РАЗДЕЛ 3 КОРПОРАТИВНОЕ УПРАВЛЕНИЕ В КАНАДЕ

SECTION 3 NATIONAL PRACTICES OF CORPORATE GOVERNANCE: CANADA

CORPORATE CONTROL, FAMILY FIRMS AND DIVIDEND DECISIONS IN CANADA

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Abstract

The purpose of this paper is to examine the relationship between dividend payments, firms' decisions control and the nature of family firms, in order to assess whether large shareholders expropriate wealth from minority shareholders in Canada. Using data collected from various sources, we formulated and tested three hypotheses related to this issue using OLS and logit regression models. Our results indicate that in Canadian firms, dividends are used as a protective mechanism for minority shareholders against the possibility of expropriation by large shareholders. The protective power of dividend, however, seems less effective in Canadian family firms. The hidden reason is the control that families exert on the dividend payout policy. Overall, our results show no clear evidence of expropriation of wealth inflicted on small shareholders by large shareholders. This research has shown that the financial policies of Canadian firms in which a family represents the majority of the shareholders are insufficiently studied and deserve the attention of finance academia and professionals, due to their significant impact on corporate dividend policy.

Keywords: corporate control, family firms, dividend decisions, large shareholder, minority shareholders, expropriation.

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1. Introduction

Family business (FB) is a prominent form of business organization around the word, both in developed and emerging economies FB is actively contributing to economic growth and wealth creation. To underline, FB constitutes 35% of fortune 500 firms in United States (US) (Dyer, 1986) while in Canada FB represent 56.16% of the 1121 companies listed on the Toronto Stock Exchange (Attig and Gadhoum, 2003). Furthermore, FB is also a prominent form of business organization in Germany where families are large shareholders of companies (Franks and Mayer, 2001). _Claessen et al., (1999) surveyed 2980 publicly traded corporations in 9 East Asian countries; they found that the majority of these corporations were family controlled, except in Japan. Importance of FB is not limited to large publicly traded firms: FB's as a percentage of total firms are even higher when all business forms are considered (including corporations, partnerships and sole proprietorships). Hence, these numbers indicate that family business (FB) is a key economic factor almost everywhere around the world.

Most researchers have focussed on FB's characterization (organisation behaviour studies) and FB's performance (finance studies), neglecting many others important research areas of FB such as financial policies. This is particularly obvious in the Canadian setting where very little effort has been devoted to the study of this important organizational form. The aim of this paper is to shed light on FB financial policies, namely the dividend policy; more specifically it will examine whether dividend decisions depend on the degree of voting rights concentration.

Parallel to Khan and Rocha (1982), Faccio, Lang and Young (2001), our paper hypothesized that not only does ownership structure (more precisely the voting rights structure), but also the organization forms are critical variables affecting firms dividend decisions. Faccio, Lang and Young (2001) analysed the relationship between dividend and the ratio of ownership over control in nine East Asian countries; they found that significantly higher dividends are paid by corporations that are tightly affiliated to a business group.

Their result suggests that investors strongly within anticipate expropriation corporations exhibiting low ownership (based on control ratios) compared to corporations that are tightly affiliated to a business group. To alleviate this perceived expropriation problem, fairly higher dividends need to be paid by low ownership or control ratio. La Porta, Lopez-de-Silanes, Shleifer and Vishny., (2000) test the law regime hypothesis and report that higher dividends are paid by corporations in countries offering strong legal protection to minority shareholders, under the common law regime, when compared to countries under a civil law regime.

The remainder of the paper is organized as follows. Section 2 formulates the research hypotheses. Methodology and necessary data bases are being presented in section 3. Then, section 4 discusses the study's empirical results in conjunction with existing relevant financial literature. Finally, section 5 presents our conclusion regarding the expected relation between degree of voting rights concentration and FB's dividend decisions.

2. Research Hypotheses

Agency theory offers an interesting framework to test the relationship between voting rights concentration and dividend policies especially in the context of a FB where a family stakeholder holds a significant block of total voting rights.

Separation of ownership and control that characterize widely held firms induces agency problems between shareholders and managers; even if shareholders have ultimate control rights, they cannot exercise an effective control of the firm activities on a day-to-day basis. First, their individual stake is too small to be worth the effort. In addition, these numerous and small shareholders are not qualified decision makers (business managers). They prefer to delegate the firms` day-to-day management to professional. As outlined by (Hart, 1995), in a disperse ownership environment, monitoring is a public good and individual shareholders have little incentive to monitor management. Monitoring is costly and small shareholders are not willing to incur such costs, they prefer to hope that someone else will perform this task and thus adopt a free rider attitude. Consequently, managers end up with substantial residual control over firm decisions. Thus, they are free to pursue their own interests at shareholders expense. Being aware of this potential expropriation problem, shareholders will prefer to receive more dividends: since increased dividends reduce free cash flows available to managers.

