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SECTION 1

MACROECONOMIC PROCESSES AND REGIONAL ECONOMIES MANAGEMENT

Understanding Roots and Means of Enhancing Control: A North American Empirical Analysis. Part II¹

Yoser Gadhoum²

Abstract

We analyze in this paper, which is a second part of the paper by the same author: Politics and Finance in the same volume of this Journal, the separation of control from ownership in Canada (1120 firms) and in US (3969 firms). Our extensive empirical results show that this separation is obviously less present in US than in Canada. Besides, the separation is accentuated via different means of enhancing control. In that, we report that pyramidal, cross and reciprocal holdings are more pronounced in Canada than in US. Moreover, the use of non voting shares, multiple class of shares, and the appointment of family related members in top management positions are significantly higher in Canada than in US. On the other hand, we document that families are the most prevalent type of controlling shareholders in Canada. In fact, they control 56.16% of Canadian firms compared to 38.27% in US. Surprisingly we document, in Canada, the existence of managers related to controlling families within State or financial institution controlled firms. These cases support the evidence reported by Claessens *et al.* (2000) and Mara and Lang (2000) that concentration of control in the hands of a few families represents an important lobby demanding preferential treatments by government agencies, and leading to the possibility of “crony capitalism”. Overall, our findings sustain the hypothesis that the probability of expropriation is higher in Canada than in US.

Key words: chain of ownership; expropriation; political system.

JEL Classification: G32

1. Introduction

In this paper we discuss the means used by controlling shareholders to overarch their control and, eventually, expropriate minority interests. In particular, we examine the mechanisms used to achieve a separation between ownership and control; with reference to the use of multiple class voting shares, non voting shares, pyramidal structures, cross-holdings, reciprocal-holdings and to the appointment by the controlling family of their members into top management positions to overarch their control. In contrast to previous studies, we report that the magnitude of the deviations from the one-share one-vote rule, through the use of multiple class voting shares, is significantly high in Canada when compared to US (but relatively close to the proportion reported for Western European firms). Also, the use of non voting shares is more pronounced in Canada than in US, these two evidence may reflect power of the ultimate owner who tries to monopolize the control of voting shares without being financially constrained. This is confirmed by the capital necessary to control 20 percent of votes (Own=20%Con) which is equal to 18.31 in Canada and 19.32 in

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US¹ (which is almost the same as what is reported for West Europe)². As the deviation of control rights from cash flow ones is relatively high in Canada, the probability that ultimate controlling owner will expropriate atomistic absentee shareholders is high.

Our conjecture is confirmed by the fact that in Canada, pyramidal holdings, cross holdings and reciprocal holdings are significantly more frequent in Canadian corporate ownership structure than in US one. We identify two further means of strengthening ultimate control, namely being the only controlling owner, and having a member of the controlling family as the CEO, Honorary Chairman, Chairman, or Vice-Chairman of the company. In this study, we check whether a member of the controlling family is the CEO, Honorary Chairman, Chairman, or Vice-Chairman of the board. For this purpose we only analyze family controlled firms since we cannot collect information on officers and directors appointed by other shareholders, such as the State, financial institutions or other corporations. The only way to obtain information on family membership is by looking at the last name of the director. This method is likely to bias our results towards an under-estimation of family affiliation inside the boards of family-controlled firms. Moreover, our results may also be biased because smaller companies are more likely to have an owner who is also the CEO or Board Chairman. Keeping these drawbacks in mind, we document that 71.43 (73.46) of family ultimate owners, at 10 (20) percent threshold, point their family members into the top management positions. These figures become 66.78 (74.51) in the US, at the two thresholds respectively. The difference between Canada and US is only significant at the 10 percent cut-off level.

Table 3

Means of enhancing control and expropriation symptoms in Canada and US (full samples, percentage of total)

The newly-assembled data for a total number of 5,089 publicly-traded corporations (1120 Canadian firms and 3969 US firms), including both financial institutions and non-financial institutions, are collected from the *Financial Post* (FP) "Survey of Industrials" (1996) and *Intercorporate Ownership in Canada* from Statistics Canada (1996) for Canadian Data and Worldscope Global 1996 Discloser and Securities & Exchange Commission Web site for US Data.

Panel A: Means of enhancing control (10%)			
	US (N=3969)	Canada (N=1120)	t
Own=20%Con	19.32	18.31	-8.54*
Non voting shares (%)	1.60	6.83	9.27*
Multiple class shares (%)	8.39	15.98	7.26*
Pyramidal holdings (%)	8.52	33.82	21.91*
Cross holdings (%)	1.15	8.18	12.73*
Reciprocal holdings (%)	0.13	2.6	8.82*
Existence of second ultimate owner (%)	22.67	37.40	9.71*
Manager(s) from controlling family (10% cut-off)	66.78	71.43	2.04
Manager(s) from controlling family (20% cut-off)	4.98	15.98	12.25*
	74.51	73.46	-0.40

¹ The difference is significant at 5% level.

² (19.19 percent, as reported in La Porta et al (1999)) where the use of dual class of share is rather rare, and also lower to the ratio for western European countries (19.36 percent), but closer to the ratio of Italian corporations (18.39 percent). Thus, the relatively low Own=20%Con ratio (compared to other countries around the globe) signal that the use of multiple class shares is quite common in Canada.

Table 3 (continuous)

Panel B: Expropriation symptoms			
Largest ultimate cash-flow rights	14.61	25.61	15.72*
Largest ultimate control rights	16.01	31.56	20.73*
Ratio of largest ultimate cash flow rights over largest ultimate control rights	0.56	0.67	6.53*
Ratio of second largest ultimate cash-flow rights over second largest ultimate control rights	0.20	0.31	7.39**
Ratio of the first largest ultimate cash-flow rights over the second largest ultimate cash flow rights	34.69	168.61	38.08*
Ratio of the first largest ultimate control rights over the second largest ultimate control rights	3.42	57.06	48.72**
Concentration (the sum of the five first immediate blocks of control)	30.13	42.7	13.97
First block over second block of control	5.24	4.53	-3.34*

We next check whether the firms have a single or more than one ultimate owner. We report that 37.40% of Canadian firms have a second ultimate owner compared to only 22.67% in US firms. This may be a good indicator of corporate governance, as it is theoretically argued that a second ultimate owner may play the role of an effective monitor that is likely to represent a threat to the largest shareholder, and to weaken the channels that lead to expropriation. However, the second ultimate owner may have the opposite role. He may collude with the first ultimate owner and conspire with him to expropriate minority interests, especially when the ultimate owner is a family. We will examine this eventuality later in the paper. However we can conjecture that the presence of a second ultimate owner in Canada, would enhance the controlling power of the largest ultimate owner, as a market discipline¹ (e.g. market efficiency, regulation and law) on insider trading, disclosure requirements, and manipulative practice are much weaker in Canada than in US.

