are in parentheses

other groups (primarily corporations). Therefore, family-controlled firms appear to use the payout policy to offset outside shareholders' concern about potential expropriation of outside shareholders. The act of paying out gives a positive

signal to outsiders and thus induces them to invest their funds in the firm (Faccio et al., 2001).⁹

To test how dividend payouts are related to the potential expropriation of minority rights by family groups, we included an interaction term CRVR×FAMILY in Logit 4. Although CRVR itself is now insignificant, the interaction variable is significantly positive. Hence, although family-controlled firms are more likely to pay dividends, those with a higher threat of expropriation of outside shareholders, as measured by the divergence between cash flow rights and control rights (CRVR), are less likely to pay dividends. In particular, for family-controlled firms, every 0.10 unit decrease in cash flow rights over voting rights decreases the log of the odds of dividend payout by 0.06, controlling for other variables in the model. Expressed in terms of probabilities, rather than odds, the chance of a firm paying dividends decreases by 1.38% when CRVR decreases from 1.0 to 0.90, and by a further 4.28% when CRVR decreases from 0.90 to 0.60.

Chen et al. (2005) found little relationship between family ownership and dividend payouts for large firms. For small firms, however, a significant negative relationship between dividend payouts and family ownership up to 10% of the company's stock and a positive relationship for family ownership between 10 and 35% were found. To test whether our results are driven by differences in firm size, we associated FAMILY with a dummy variable for firm size (LARGE). We ranked firms by total assets and assigned them to three equal-sized portfolios – small, medium and large firms. LARGE takes the value of one if the firm belongs to the large firm portfolio.¹⁰ Logit 3 shows that only small- to medium-size family-controlled firms are more likely to pay dividends. However, this relationship is moderated by the divergence between cash flow rights and control rights. In particular, Logit 5 shows that the propensity to pay dividends is negatively related to the separation of the controlling shareholder's cash flow rights from control rights (CRVR) for smaller family-controlled firms only. For large family-controlled firms, this relationship is flat. Therefore, it is suggested that smaller family-controlled firms are less likely to pay dividends when the threat of expropriation is higher.

⁹ An alternative interpretation of this result is provided by Chen et al. (2005), who argue that controlling shareholders use dividends to extract resources out of the firms they control since dividends make up a disproportionately large part of the income they derive from these firms. This is further supported by Cheung, Stouraitis, and Wong (2005), who report a dividend income to cash emoluments ratio of 4:1 (4 dollars in dividends for every dollar received as cash emoluments).

¹⁰ We find that the proportion of payers increases with total assets. About 53% of small firms are dividend payers, compared to 80% for medium-sized firms and 92 % for large firms.

Additionally, larger firms (ASSETS), which tend to be more diversified and mature and have a more fluid access to external funding, are more likely to pay dividends. As expected, highly levered firms are less likely to be payers, as indicated by the significantly negative coefficient on DEBT. The remaining control variables, growth potential (GROWTH), board independence (BOARD>0.5)¹¹ and duality (DUALITY), are insignificant.

We next test the relationship between ownership structure and control and the *amount* of dividends paid out (dividends over earnings). Since the dependent variable is truncated at zero, we ran a tobit regression. Table 4 reports the results, which are generally consistent with the logit results discussed above. In particular, the significantly positive coefficient on CRVR is in line with the *expropriation hypothesis*, with firms paying out less dividends when the controlling shareholders have substantial power to expropriate. The regression results (Tobit 1) suggest that firms with a CRVR of 0.9 pay out 1.70% less in dividends compared to firms with no separation between these rights, controlling for other variables in the model. Consistent with Chen et al. (2005), the voting rights of the controlling shareholder (VOTING1) is insignificant in explaining dividend payouts.

Tobit 2 and Tobit 4 respectively show that FAMILY and CRVR×FAMILY are insignificant, consistent with unreported univariate results of no difference in the dividend payout ratio between family-controlled and other firms. The coefficient on VOTING2 is insignificant in all regressions, suggesting that other large shareholders do not play an effective monitoring role in pressuring firms to disgorge cash flows to outside shareholders. Therefore, Faccio et al.'s (2001) contention that multiple large shareholders exacerbate expropriation is not supported, at least in this part of Asia.