Shleifer & Vishny (1986) argue that the emergence of one or several large shareholders (i.e., ownership concentration) can help overcome the shareholders-managers agency problem. Large shareholders have more incentive to collect information and improve management monitoring thereby, avoiding the traditional complacency of small shareholders (free rider attitude). This improved alignment of ownership and monitoring control reduces agency costs since there is less room for managers opportunism.

The fact that increased ownership concentration can mitigate the agency problem between shareholders and managers does not mean that all agency problems have vanished, others still exist. To illustrate, agency problems arising from conflict of interest between majority and minority shareholders is a good example. As argued by Shleifer & Vishny (1997), as "large owners gain nearly full control of

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the corporation, they prefer to generate private control benefits, benefits that are not shared by minority shareholders. Even though many mechanisms can be used to expropriate minority shareholders, increasing dividends is the most important one, as outlined by (Faccio, Lang & Young, 2001).

As mentioned above, dividend payments play a key role in containing insider expropriation because these payments remove corporate wealth from insider control (management). When profits are not distributed to shareholders, insiders get an opportunity to use the existing free cash flows for their own personal objective or to engage in unprofitable or low returns investment projects of benefit to them. Therefore, small shareholders (or outsiders) have a preference for dividends over retained earnings (La Porta, Lopez-de-Silanes, Shleifer & Vishny, 2000). Given the above reasoning, we state the following hypothesis 1:

Hypothesis 1: In Canada, divided policy is being used as a minority shareholder's protection device against potential expropriation by large or majority shareholders.

Given potential expropriation of minority shareholders by large shareholders who control firms' decisions, in Canada, a positive and significant relationship should exist between dividend payment and ownership, control concentration measured by an appropriate proxy variable.

Stated differently, Hypothesis 1 means that dividends act as a protecting device for minority shareholders. As discussed below, FB offers an interesting setting to test hypothesis 1.

Withstanding the need to protect minority shareholders against expropriation, family firm status can impact the dividend policy. Family businesses are usually dominated by a controlling shareholder who left other family members in different minority and or, management positions in the firm (for example, CEO, chairman, honorary chairman or vice chairman).

At first glance, tight family control over a firm's decisions should translate into relatively more stable dividend policy in order to keep financial resources under direct family control. As underlined by La Porta, Lopez-de-Silanes, Shleifer & Vishny (2000):

A good example is Velcro Industries, the producer of the famous "touch fastener" incorporated on the island of Curacao in the Netherlands Antilles, "where shareholders have no right of dissent" (Forbes, October 15, 1990). Twothirds of the shares of Velcro Industries are controlled by the Cripps family that runs Velcro (Forbes, May 23, 1994). In 1998, despite of having a large cash reserve, the company suspended dividends "for the foreseeable future", (Forbes, October 3 1988), unlisted itself from the Montreal Stock Exchange, and aggressively wrote down assets to slash earnings, evidently to "buy out Velcro minority holders" (Forbes, May 23, 1994).

La Porta et al. (2000) above example leads to the following second paper's hypothesis:

Hypothesis 2: Family owned firms should exhibit a more stable divided policy

Dividend policy changes in family controlled firms should tend to be rarer since such firms prefer to keep financial resources under direct family control. To validate hypothesis 2 one should observed a negative and statistically significant relationship between dividend policy changes and an appropriate proxy for family business or FBs'.

Even if minority shareholders try to protect themselves against potential expropriation, family owners are still in a position to pay fewer dividends through their control and thus freeing up cash flows for personal use. Given this situation, we formulate the third hypothesis.

Hypothesis 3: In Canadian owned family firms, stability in the dividend policies are determined by family status and control concentration, as captured by appropriate proxies variables.

By limiting changes in their dividend policies, hypothesis 3 would mean that FB succeed in their effort to expropriate minority shareholders in Canadian family owned firms In order for hypothesis 3 to be true, a negative and statistically significant relationship between dividend change and the interaction term between family status proxy and control concentration proxy has to be observed.