Overall, we find that controlling shareholders of Canadian traded companies use pyramids, cross-holdings, reciprocal holdings, point related members into top-management positions, and use multiple class of voting shares more frequently to gain control than the controlling shareholders of US traded companies do. These findings, accentuate the difference between Canadian and American corporate structures, and mainly reveal the power the ultimate owner has in Canada and show the magnitude of expropriation opportunities. We next examine some expropriation “symptoms”. For that, we report in (Panel B, Table 3) results on concentration of cash flow and control rights in Canadian and US corporations. We find that largest ultimate controlling shareholder owns on average 25.61 percent of cash flow rights, and controls 31.56 percent of voting rights, however they are respectively 14.61 and 16.01 for US sample. Panel B of Table 3 also documents the ratio of cash flow to voting-rights, which measures the separation between ownership and control. Unexpectedly, we find that ratio of largest ultimate cash flow rights over largest ultimate control rights in US (0.56) is lower than the counterpart ratio in Canada (0.67). But in fact this result is not surprising as it looks², as in US there are more widely held firms and the values for the largest ultimate control and cash flow stakes will be zero, and consequently (in these cases) we give value zero to the ratio of largest ultimate cash flow rights over largest ultimate control. If we look at the medians values of this variable, results are as expected.

From a comparative standpoint, these figures are lower than those reported in Mara and Lang (2000) for Western European firms where they found that the largest shareholder owns on average 34.6 percent of cash flow rights, and controls 37.75 percent of voting rights. Ownership and control are, on average, much higher in our sample than for the nine East Asian countries (Claessens et al, 1999). In East Asia, the largest ultimate owner, on average, owns 15.70 percent of cash flow rights, and controls 19.77 percent of voting rights. However, the cash flow to control rights ratio is higher in West Europe than in East Asia and Canada.

¹ Small shareholder protection in Canada is weaker than in US.

² We will show later that this ratio is lower when we consider the family controlled firms or firms with ultimate owner.

Moreover, we compute the ratio of the first largest ultimate cash flow rights over the second largest ultimate cash flow rights and similarly the ratios of the first largest ultimate control rights over the second largest ultimate control rights. We find that these two ratios are sharply higher in Canada than in US. Especially, the ratio of control rights of the first largest over the second largest stakes, is a meaningful indicator of the power of the ultimate owner, which is extremely high in Canada (168.61) compared to only (34.69) in US. Obviously, this would give incentives to the ultimate owner to expropriate and monopolize firm's wealth, and the second ultimate owner will have not the necessary power to impede the channels of expropriation.

Finally, to shed more lights on the expropriation opportunities we sum the control rights of the five largest immediate shareholders and compute the ratio of the first block over the second block. Our results are also reported in Panel B of Table 3. We find that concentration of the control rights is significantly higher in Canada than in US, and that the ratio of the first block over the second block of control is significantly lower in Canada than in US. This may seem, at first glance, a contradiction to the pattern we show earlier. However, we conjecture that this is even a mean of entrenchment for the owner of the largest block. In fact, as family firms are the most concentrated firms, the controlling owner may share another large part of the firm control with a related controlling shareholder, this may allow to manipulate firm decisions and wealth.

As a conclusion of this section, we report differences of control in Canadian firms compared to US firms and other Western European and East Asian ones. These differences may be related to differences in regulations across countries. Furthermore, in Canada there is more chance that minority shareholders will be expropriated by large controlling owner. In an attempt to clarify a little more the opportunities of expropriation in Canada compared to US, we classify firms by size. This will allow us to confirm or infirm our conjecture that large shareholders in small firms are more likely to enjoy expropriation behavior than in large firms. Results are discussed in the next section.

2. The Effects of Size on the Means of Enhancing Control

The presence of multiple class of shares, non-voting shares, pyramidal holdings, reciprocal holdings, is pronounced within largest firms in both countries. Besides, reciprocal holdings are more frequent within smallest, small and large firms in Canada (they are almost nonexistent in US firms). This result is not surprising if one considers that large firms need more capital. Consequently, the controlling owner who is financially constrained will open the capital of his firm to the public without losing his private benefits of control. This can be assured mainly via the use of multiple class of shares, pyramids, etc. Furthermore, the controlling shareholders will try to structure their activity through conglomerates and groups, in that, they may expropriate minority shareholders.

From a comparative standpoint, the use of means of enhancing control in Canada is generally significantly different from the US. As a matter of fact, the use of multiple voting shares and non-voting shares increases with size, and the highest rates are reported for largest corporation 27.08 which is significantly different from the proportion for largest US firms which is equal to 10.58. We also document that the highest use of pyramidal holding within the largest firms in Canada (38.54) is sharply different from the proportion reported for the US sample (9.16). Similar results are also documented for the use of the other means of enhancing control, which are clearly more pronounced in Canada than in US (within the different categories of size). This confirms our conjectures: (a) that corporate ownership structure in Canada is different from US, (b) that the major controlling shareholder use such means to overarch his control stakes within the corporations (and groups), and (c) that the major controlling shareholder is getting the necessary external finance without losing his private benefits of control.

On the other hand, we find that the appointment of controlling family's member into top management position decreases with size, at 10 percent cut-off. This may be explained by the fact that as size of the firm becomes larger, the controlling shareholder needs professional and qualified manager to run the business. However, at the 20 percent cut-off, the relation is less clear. In particular, when we move from smallest size to small and medium size, the presence of members of

the controlling family increases, but if we move to the largest size firms, the appointment decreases. This also may be explained by the fact that as much as the size of the firm is controllable, the major shareholder will seek to overarch his stakes and protect his interests by appointing his family member into top management position. On the other hand, the presence of a second ultimate owner increases with size (except for largest ones), and this is true at the two threshold rates. Finally, we report that the appointment of family related managers is significantly higher in Canada than in US for all categories of size. This confirms our conjecture of expropriation opportunities within Canadian large firms and conglomerates. This is not the case in US firms, may be because the rules of information disclosure, regulations and restrictions on insiders trading to protect small stockholders in US are more efficient to reduce the risks of expropriation.

Table 4

Means of enhancing control and Company Size

The newly-assembled data for a total number of 5,089 publicly-traded corporations (1120 Canadian firms and 3969 US firms), including both financial institutions and non-financial institutions, are collected from the Financial Post (FP) "Survey of Industrials" (1996) and Intercorporate Ownership in Canada from Statistics Canada (1996) for Canadian Data and Worldscope Global 1996 Discloser and Securities & Exchange Commission Web site for US Data.