As before, we tested whether our results are driven by differences in firm size. Tobit 3 shows a significantly negative coefficient on FAMILY×LARGE. Therefore, as with the logit regression results, this suggests that small- to medium-size family-controlled firms have substantially higher dividend payouts than large family-controlled firms. The higher payout may be due to more financial constraints on smaller family-controlled firms than their larger counterparts and thus depend more on the external market for their financing requirements. Thus, establishing a good reputation for not expropriating wealth from minority shareholders, by paying out more dividends and thereby limiting insider expropriation, is important for these firms. Again, we see that this relationship is moderated by the divergence between cash flow rights and control

¹¹ Although not reported in detail, similar results are obtained using BOARD.

Table 4
Tobit Regressions of Dividend Payouts for 324 Hong Kong Firms, 2005.

	Tobit 1	Tobit 2	Tobit 3	Tobit 4	Tobit 5
VOTING1	0.1383 (0.2458)	0.0685 (0.5492)	0.0467 (0.6859)	0.0679 (0.5526)	0.0483 (0.6734)
CRVR	0.1699 (0.0614)	0.1689 (0.0275)	0.1745 (0.0199)	0.1290 (0.1066)	0.1154 (0.1481)
CRVR×FAMILY				0.0520 (0.2187)	0.1207 (0.0143)
CRVR×FAMILY×LARGE					-0.1818 (0.0030)
FAMILY		0.0474 (0.2369)	0.1119 (0.0189)		
FAMILY×LARGE			-0.1605 (0.0075)		
VOTING2	0.2096 (0.1979)	0.2255 (0.1487)	0.2217 (0.1408)	0.2261 (0.1471)	0.2283 (0.1280)
LOG(ASSETS)		0.0594 (0.0000)	0.0805 (0.0000)	0.0593 (0.0000)	0.0801 (0.0000)
DEBT		-0.4282 (0.0016)	-0.4146 (0.0013)	-0.4280 (0.0017)	-0.4226 (0.0011)
GROWTH		0.0643 (0.0002)	0.0645 (0.0001)	0.0645 (0.0002)	0.0647 (0.0001)
BOARD>0.5		-0.1135 (0.0591)	-0.1041 (0.0784)	-0.1142 (0.0570)	-0.1020 (0.0824)
DUALITY		0.0163 (0.6329)	0.0143 (0.6729)	0.0154 (0.6520)	0.0121 (0.7222)
Constant	-0.0375 (0.7397)	-0.9217 (0.0000)	-1.2467 (0.0000)	-0.8829 (0.0000)	-1.1832 (0.0000)
Adjusted R2	-0.0037	0.0969	0.1121	0.0966	0.1139

Notes: The dependent variable is dividends as a fraction of earning after interests and taxes but before extraordinary items. CRVR is the ratio of cash flow rights to voting rights of the largest shareholder; VOTING1 and VOTING2 are the voting rights of the largest and second largest shareholder respectively; FAMILY takes a value of one if the largest ultimate shareholders belongs to a family group and zero otherwise; ASSETS is total assets; DEBT is the ratio of total debt to total assets; GROWTH is the ratio of market value to book value of equity; DUALITY takes a value of one if the CEO holds the position of the chairman and zero otherwise; BOARD is the percentage of non-executive directors on the board. LARGE is a dummy variable that takes the value of one if the company has assets>HK\$4.63 million and zero otherwise. Industry dummies are included but not reported. P-values from Huber/White's corrections are in parentheses

rights. Tobit 5 shows that the amount of dividends paid is negatively related to the separation of the controlling shareholder's cash flow rights from control rights for smaller family-controlled firms only. For large family-controlled firms, this relationship is flat. Taken together with the logit results, we find that smaller family-controlled firms are both less likely to pay dividends and to pay in smaller amounts when the threat of expropriation is higher.