3. Data And Methodology

3.1. Data and variables

The data used in this paper is gathered from various sources for the years 1989, 1990 and 1991. These include Stock guide, under the heading 'Corporate Profile'; Financial Post, under the headings 'Survey of Industrials' and 'Survey of Mines and Energy'; Intercorporate Ownership in Canada.

Two dependent variables are considered in the econometric models presented in section 3,2 below.

The annual dividend per share (symbolized by DPS) is used in testing hypothesis 1. DPS is defined as the sum of the quarterly dividend per share after taking into account all possible stock splits. For hypotheses 2 and 3, a Dummy variable labeled DPSCHANGE is used; DPSCHANGE is defined as follows:

DPSCHANGE_{i,t} = 1 if DPS_{i,t} - DPS_{i,t-1} \neq 0 and DPSCHANGE = 0 otherwise

Regarding independent variables, voting rights cconcentration (CONC) is approximated by three different variables: MSVR, which represents the major shareholder's voting rights, MDCEOVR, which represents the managers, directors and CEO voting rights and 5MSVR, which is defined as the sum of the voting rights of the five largest shareholders. For the family classification, there is no agreement in the literature reviewed on what constitutes a family. One commonly used definition considers family businesses as businesses in which the members of a family have legal control over ownership. For the purpose of this study, we put the focus on very large families (FML) as reported by Statistics-Canada. FML is thus a dummy variable which takes the value 1 when we are in presence of a very big family, according to Statistics-Canada, and zero otherwise. All other configurations are called non family (NFML) firms.

Various sets of control variables are used in the paper's regression models:

i) Free Cash Flows (FCF), defined as the amount of cash available after the coverage of all financial needs (such as dividend payment, project financing, and debt repayment) over total assets. According to Jensen (1986), firms with substantial free cash flows (such as family owned firms) will have a tendency to have high agency costs. In fact, free cash flows can discretionarily be used by managers for their own private interest. Money can be wasted by using it in expenses for which these managers have some professional advantages or by self-aggrandising (over-investing by accepting projects with negative net present values) so that the size of the firm is increased and in the same stroke, their own personal prestige. Our model therefore predicts that if the free cash flows increase, managers will be urged by the minor shareholders to pay more dividends.

ii) Transaction volume (VOL). The model used in this paper anticipates a negative relationship between dividend payments and the volume since dividend payments reduce the bid-ask spread and therefore increases the transaction volume.

iii) Size (SIZE): Zéghal (1979) showed that large firms produce more information (in addition to their financial statements) than smaller one, and that this information creates an improved and larger diffusion. If it is in competition with the information conveyed by the dividends, the signalling efficiency of the latter diminishes. Given the signalling costs, we can expect a negative relationship between size and dividend payments. However, it is usually assumed that large firms tend to have high free cash flows and weak growth. Hence, it is sustainable that rational shareholders request high dividends from large firms in order to lessen the agency costs. Thus, we can also hypothesize a positive relationship between size and dividend payments. In others words, the sign of the relationship that should be anticipated is not clear. Many measures of firm size are suggested in empirical studies. We first consider total assets as a proxy of size. However, we tested for multi co linearity and found that size (total assets), the insider stake (CONC) and the transaction volume (VOL) variables, exhibited multi co linearity. In order to correct for this problem, we then regressed our size proxy on these multi co linear

variables and created a new variable "RSIZE" into the regression equations, "RSIZE being the residual of the regression of size on the CONC and VOL variables.

iv) Past growth (PASTGR): According to the pecking order theory, we can expect firms to pay fewer dividends if they have experienced past growth. This hypothesis supports the view that growth entails higher investment expenditures and may influence dividend payments because external financing is costly (Myers & Majluf, 1984). This implicit relationship between dividend policy and investment policy is confirmed by Rozeff (1982). Our model anticipates a negative relationship between past growth and dividend payments.

v) Potential growth (POTGR): For the reasons evoked in the preceding paragraph, prudent managers will retain a greater proportion of the firm's cash flows if they anticipate an expansion so as to avoid costly external financing. Hence, our model predicts a negative relationship between anticipated growth and dividend payments. Rozeff (1982) used Value Line's forecast of the growth of sale revenues as a measure of the management expectations of growth. According to Thomadakis (1977), the latter should be market related. On this basis and according to Lang & Litzenberger (1989), we proxy POTGR by a useful version of the Tobin's Q ratio defined as the firm market value over the book value of equity.