Category		Multiple Class shares (%)	Non voting Shares (%)	Pyramidal holdings (%)	Cross Holdings (%)	Reciprocal holdings (%)	Manager(s) from controlling family (10%)	Manager(s) from controlling family (20%)
All firms	US	8.39	1.6	8.52	1.15	0.13	27.44	16.13
	CAN	25.98	6.83	33.82	8.18	2.60	44.31	34.10
	t	7.27	9.28	21.91	12.73	8.82	10.55	13.07
Largest	US	10.58	1.68	9.16	1.04	0.21	12.28	6.35
	CAN	27.08	11.98	38.54	13.02	3.65	35.42	32.29
	t	6.24*	7.35*	11.26*	9.14*	4.99*	8.17*	11.17*
Middle	US	9.21	2.20	9.24	1.04	0.00	23.52	14.20
	CAN	18.68	6.04	38.46	7.69	1.10	49.45	40.11
	t	3.80*	2.88*	10.98*	5.83*	3.27*	7.35*	8.58*
Small	US	8.15	1.57	9.15	1.67	0.31	34.89	19.94
	CAN	10.38	6.01	26.23	3.83	2.19	52.46	10.98
	t	0.99	3.71*	6.67*	1.90	2.99*	4.54*	6.26*
Smallest	US	5.61	0.95	6.53	0.84	0.00	39.20	24.13
	CAN	8.00	2.86	27.43	5.71	0.57	53.14	37.14
	t	1.22	2.08*	8.83*	4.76*	2.33*	3.40*	3.58*
F (KW)	US	5.45 (16.30)	1.57 (4.71)	2.15 (6.43)	1.09 (3.28)	1.79 (5.38)	75.09 (213)	43.74 (126)6
	CAN	10.63 (30.68)	4.29 (12.69)	3.84 (11.38)	4.24 (12.54)	1.83 (5.46)	5.27 (15.53)	1.23 (3.7)

* F=test de fisher and KW, a kruskal-wallis test, is under parenthesis

Our results are, to some extent, similar to those of Mara and Lang (2000) for the Western European countries except for U.K and Spain. But Spain's dramatic difference is largely related to the privatization process that took place in 1996-97 with the creation of a number of widely held companies. These results show that a relatively small number of families control a large part of Canadian corporations. Control features are, to some extent, similar to those of Western European countries, except for U.K. However, our findings show much discrepancies between Canadian and US corporate structures, where the concentration of control is relatively weak in the latter.

In an attempt to clarify more the distribution of North American corporate ownership structure, we classify firms according to the existence or non existence of ultimate controlling owner. By doing this, we will be able to identify the role of the ultimate owner and to weight his control power in the expropriation eventualities. Results are discussed in the following section.

3. Features of Firms with an Ultimate Owner

The separation of ownership from control confronts all corporations with an agency problem. Shleifer and Vishny (1997) argued that in the US, the agency problem comes from the conflict between managers and dispersed shareholders, whereas the agency problem in other countries is between controlling owners and minority shareholders. Claessens *et al.* (1999) relate the separation of ownership from control to the value discount, which measures the loss for minority shareholders¹. This evidence is consistent with the notion that minority shareholders were expropriated by controlling owners. In light of this evidence, it would be interesting to examine the expropriation hypothesis in Canada where a significant separation of ownership from control is evidenced, and contrast our results to the US.

Expropriation may be an issue in Canada. For example, at 10% cut-off, 81.54% of Canadian listed firms have an ultimate owner, this proportion becomes 62.69% at 20% cut-off. However, these proportions are 60.63% and 30.20% in US, respectively at 10 and 20 percent cut-off levels. As theoretically and empirically argued, the presence of large (ultimate) owner is in itself a symptom of potential expropriation². In fact, ultimate owner has on average 25.61% of cash flow rights and controls 31.56% of the firm in Canada. By contrast in US, the ultimate owner has only 14.61% and controls 16.01%. In light of this evidence, it would be interesting to examine the expropriation hypothesis: firms with an ultimate owner are more likely to expropriate. To do this, we split our overall sample into two sub-samples, in each country, according to the presence or not of an ultimate owner. Our findings are reported in Table 5 and discussed below.

We find that the first immediate block in US firms having ultimate owner at 10% (20%) cut-off is 27.49% (40.61%) compared to only 5.28% (9.30%) in firms without ultimate owner. The difference between the firm's types is significant. In Canada, these proportions are 40.32 (40.61) for firms with ultimate owner at 10% (20%) cut-off level and 4.96% (9.30%) for firms without. Our t-test for the first direct bloc of control between Canada and US firms is significant for firms with ultimate owner. This result show that the first direct bloc of control in Canada is significantly higher than its counterpart in US. A similar pattern is reported for the second direct bloc of control, except for the difference between Canada and US, where it becomes non significant for firms with ultimate owner and significant for firms without.

We also report, both in Canada and US, a significant difference in the ratio of the first direct bloc of control over the second direct bloc of control, between firms with ultimate and firms without ultimate owners. Overall, we find that the former firms, in US, have a direct control concentration³ of 45.48% (55.56%) which is significantly higher than the concentration of direct control in firms without ultimate owner (28.70% (19.12%)). In Canada the pattern is quite alike, in that we find that the sum of the five direct control stakes is 58.87% (59.97%) at 10% (20%) cut-off level in firms with ultimate owner compared to 34.41% (13.67%) in firms without. The differences between US and Canada are significant, showing more concentration of corporate control in Canada than in US especially when there is an ultimate owner.

¹ In a related study, La Porta *et al.* (1999b) relate the degree of shareholders' protection to the value loss. Their conclusion is consistent with the expropriation hypothesis in that a lesser value loss (i.e. less expropriation) is observed for countries with more investors' protection.

² Mainly in countries with low investor protection.

³ The sum of the five largest direct control stakes.

On the other hand, we find that the cash flow stake of the ultimate owner is 23.80% (35.14) and 30.42(36.55), respectively in US and Canada, at 10% (20%) cut-offs. The difference is significant showing that ultimate owner in Canada holds more cash flow stakes than its counterpart in US. This is similar to what is documented for control stake of the ultimate owner, where we report that first ultimate owner controls, on average, 26.10% (38.73%) of US firms and 37.9% (45.44%) of Canadian firm, at 10% (20%) cut-off. The difference between the two countries is significant. Consequently, we find that the ratio of first ultimate ownership over second ultimate ownership in Canada (0.80 and 0.78) is significantly lower than the ratio in the US firms (0.90 and 0.90) at the two cut-off levels (10 and 20 percent). This confirms our explanation that the result found for this ratio in Panel B of Table 3, is due to rule of computation.

In investigating the presence of a second ultimate owner, we find that only 36.96% of US firms have a second ultimate owner at 10% cut-off, compared to 45.87% in Canada. When we increase the cut-off to 20%, these proportions become 16.18% and 25.19% in US and Canada respectively. At first glance, these results may oppose our speculation. In fact, in theory, it is argued that the presence of a powerful second ultimate owner may impede the channel of expropriation of the first ultimate owner would use, but we believe this is true only where institutional infrastructure is also powerful.