As before, dividend payouts are significantly higher for larger firms (ASSETS). Although board composition does not have an impact on the

likelihood of paying dividends (as shown in Table 3), Table 4 shows that firms with a majority of independent directors on the board ($BOARD > 0.5$) pay significantly (about 11%) lower dividends than other firms. Therefore, board independence and dividend payments appear to be substitute mechanisms in controlling agency problems. Highly leveraged firms, on the other hand, pay lower dividends due to the higher cost of external finance and restrictions imposed by protective covenants in debt contracts.

ROBUSTNESS

We report the results from additional robustness tests in this section. First, in light of the increasingly popular use of share repurchases and the criticism that the vast majority of the finance literature has analysed the payout question with only a narrow definition of dividend payout (Allen & Michaely, 2003), we include share repurchases in our payout measure. There are 22 firms in our sample that had a share repurchase in 2005. Of the ownership variables, only the voting rights of the controlling shareholder (VOTING1) is significant. The explanatory power of this model is much poorer than that reported in Tables 3 and 4. Including share repurchases in our measure of payout appears to create more noise.

The pyramidal structure is an effective method of separating control from ownership (Bertrand & Mullainathan, 2003) and was included in our tests. In the example provided in DATA section, if the shareholder owns 100% of firm X, which owns 100% of firm Y, then this structure is not pyramiding, and there is no separation between control rights and cash flow rights. A binary variable PYRAMID indicates the presence of a pyramidal structure in our sample firms, where CRVR is not unity. The pyramidal structure is present in 22% of the firms. Our results show that PYRAMID is generally insignificant and including it does not materially affect the results.

We identified the second largest shareholder and included it in the tests. As with the largest shareholder, we identified the second largest shareholder as belonging to a family group, corporation, state or financial institution. The results show that the identity of the second largest shareholder is insignificant and its inclusion does not change our conclusions.

We used a composite measure of corporate governance based on the data provided by the Institutional Shareholder Services (ISS).¹² Following the

¹² The ISS defines a total of 61 governance factors, which can be classified into eight categories: board of directors; audit; charter/bylaws; state of incorporation; executive and director compensation; progressive practices; ownership; and director education.

method in Brown and Caylor (2009), the composite measure encompasses a variety of both internal and external corporate governance factors. For the 54 sample firms for which we are able to extract this governance measure, the results show that firms with better governance in place pay significantly lower dividends. However, none of our ownership variables, including CRVR, are significant in this reduced sample.

SUMMARY AND CONCLUSION

The major agency problem in firms with concentrated ownership is the potential conflict of interest between the controlling and the minority shareholders. This problem is even more severe in Hong Kong firms, which typically have families as controlling shareholders and family members as top managers. We exploited this ownership and control structure of Hong Kong firms by examining how it relates to corporate dividend policy.

Evidence was provided suggesting that ownership structure and control have a significant impact on corporate dividend policy in Hong Kong. This is observed despite significant improvements in the corporate governance environment in Hong Kong in response to the 1997 Asian financial crisis. Specifically, we found a lower propensity and amount of dividend payouts in firms where the separation between cash flow rights and control rights is greater. The relationship between potential expropriation and dividend policy is stronger in firms where the controlling shareholder belongs to a family group. Therefore, families are more likely than non-families (in particular corporations) to extract wealth from outside shareholders when they are able to do so (lower cash flow rights relative to voting rights). Thus, our main results support the expropriation hypothesis, with firms paying out less dividends when the controlling shareholders have substantial power to expropriate.

Small- to medium-size family-controlled firms are significantly more likely to pay dividends and have higher dividend payouts than other family-controlled firms. This may be due in part to smaller family-controlled firms being more internally financially constrained and thus depend more on the external market for their financing requirements. Since dividends are not taxed in Hong Kong, we cannot rule out that in the case of small firms, the main earners draw a low salary, leaving more profits to be paid out as dividends to shareholders who are family members. However, our results show that this association is moderated by the threat of expropriation, as measured by the divergence between the controlling shareholder's cash flow rights from voting rights.

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