3.2. Econometric model

In order to test hypothesis 1, the following economet ric model is being used:

$$DPS_{it} = \alpha_0 + \alpha_1 CONC_{it} + \alpha_2 FCF_{it} + \alpha_3 VOL_{it} + \alpha_4 PASTGR_{it} + \alpha_5 POTGR_{it} + \alpha_6 RSIZE_{it} + \varepsilon_{it},$$
(1)

Were i is the firm index, t is the time index and ε is the error term.

To test hypotheses 1 and 2, a logit model is being used to investigate whether family status affects dividend policy changes. The econometric model is specified as follows:

(2)

(1)

$$\begin{split} & \text{E}[\text{DPSCHANGE}_{ii} = 1 \mid CONC, FML, CV] = \text{PROB}[\text{DPSCHANGE}_{i}] \\ & = \beta_0 + \beta_1 \text{CONC}_{ii} + \beta_2 \text{FML}_{ii} + \beta_3 \text{FCF}_{ii} + \beta_4 \text{VOL}_{ii} + \beta_2 \text{PASTGR}_{ii} + \beta_6 \text{POTGR}_{ii} \\ & + \beta_1 \text{RSIZE}_{ii} + \beta_8 \text{FCONC}_{ii} + \beta_9 \text{FFCF}_{ii} + \beta_1 \text{eVOL}_{ii} + \beta_1 \text{ePASTGR}_{ii} \\ & + \beta_1 \text{FPOTGR}_{ii} + \beta_1 \text{FRSIZE}_{ii} + \mu_{ii}, \end{split}$$

were CV stands for the set of control variables; FCONC, FFCF, FVOL, FPASTGR, FPOTGR and FRSIZE is the interaction term between FML and respectively CONC, FCF VOL, PASTGR, POTGR and RSIZE and i is the firm index, t is the time index and μ is the error term.

4. Results and Discussion

The regression results for our first Hypothesis are reported in the following Table 1. Regressions were performed on the full sample, the *only-family* sub-

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sample and the *non-family* sub-sample. [See appendix, Table 1].

The coefficients of voting rights concentration (CONC) proxies [i.e., the major shareholder's voting rights (MSVR), the managers, directors and CEO stake (MDCEOVR) and the five main shareholders voting rights (5MSVR)¹ are positive and significant for the full sample and for the non-family sample regressions. For the family sample regression, they are all positive, but not significant. These results validate our first hypothesis which states that, the possibility of expropriation of minority shareholders by large shareholders who control firms' decisions induces the use of dividends as a protective device of minority shareholders in Canada. The concentration of voting rights in the hand of a large shareholder (or large shareholders) seems to induce fear of expropriation manifested by minority shareholders. Those shareholders then seek more dividends in order to reduce the free cash flows available to the large shareholders. In the family sub-sample however, results suggest that minority shareholders protection is less effective in family owned firms.

Regarding the control variables, the free cashflows effect is positive, but only significant for the family sub-sample. Then, as free cash flows increase, family firms tend to pay more dividends. The volume effect (VOL) and the size effects (RSIZE) on dividend payments are positive and significant, except for VOL in family firms, which is not significant. Non-family firms generally pay fewer dividends when they have experienced past growth (PASTGR), on the other hand this is only occasional in family firms (with a negative and significant coefficient in model 3). For the potential growth effect (POTGR), it is non significant in all cases.

Table 2 summarizes the results of the logit regressions of our explanatory variable on dividend changes. The parameters were estimated using the maximum likelihood approach.

[See appendix, Table 2].

For Hypothesis 2, the results show that the family status (FML) is negatively related to dividend change and significant in models 2 and 3. Therefore, we cannot reject the hypothesis which states that "The probability of dividend change is lower in family firms were the owning family prefers to keep more financial resources under its control in order to use for its own purposes". While the concentration of control is positively and significantly related to dividend changes (the coefficient of the variable CONC is positive and significant in each of our 3 regression specifications) the owning family is powerful enough to control the dividend payout policy, and can therefore neutralize the protective power of dividends. Does this lead to effective expropriation of minority shareholders?

This question is addressed below through our third hypothesis.

Our third hypothesis is validated if there is a negative and significant relationship between DPSCHANGE and the interaction term between the family status proxy and control concentration (FCONC). Table 2 shows that FCONC is positively related to DPSCHANGE in our 3 models, and significant in models 2 and 3. This forces us to reject our third hypothesis which states that by exerting changes in the dividend payout policy owning families succeed in expropriating minority shareholders in Canadian family owned firms. Thus, even though the family firm's owners can use their concentration to change the payout of dividends depending on their personal or business needs they do not effectively succeed in expropriating minority shareholders.