In that, we think that the presence of second ultimate owner is also an eventual opportunity of expropriation for the first ultimate owner. As the later may conspire with the former to enterprise some manipulations to expropriate minority interests. In addition, the second ultimate owner is not as much powerful as we may think. This is confirmed by the ratio of control stake of the first ultimate owner over the second ultimate owner's control stake and the ratio of first ultimate owner's ownership over second ultimate ownership, especially in Canada, where this ratio is significantly higher than in US. In light of these results, we find that the presence of an ultimate owner increases the probability of expropriation, and this probability is even higher in Canada than in US. On the other hand, our findings on means of enhancing control corroborate with this conjecture. In fact, we find that the use of multiple class of shares is significantly higher in firms with ultimate owner than in firms without, in both countries and at the two cut-off levels. We also find that the use of multiple class is significantly higher in Canada than in US. However, we find that the use of non voting shares is quite alike between the two types of firms (with and without ultimate owner), but still higher in Canada than in US. This is confirmed by the minimum capital required to control 20 percent of the firm. As a matter of fact, in US, 19.03% of cash flow rights are needed to control 20 percent of the firm, that is significantly lower than the ratio reported in US firms without ultimate owner (19.77%). In Canada, a similar pattern is documented, however, the ratios are significantly lower than those reported for US firms. This confirms that the separation between control and ownership is significantly higher in Canada than in US, which allows the ultimate owners to expropriate minority interests.

Moreover, we report that the use of cross holdings, reciprocal holdings, pyramidal holdings and the appointment of family related members in top management positions, is higher in firms with ultimate owner than in firms without, and these features are significantly higher in Canada than in US corporations. For example, 39.36% (41.94%) of Canadian firms with ultimate owner at 10% (20%) cut-off levels use pyramidal holdings structure, which is significantly higher than the proportions reported in Canadian firms without ultimate owner (9.38% (20.16%)), and significantly higher than their counterparts in US firms (13.75% (12.51%)). Furthermore, managers from controlling families are present in 53.19% in Canada compared to 44.67% (at 10% cut-off)¹. The differences are statistically significant.

We next investigate the type of ultimate owner when it does exist. In that, we find that 62.54% of firms with ultimate owner, at 10% cut-off, are controlled by families, 32.37% are controlled by widely held financial institutions and 7.23% are controlled by widely held corporations (0.39% are controlled by the State). When we move to the 20% cut-off, these proportions become: 63.87%, 15.53% and 7.69% respectively for families, for widely held financial institutions and for widely held corporations. On the other hand, we find that 67.97% (63.54%) of American firms

¹ The difference is significant at 20% cut-off level.

with ultimate owner are controlled by family, 21.61% (17.05%) are controlled by widely held financial institutions and 7.57% (6.06%) are controlled by widely held corporations, at 10% (20%) cut-offs. What is noticeable, is that the State control and foreign firm control¹ are more pronounced in Canadian than in US firms.

On balance, we find that corporate ownership (control) in Canada is more concentrated than in US, and its structure present some opportunities for the ultimate owner to expropriate minority interests. The presence of ultimate owner, its type and the use of means to overarch its control would influence the eventuality of expropriation. In that, in an attempt, to give further evidence on the expropriation of minority interests, we go further by splitting our overall sample (in each country) according to the type of the ultimate owner. Results are reported in Table 6 and discussed in the following section.

4. Further Evidence on Minority Expropriation: Does the type of the ultimate owner matters?

The evidence reported up to this point shows that the use of pyramids, cross-holdings, reciprocal holdings, and deviations from the one-share one-vote rule contribute to the separation between ownership and control. In Table 6 we analyze such separation more extensively. In fact, to give more light on ownership structure for Canadian and US corporations, we split the over-all sample into sub-samples: controlled family firms, State controlled firms, and firms controlled by a financial institution at 20 percent cut-off level². Results are reported in Table 6.

We find that the most means of expropriation used by family ultimate owner is pyramidal holdings. Its proportion is significantly higher in Canada (40.90) than in US (13.20). Similarly, the use of non-voting shares, multiple class of shares, and cross holdings are significantly higher. We report that only 28.61 (16.67) of Canadian (US) family controlled firms have a second ultimate owner. Surprisingly, the ratio of the minimum required capital to control 20% of the vote and the proportion of firms that have family related managers are quite the same. This may be explained by the fact that, *citrus paribus*, the family controlling owner will adopt the same expropriation behavior *wherever* it is (either in Canada or US). What should make the difference, is the enforcement of market regulations and laws to impose restraints on insider trading and manipulative practice to enforce the protection of small investors.

On the other hand, control is highly concentrated within family firms. In that, we document that the first direct block of control in Canada is about 44.95% which is significantly higher than the US one that is equal to 40.70%. The second direct block of control decreases sharply (in the two countries) compared to the first one. Surprisingly, we find that the first ultimate ownership in US (34.98) is significantly higher than the Canadian one (31.93), however, the first ultimate control stakes are significantly higher in Canada (42.97) than in US (39.48). The more pronounced use of control enhancing means by Canadian controlling families may explain these features. This is confirmed by the ratio of the first ultimate ownership over the second ultimate ownership which is significantly lower in Canada (0.75 and 0.72) than in the US (0.89 and 0.90) at the two cut-off levels (10 and 20 percent). This also confirms our explanation that the results found for this ratio in Panel B of Table 3, are due to our rule of computation.

We also find out that, within family business, the use of non voting shares, multiple class of shares, the cross holdings structure, the reciprocal holdings and the appointment of family members into management positions increases with the stakes of the controlling family (at the 20%cut-off level)³.

¹ Not with legal control.

² We did the same thing at the 10 percent cut-off level, results are not reported in the text but available from the authors. Results are similar to those of the 20 percent cut-off.

³ Results for the 10 percent cut-off are not reported here.

Table 6

Means of enhancing control and control distribution in US and Canada
(data are split according to the type of the ultimate controlling owner; 10 percent cut-off point)

The newly-assembled data for a total number of 5,089 publicly-traded corporations (1120 Canadian firms and 3969 US firms), including both financial institutions and non-financial institutions, are collected from the *Financial Post* (FP) "Survey of Industrials" (1996) and *Intercorporate Ownership in Canada* from Statistics Canada (1996) for Canadian Data and Worldscope Global 1996 Discloser and Securities & Exchange Commission Web site for US Data.

Panel A: Family-Controlled Companies at 20 Percent Cut-Off																							
Means of control enhancing																							
Own=20%Con			Non Voting Shares (%)			Multiple Class Shares (%)			Pyramidal holdings (%)			Cross Holdings (%)			Existence of second ultimate owner (%)			Reciprocal Holdings (%)			Manager(s) from the controlling family (%)		
US N=760	CAN N=422	t	US N=762	CAN N=423	t	US N=762	CAN N=423	t	US N=765	CAN N=423	t	US N=765	CAN N=423	t	US N=762	CAN N=423	t	US N=765	CAN N=423	t	US N=765	CAN N=422	t
18.01	16.92	-1.37	3.67	11.11	5.09*	17.45	22.22	2.00*	13.20	40.90	11.42*	3.01	11.11	5.75*	16.67	28.61	4.88*	0	4.49	5.99*	74.51	73.46	-0.4
Control distribution																							
First Direct Bloc ownership			Second Direct Bloc ownership			Third Direct Bloc ownership			First Ultimate ownership			First Ultimate control			Second Ultimate ownership			Second Ultimate control					
US N=764	CAN N=424	t	US N=765	CAN N=424	t	US N=764	CAN N=424	t	US N=763	CAN N=424	t	US N=765	CAN N=424	t	US N=764	CAN N=424	t	US N=765	CAN N=424	t	US N=765	CAN N=424	t
40.70	44.95	3.35*	10.07	10.09	-0.03	4.08	2.35	-5.28*	34.98	31.93	-2.52*	39.48	42.97	2.84*	7.12	8.03	1.49	8.09	11.73	5.26*			
Panel B: State-Controlled Companies at 20 Percent cut-off																							
Means of control enhancing																							
Own=20%Con			Non Voting Shares (%)			Multiple Class Shares (%)			Pyramidal holdings (%)			Cross Holdings (%)			Existence of second ultimate owner (%)			Reciprocal Holdings (%)			Manager(s) from the controlling family (%)		
US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t
20	19.12	-0.55	0	9.52	0.54	0	9.52	0.54	0	47.62	1.58	0	19.05	0.8	33.33	33.33	1.43	0	4.76	0.37	0	9.52	0.54

Table 6 (continuous)

Control Distribution																							
First Direct Bloc ownership			Second Direct Bloc ownership			Third Direct Bloc ownership			First Ultimate ownership			First Ultimate control			Second Ultimate ownership			Second Ultimate control					
US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t			
17.59	49.09	1.72	12.42	11.14	-0.17	1.77	1.30	-0.18	17.59	37.59	1.40	17.59	43.06	1.66	12.42	10.12	-0.34	12.42	12.10	-0.04			
Panel C: Companies Controlled by a Widely-Held Financial Company at 20 percent cut-off																							
Means of control enhancing																							
Own=20%Con			Non Voting Shares (%)			Multiple Class Shares (%)			Pyramidal holdings (%)			Cross Holdings (%)			Existence of second ultimate owner (%)			Reciprocal Holdings (%)			Manager(s) from the controlling family (%)		
US N=197	CAN N=115	t	US N=197	CAN N=115	t	US N=197	CAN N=115	t	US N=198	CAN N=115	t	US N=198	CAN N=115	t	US N=198	CAN N=115	t	US N=198	CAN N=115	t	US N=198	CAN N=115	t
19.23	17.89	-2.84*	3.05	8.70	2.19*	9.64	25.22	3.75*	14.65	48.70	7.00*	2.02	14.78	4.47*	12.12	44.35	6.89*	0.51	3.48	2.03*	10.10	20.87	2.66*
Control distribution																							
First Direct Bloc ownership			Second Direct Bloc ownership			Third Direct Bloc ownership			First Ultimate ownership			First Ultimate control			Second Ultimate ownership			Second Ultimate control					
US N=197	CAN N=115	t	US N=198	CAN N=115	t	US N=198	CAN N=115	t	US N=198	CAN N=115	t	US N=198	CAN N=115	t	US N=198	CAN N=115	t	US N=198	CAN N=115	t			
35.63	47.16	5.03*	9.46	14.93	4.52*	4.17	4.30	0.18	31.66	35.13	1.45	33.38	45.75	5.32*	6.23	12.05	4.85*	6.49	16.70	8.18*			

In fact, in the overall sample, we find that at 10% (20%) cut-off, families are the most pronounced type of controlling owner, controlling 56.17 (40.85) percent of Canadian listed companies, which is significantly higher than the US counterpart (38.27 (19.94) percent (see Table 3). As shown in Zingales (1994), Bigelli and Mengoli (1999) and Mara and Lang (2000), this relationship provides well-connected managers with the opportunity to accumulate personal wealth through operations between firms in the same group in Western European firms. In Canada, we have reported in the precedent section, family-controlled firms are significantly pronounced, along with the powerful and intimate relationship with top managers, and also structuring their business activities within conglomerates, further exacerbates the likelihood of expropriation.

Gadhoom (2000) supports this argument, where he concludes to the eventuality of minority shareholders expropriation in the Canadian corporations. In particular, Gadhoom (2000)'s investigation of family owned business and group affiliated firms financial features and policies, does provide an empirical evidence on the expropriation which takes place within these firms. Mainly, large shareholder exerts influence on dividend payments no matter what are the expectations of minority shareholders. Moreover, several studies report that voting shares trade at a premium over non-voting shares in Canada (e.g. Robinson *et al* (1996), Robinson and white (1990), and Jog and Riding (1986)). According to La Porta *et al.* (1999a), the presence of large shareholders in the US is less significant compared to Canada, because there is a smaller likelihood of expropriation in the US. Therefore, it is no surprise to observe a much higher premium in Canada than the 4.5 percent premium reported in the US by Lease, McConnell and Mikkelson (1983).

Similar patterns are reported in the firms controlled by widely held financial institutions. As a matter of fact, we find out that 48.70% of Canadian traded corporations that are controlled by financial institutions use pyramidal holdings, which is sharply different from the 14.65% one reported for US counterpart. We noticed that the ratio of the minimum required capital to control 20 percent of the vote is significantly lower in Canada than in US (17.89 and 19.23 respectively). The proportion of firms that have managers related to a controlling shareholder, is 20.87 percent in Canada and 10.10 percent in US, the difference is significant. These findings give us an idea about the role played by Canadian financial institutions in corporate governance in Canada compared to US.

Overall, we can conjecture that Canadian financial institutions, as a controlling shareholder, have an expropriation behavior, and may collude with other controlling shareholders to expropriate minority interests. This is confirmed by our findings on control distribution within these sub-samples. In fact, we document that the first block of control in Canada (47.16%) is significantly higher than the US one (35.63%) and the second block of control is also significantly different between the two countries. Similarly, the first and the second ultimate control stakes (control and cash flow) are significantly different. On the other hand we find that the State controlled firms, have quite alike patterns of corporate control structures in the two countries (this conclusion holds for both control enhancing means and control distribution).

From an inter-type comparative standpoint, we report that the highest deviation between control and ownership is reported within family controlled firms (in both countries). Moreover, the use of non-voting shares and multiple class of shares are also the highest in the family controlled firms. However, pyramidal holdings and cross holdings are the most frequent within State controlled firms (19.05 and 47.62 respectively), then within financial institution (14.78 and 48.70), and last within family controlled firms (11.11 and 40.90). It is worth mentioning that these figures may not be as conclusive as they look. In fact, the smallness of the State controlled sample may be a plausible explanation of these findings.