5.Conclusion

Agency theory suggests a close relationship between the possibility of expropriation of minority shareholders and dividend policy. In effect, in the presence of potential expropriation of minority shareholders by large shareholders, dividend payments can act as a protective device, by shifting financial resources from the large shareholder to minority shareholders.

In this research, we formulated and tested three hypotheses related to dividend policies and the possibility of expropriating minority shareholders in Canadian firms. Our results indicate that the possibility of large shareholders expropriating minority shareholders induces the use of dividends as a protective device for minority shareholders. To further support this statement our analysis shows a positive and significant relationship between dividend payments and proxies of voting rights concentration. On the other hand, the protective power of dividends seems to be less effective in Canadian family firms where the owning family can exert its control on the dividend payout policy. Hopefully for minority shareholders, this does not result in an effective expropriation of their wealth. Overall, the results show no clear evidence of expropriation of minority shareholders through dividends for Canadian family-owned firms. More research is required however, with a larger sample of family firms. The aim would be to quantify the private benefits extracted from the controlling family in firms where it represents a large concentration of the voting rights.

One of the implications of this paper has been to show that family firms' financial policies are insufficiently studied in finance and have interesting features which deserve the attention of financial academics and professionals.

¹ These variables were introduced separately into our regressions. This justifies the use of models 1 to 3.



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Appendix

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|---------------------------------|------------------|-----------------|-------------|
| Table1. Impact of voting rights | concentration on | infins dividend | a decisions |

| | | Full sample | FML | NFML |
|--------------------|-----------------------------------|---------------------|--------------------|---------------------|
| VARIABLES | DESCRIPTION | (n = 278) | (n = 205) | (n = 73) |
| | MU | DEL 1 | | |
| | | 0.0800 | 0.1000 | 0.0800 |
| INTERCEPT | Intercept | (0.0113) | (0.2617) | (0.0095) |
| | <u>^</u> | 0.0020 | 0.0007 | 0.0020 |
| | CONC = MSVR = Major | (0.0001) | (0.5698) | (0.0001) |
| CONC | shareholder's voting rights | 0.0000 | C 01 00 | 0.0400 |
| FCF | F 10 | 0.2000 | 6.2100 | 0.0400 |
| | Free cash flow | (0.1956) 2.8700 | (0.0001) 2.1900 | (0.773) 2.9800 |
| VOL | Transaction and have | | | |
| | Transaction volume | (0.0001) -0.0007 | (0.7182) 0.0003 | (0.0001) -0.0007 |
| PASTGR | Past growth | (0.0249) | (0.8694) | (0.0288) |
| PASTOR | Past growth | -0.0003 | 0.0300 | -0.0003 |
| DOTCD | Tobin's Q Ratio | (0.6701) | (0.4207) | (0.6558) |
| POTGR | | 0.0800 | 0.0600 | 0.0800 |
| RSIZE [*] | Size effect | (0.0001) | (0.0033) | (0.0001) |
| KSIZL | R-square | 0.2738 | 0.8179 | 0.2745 |
| | 1 | | 0.8179 | 0.2745 |
| | MC | DEL 2 | | |
| | | 0.1400 | 0.0200 | 0.1500 |
| INTERCEPT | Intercept | (0.0001) | (0.7866) | (0.0001) |
| | | (******) | (011000) | (010000) |
| | CONC = MDCEOVR = Manager, | 0.0010 | 0.0010 | 0.0010 |
| CONC | directors and CEO's voting rights | (0.0135) | (0.2144) | (0.0312) |
| | | 0.2100 | 6.1200 | 0.0400 |
| FCF | Free cash flow | (0.1946) | (0.0001) | (0.7774) |
| | | 2.600 | 0.6900 | 2.6800 |
| VOL | Transaction volume | (0.0005) | (0.9086) | (0.0003) |
| | | -0.0007 | 0.0003 | -0.0007 |
| PASTGR | Past growth | (0.0217) | (0.8475) | (0.0246) |
| | | -0.0003 | 0.0300 | -0.0003 |
| POTGR | Tobin's Q Ratio | (0.6977) | (0.3461) | (0.6754) |
| | | 0.0800 | 0.0600 | 0.0800 |
| RSIZE [*] | Size effect | (0.0001) | (0.0034) | (0.0001) |
| | R-square | 0.2503 | 0.8258 | 0.2503 |
| | MO | DEL 3 | | |
| | | 0.0700 | 0.0700 | 0.0700 |
| | | (0.0671) | (0.5041) | (0.0650) |
| INTERCEPT | Intercept | (0.0071) | (0.5041) | (0.0050) |
| | CONC = 5MSVR = | 0.0020 | 0.0009 | 0.0020 |
| CONC | 5 major Sh. voting rights | (0.0008) | (0.5602) | (0.0015) |
| FCF | | 0.2100 | 6.2400 | 0.0500 |
| | Free cash flow | (0.1737) | (0.0001) | (0.7352) |
| | | 3.0200 | 2.3300 | 3.1200 |
| VOL | Transaction volume | (0.0001) | (0.6974) | (0.0001) |
| PASTGR | | 0.0002 | -0.0001 | -0.0007 |
| | Past growth | (0.8973) | (0.0342) | (0.0342) |
| POTGR | | -0.0003 | 0.0300 | -0.0004 |
| | Tobin's Q Ratio | (0.6737) | (0.4239) | (0.6560) |
| * | | 0.0800 | 0.0500 | 0.0800 |
| RSIZE [*] | Size effect | (0.0001) | (0.0046) | (0.0001) |
| | R-square | 0.2614 | 0.8180 | 0.2632 |