The use of reciprocal holdings is not significantly different across the sub-samples. However, the results about the presence of a second ultimate owner and the appointment of related-family members into top management positions diverge. Mainly, the second ultimate owner is less present within family controlled firms, i.e. usually family controlled firms have only single ultimate owner, that overarch his control via the means discussed above to expropriate minority interests. It is obvious to find the ultimate owners of family controlled firms pointing their related family members into top management positions, what is surprising however, is the existence of family related members in these positions within State or financial institutions controlled firms. The plausible explanation for this, is that there exist families that have important

stakes and that may influence business decisions, even within State or financial institution controlled firms¹. Consequently, these families may have a non negligible influence on the economic policy of governments.

This is confirmed by the results reported in table 6. In that, at the 20 (10) percent cut-off levels, we find 9.52 (36.96) percent of State controlled firms having in their top management board, members from the controlling family as a second ultimate owner; and 20.87 (31.35) for financial institutions controlled firms at 20 (10) percent cut-offs. These cases support the evidence reported by Claessens *et al.* (2000) and Mara and Lang (2000) that concentration of control in the hands of a few families represents an important lobby demanding preferential treatments by government agencies, and leading to the possibility of “crony capitalism”.

According to results reported in Table 6, the first and the second direct blocks of control, and first and the second ultimate ownerships are higher within financial institutions controlled firms, then within family controlled ones. Similar pattern is observed for ultimate control of the first and second ultimate owners. On balance, we may note the important ownership and control stakes of Canadian financial institutions and at a lower level the US ones. Moreover, whoever is the controlling shareholder, he is using some means of enhancing control to overarch his power and expropriate minority interests.

The evidence reported up to this point shows that one of the major means of control enhancing is the use of pyramidal holdings, and at a lower level the use of cross holdings. Thus, in next section, we split our sample into sub-samples according to the use or not of pyramidal holdings then according to the use of cross holdings or not in order to analyze the separation of control from ownership extensively. Our results are reported and discussed in the next section.

5. Does the Pyramidal and Cross Holdings Matter in Expropriation?

As documented in the preceding sections, the use of pyramidal and cross holdings is more frequent in Canada than in US. Pyramidal and cross holdings are generally used to accentuate the separation of control from ownership, and thus to facilitate the expropriation of atomistic minority shareholders. Results in Tables 7 and 8 confirm this conjecture. As a matter of fact, we find that the first immediate bloc of control is significantly higher in firms with pyramidal structure than firms without, in both countries. Similar pattern is reported for the second direct bloc of control.

The concentration of control (the sum of the five largest blocs of immediate control) is also significantly higher in firms with pyramidal holdings than in firms without, and it is significantly higher in Canada than in US. The ultimate stakes (control and ownership) for both first and second ultimate owners, are significantly higher in firms with pyramidal structure than in firms without, and significantly more pronounced in Canada than in US. What seems to be surprising, is the fact that the deviation from the 20% necessary capital to control 20% of the firm is high in Canada for both type of firms (with and without pyramidal holdings). In that, we find out that only 18.40% of capital is needed to control 20% of firms using pyramidal structure (which is significantly lower than its counterpart in US). In firms without pyramidal holdings, only 18.26% of capital is needed to get 20% of control (this is also significantly lower than its counterpart in US). However, the difference between the two ratios is not statistically significant. A plausible explanation for this finding, is the use of other means by ultimate owner to enhance control and accentuate the separation of ownership from control.

Our speculation is in fact confirmed by the non-significant difference in the use of non voting shares and multiple class between the firms using pyramidal holdings and the firms that do not use it. However the difference between Canada and US is still significant showing, in Canada, more pronounced use of means to overarch the control of ultimate owner than in US.

¹ In fact, when we identify firms features, we find that for State controlled firms at 10 percent threshold, family control is present in 52.17 percent of cases at 10 percent cut-off and this proportion decreases to 36.96 percent at 20 percent cut-off. When we use 20 percent threshold, we find that family control is present in 28.57 percent of cases at 10 percent cut-off level and in 14.29 percent at 20 percent cut-off.

Table 7

Means of enhancing control and control distribution in US and Canada (data are split according to the use of pyramidal holding)

The newly-assembled data for a total number of 5,089 publicly-traded corporations (1120 Canadian firms and 3969 US firms), including both financial institutions and non-financial institutions, are collected from the *Financial Post* (FP) "Survey of Industrials" (1996) and *Intercorporate Ownership in Canada* from Statistics Canada (1996) for Canadian Data and Worldscope Global 1996 Discloser and Securities & Exchange Commission Web site for US Data.

Panel A: Existence of Pyramids at 10% cut-off																															
Means of control enhancing																															
Own=20%Con			Non Voting Shares (%)			Multiple Class Shares (%)			Cross Holdings (%)			Existence of second ultimate owner (%)			Reciprocal Holdings (%)			Manager(s) from the controlling family (%)			Family controlled firms at 10%										
US N=760	CAN N=422	t	US N=762	CAN N=423	t	US N=762	CAN N=423	t	US N=765	CAN N=423	t	US N=765	CAN N=423	T	US N=762	CAN N=423	t	US N=765	CAN N=423	t	US N=765	CAN N=422	t								
19.08	18.40	2.60**	1.53	5.70	3.36**	11.96	24.22	5.36**	10.15	22.79	11.10*	48.93	53.85	1.51	0.61	6.84	10.25	35.28	50.86	4.43**	78.29	63.25	4.11**								
Control distribution																															
First Direct Bloc owner-			Second Direct Bloc			First Ultimate ownership			First Ultimate control			Second Ultimate ownership			Second Ultimate control			Concentration			Widely held financial institu-										
US N=764	CAN N=424	t	US N=765	CAN N=424	t	US N=764	CAN N=424	t	US N=763	CAN N=424	t	US N=765	CAN N=424	T	US N=764	CAN N=424	t	US N=765	CAN N=424	t	US N=765	CAN N=424	t								
29.42	47.12	11.14**	9.16	9.21	0.10	17.18	30.82	8.90**	24.12	41.44	10.66**	4.72	8.13	6.24**	7.29	13.10	9.74	45.48	58.87	7.02**	27.83	23.93	1.28								
Panel B: Absence of Pyramids																															
Means of control enhancing																															
Own=20%Con			Non Voting Shares (%)			Multiple Class Shares (%)			Cross Holdings (%)			Existence of second ultimate			Reciprocal Holdings (%)			Manager(s) from the con-			Family controlled firms at										
US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	T	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t								
19.34	18.26	7.67**	1.61	7.42	8.64**	8.06	11.79	3.01**	0.31	0.58	0.44	20.22	28.97	4.94**	0.09	0.44	1.07	26.72	40.90	7.44**	34.54	52.41	8.99**								
t-statistic for intra-country firm types (Means of control enhancing)																															
t-US		t-CAN		t-US		t-CAN		t-US		t-CAN		t-US		t-CAN		t-US		t-CAN		t-US		t-CAN									
1.35		0.65		0.08		1.63		2.27*		6.37**		11.48**		22.90**		11.70**		8.94**		1.16		12.36**		3.23**		3.32**		15.91**		3.47**	
Control Distribution																															
First Direct Bloc owner-			Second Direct Bloc			First Ultimate ownership			First Ultimate control			Second Ultimate ownership			Second Ultimate control			Concentration			Widely held financial institu-										
US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	T	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t								
17.76	26.96	10.68*	6.07	5.62	1.46	14.37	22.95	10.32*	15.26	26.55	12.83**	2.80	4.66	6.25**	2.94	5.44	7.73	28.70	34.41	5.51**	19.20	14.72	2.72								
t-statistic for intra-country firm types (Control Distribution)																															
t-US		t-CAN		t-US		t-CAN		t-US		t-CAN		t-US		t-CAN		t-US		t-CAN		t-US		t-CAN									
9.75**		14.87**		7.27**		7.44**		2.43*		6.02**		7.27**		10.74**		4.67**		7.44**		9.69**		15.02**		11.68**		15.01**		3.78**		3.55**	

Table 8

Means of enhancing control and control distribution in US and Canada (data are split according to the use of cross holdings)

The newly-assembled data for a total number of 5,089 publicly-traded corporations (1120 Canadian firms and 3969 US firms), including both financial institutions and non-financial institutions, are collected from the *Financial Post* (FP) "Survey of Industrials" (1996) and *Intercorporate Ownership in Canada* from Statistics Canada (1996) for Canadian Data and Worldscope Global 1996 Discloser and Securities & Exchange Commission Web site for US Data.

Panel A: Existence of cross holdings at 10% cut-off																							
Means of control enhancing																							
Own=20%Con			Non Voting Shares (%)			Multiple Class Shares (%)			Pyramidal holdings (%)			Existence of second ultimate owner (%)			Reciprocal Holdings (%)			Manager(s) from the controlling family (%)			Family controlled firms at 10%		
US N=760	CAN N=422	t	US N=762	CAN N=423	t	US N=762	CAN N=423	t	US N=765	CAN N=423	t	US N=765	CAN N=423	t	US N=762	CAN N=423	t	US N=765	CAN N=423	t	US N=765	CAN N=422	t
17.25	18.38	1.79	6.98	7.06	0.03	23.26	22.35	0.16	75.00	95.24	3.48**	50.00	52.94	0.37	4.55	21.18	11.81*	61.36	50.59	1.27	79.55	58.82	2.29*
Control distribution																							
First Direct Bloc ownership			Second Direct Bloc ownership			First Ultimate ownership			First Ultimate control			Second Ultimate ownership			Second Ultimate control			Concentration			Widely held financial institution at 10%		
US N=764	CAN N=424	t	US N=765	CAN N=424	t	US N=764	CAN N=424	t	US N=763	CAN N=424	t	US N=765	CAN N=424	t	US N=764	CAN N=424	t	US N=765	CAN N=424	t	US N=765	CAN N=424	t
31.95	47.46	3.94**	10.76	10.25	0.37	26.02	34.30	2.22*	36.24	48.06	3.00**	5.53	9.98	3.35**	6.95	16.91	6.76**	50.45	60.75	2.17*	18.18	23.53	0.3
Panel B: Absence of cross holdings																							
Means of control enhancing																							
Own=20%Con			Non Voting Shares (%)			Multiple Class Shares (%)			Pyramidal Holdings (%)			Existence of second ultimate owner (%)			Reciprocal Holdings (%)			Manager(s) from the controlling family (%)			Family controlled firms at 10%		
US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t
19.34	18.30	8.49**	1.54	6.81	9.02**	8.23	15.41	6.64**	7.70	28.41	18.2**	22.35	36.06	8.76**	0.0	0.94	3.15**	27.05	43.76	10.10	37.80	55.88	10.24*
t-statistic for intra-country firm types (Means of control enhancing)																							
t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN
4.04**	0.21	2.20*	0.13	3.28**	2.06*	14.20**	18.29**	4.22**	3.45**	3.89**	23.56**	4.96**	1.32	5.65**	0.53								
Control Distribution																							
First Direct Bloc ownership			Second Direct Bloc ownership			First Ultimate ownership			First Ultimate control			Second Ultimate ownership			Second Ultimate control			Concentration			Widely held financial institution at 10%		
US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t	US N=3	CAN N=21	t
18.59	32.55	18.19*	6.28	6.54	0.96	14.47	24.83	14.34*	15.77	30.09	18.62*	2.93	5.48	9.84**	3.27	7.26	13.91**	29.88	41.07	12.09*	19.98	17.31	1.86
t-statistic for intra-country firm types (Control Distribution)																							
t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN	t-US	t-CAN
4.16**	6.22**	3.99**	4.40**	3.77**	4.19**	6.36**	6.48**	2.40*	5.54**	3.07**	10.71**	5.31**	6.81**	0.30	1.39								

On the other hand, we find more firms with pyramidal holdings having significantly higher proportions of corporations with second ultimate owner than in firms that do not use pyramidal holdings. Differences between Canada and US are significant only between sub-samples of firms using pyramidal holdings.

What is surprising, is the fact that families in US control 78.29% of firms with pyramidal holdings which is sharply higher in Canada (63.25%). A plausible explanation for this result, is that the high proportion of family in US firms with pyramidal holdings is due to the FMR Corp. More than 40% of ultimately controlled firms have the *FMR Corp* in their ownership chain, which is held by the Johnson family. In that, these holding structures are used to overarch the family's power over the project and over its growth opportunities. On the other hand, we find that in Canadian firms with pyramidal holdings, the ultimate owner uses more other means of control enhancing than in US counterparts. In that, 50.86% of firms with pyramidal structure have related members' families in top management positions, compared to only 35.28% in US.

A similar pattern is documented for the use of cross holdings (Table 8). This reveals that controlling owners use different means (direct and indirect) to grasp power control in firms. Overall, family controlled firms are more present in firms with pyramidal holdings than in firms without. Besides, ultimate owners, in the former firms, use more pronounced means to enhance their control than do their counterparts in firms without pyramidal structure. In order to analyze extensively these facts, we did the same investigation with firms using cross holdings. Results are reported in Table 8.

Overall, the patterns documented in Table 8 are closely like those reported in Table 7. Mainly, we find that families controlled firms are more pronounced in firms using cross holdings than in firms without. There are also more controlled firms by widely held financial institutions in sub-sample of corporations with cross holdings than in the sub-sample of corporations without cross holdings. These findings are valid in both Canada and US. The immediate and ultimate blocs of control and ownership stakes are higher in firms with cross holdings than in firms without cross holdings, and are higher in Canada than in US.