(*) Due to possible collinearity between SIZE, CONC and VOL, we regressed the original size proxy on CONC and VOL, and consider RSIZE, the residuals of the regression as the new proxy of SIZE.

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| | Model 1 (n=278) | | Model 2 (n=278) | | Model 3 (n=278) | |
|------------------|--------------------|---------|--------------------|---------|--------------------|---------|
| Variables | Parameter | P-Value | Parameter | P-Value | Parameter | P-Value |
| Intercept | -1.4218 | 0.0001 | -1.2651 | 0.0001 | -1.3135 | 0.0001 |
| CONC (MSVR) | 0.0103 | 0.0001 | | | | |
| CONC (MDCEOVR) | | | 0.00787 | 0.0001 | | |
| CONC (5MSVR) | | | | | 0.00638 | 0.0144 |
| FML | -0.7527 | 0.2510 | -3.4882 | 0.0009 | -3.1208 | 0.0042 |
| FCF | -1.3414 | 0.003 | -1.3614 | 0.0025 | -1.3170 | 0.0035 |
| VOL | 24.3415 | 0.0001 | 23.5361 | 0.0001 | 23.8135 | 0.0001 |
| PASTGR | -0.0115 | 0.0001 | -0.0117 | 0.0001 | -0.0115 | 0.002 |
| POTGR | -0.0203 | 0.3813 | -0.0193 | 0.3538 | -0.0210 | 0.3780 |
| RSIZE* | 0.4277 | 0.0001 | 0.4368 | 0.0001 | 0.4305 | 0.0001 |
| FCONC (FMSVR) | 0.00922 | 0.3709 | | | | |
| FCONC (FMDCEOVR) | | | 0.0452 | 0.0015 | | |
| FCONC (F5MSVR) | | | | | 0.0388 | 0.0055 |
| FFCF | 10.1174 | 0.7470 | -29.8390 | 0.3387 | -20.0566 | 0.5213 |
| FVOL | -81.7743 | 0.2377 | -227.1 | 0.0051 | -181.1 | 0.0204 |
| FPASTGR | -0.0111 | 0.4789 | -0.0245 | 0.1641 | -0.0203 | 0.2400 |
| FPOTGR | 0.8011 | 0.0051 | 1.0332 | 0.0011 | 0.9819 | 0.0018 |
| FRSIZE | 0.3802 | 0.0544 | 0.551 | 0.0086 | 0.4498 | 0.251 |
| Concordant : PC | 0.734 | | 0.737 | | 0.733 | |

Table 2. Logit regressions of explanatory variables on the probabilities of changes in dividend payments

(*) Due to possible collinearity between SIZE, CONC and VOL, we regressed the original size proxy on CONC and VOL, and consider RSIZE, the residuals of the regression as the new proxy of SIZE. FCONC, FFCF, FVOL, FPASTGR, FPOTGR and FRSIZE are the interaction term between FML and respectively CONC, FCF VOL, PASTGR, POTGR and RSIZE.



Figure 1. The Wallace McCain family group (C = Control; O = Ownership. The numbers in parenthesis hold for indirect control and ownership).

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Figure 1. The Wallace Mc Cain family group (continued)

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