The evidence reported through this empirical investigation shows that ownership and control structure are significantly more concentrated in Canada than in US. Moreover, the separation of control from ownership is more pronounced in Canada than in US. This separation is accentuated via different means of control enhancing that are obviously less present in US than in Canada. According to these findings, we may ask why Canadian ownership structure is so different from its counterpart in US? In the next section we will try to answer this question, and contrast our findings to other recent empirical ones on corporate structure in other countries

6. Corporate Control Around the World: The Puzzle

The evidence, reported in this paper, shows that the presumed similarity between Canadian and US corporate structure is an illusion rather a reality, despite their geographic and culture similarities. The entrenched protectionism and nationalism within Canadian entrepreneurial culture may, potentially explain the difference between Canada and US.

The history of Canada and its entrepreneurial limits can explain a part of our interrogation. We can eventually deep our analysis by asking why US corporate structure (and UK at a lower level) is so different from the other corporate structure around the world? Is it a matter of laws or politics?

According to the Table 9 (reported from La Porta et al. (1999)) and according to our findings, the argument of La Porta et al. is not sustainable. In fact, La Porta, argued that the differences in institutional indexes may explain the differences of corporate ownership structure around the world. Conversely, it was reported that Canadian and US (and UK) institutional indexes are quite similar, however their ownership structures are sharply different. Furthermore, it is not even a question of financial or capital market size as argued by different authors. Because Canada and UK have similar quite small capital markets, but their corporate ownership and control stakes are clearly different. The only left plausible hypothesis, to explain the difference of

ownership structures between US and Canada, to some extent, is the differences in the political systems of the two countries.

Table 9

Comparative institutional indexes

Country	Enforcement Variables						GNP per Capita (US \$)
	Efficiency of Judicial System	Rule of Law	Corruption	Risk of Expropriation	Risk of Contract Repudiation	Accounting: Rating on Accounting Standards	
Canada	9.25	10.00	10.00	10.00	9.67	74	19,970
United Kingdom	10.00	8.57	9.10	9.10	9.63	78	18,060
United States	10.00	10.00	8.63	9.98	9.00	71	24,740

It is clear that the political system in Canada has been for a long time more nationalist, more conservatist and more loyalist. This creates more protectionism in the political and social systems, which may have, as a consequence, less separation between ownership and control. This situation is very obvious if one considers the banking industry in Canada, which is very protective against power-shift and risk taking. The requirement about capital adequacy for instance is so high that only 7 banks in Canada are well installed, compared to many thousands in US. Moreover, only one Bank in the history of Canada went bankruptcy. The telecommunication and airline industries, in Canada, are severely regulated. Only in the last decade that Canada start partially deregulating these industries.

To confirm our conjecture, we address a direct comparative study to what is reported in La Porta et al. (1999). In that, we conduct our investigation on the 20 largest and 20 smallest firms. We then contrast our findings to those of La Porta et al. (1999). Overall, our results are different from those of La Porta et al (1999). Mainly, for the proportion of widely held firms in the 20 largest and 20 smallest Canadian firms, where we report 35.00 percent and La Porta et al (1999) reported 50.00 percent for the largest firms, and we find 15.00 percent and they found 40.00 percent for the smallest firms at 10 percent cut-off. The presence of family control and the use of means to enhance control are more pronounced in our study than in theirs.

The reason for these differences might be that both of us didn't work with the same 20 largest firms. We picked up those with the largest total assets and firms having available the data needed in this investigation. However, there's not any contradiction, and results in this table remain coherent with our prior findings. In that, corporate control and ownership are more concentrated in Canada than in US, the probability of expropriation is higher in Canada than in US, and it is more likely to observe control and ownership concentration within smallest corporations than within largest ones. However, in examining Table 10, we find that the work done by La Porta et al (1999) is still questionable. More rigorously, we can show that their results for some variables might be questioned, mainly the ratio of the minimum needed capital to control 20 percent of the votes, the control of financial institution, and the use of cross holdings, especially within smallest firms. But the results for the smallest firms are also different for a comprehensive reason. While he took the ten smallest according to his criteria we took the 20 smallest according to total assets. We avoided market capitalization because of some speculative bubbles we might have.

Table 10

Comparison with the findings of LaPorta et al. (1999)

The newly-assembled data for a total number of 5,089 publicly-traded corporations (1120 Canadian firms and 3969 US firms), including both financial institutions and non-financial institutions, are collected from the Financial Post (FP) "Survey of Industrials" (1996) and Intercorporate Ownership in Canada from Statistics Canada (1996) for Canadian Data and Worldscope Global 1996 Disclosure and Securities & Exchange Commission Web site for US Data.

	20 Largest firms (L)				20 Smallest firms (S)				χ^2 (Chi-two)			
	US		CAN		US		CAN		US-CAN	US-CAN	US-US	CAN-CAN
	Our study	LaPorta and al	Our study	LaPorta and al	Our study	LaPorta and al	Our study	LaPorta and al	L_{US} vs L_{CAN}	S_{US} vs S_{CAN}	L_{US} vs S_{US}	L_{CAN} vs S_{CAN}
1	2	3	4	5	6	7	8	9	10	11	12	13
First block	6.58	Na	29.17	Na	17.99	Na	27.82	Na	3.57***	1.55	-1.80*	0.21*
Second block	1.76	Na	3.53	Na	7.84	Na	3.53	Na	0.73	1.14	-2.51**	-2.92***
Third block	0.52	Na	0.50	Na	4.73	Na	3.25	Na	-0.01	-0.98	-2.80***	-1.82*
Fourth block	0.26	Na	0.00	Na	2.36	Na	0.76	Na	-0.30	-1.87*	-2.46**	-0.89
Fifth block	0	Na	0.00	Na	0.00	Na	0.00	Na				
Widely held at 10% (%)	85	80.00	35.00	50.00	35.00	50.00	15.00	40.00	-3.66***	-1.46	3.66***	1.46
Widely held at 20% (%)	85	80.00	55.00	60.00	70.00	90.00	30.00	60.00	-2.07**	-2.77***	1.04	1.73*
Ultimate owner at 10% (%)	15	20.00	65.00	50.00	65.00	50.00	85.00	60.00	3.66***	1.46	-3.66***	-1.46
Ultimate owner at 20% (%)	15	20.00	40.00	40.00	30.00	10.00	65.00	40.00	1.72*	2.40**	-1.03	-1.72*
Family at 10% (%)	15	20.00	25.00	30.00	50.00	30.00	70.00	50.00	0.70	1.40	-2.45**	-3.15***
Family at 20% (%)	10	20.00	20.00	25.00	20.00	10.00	55.00	30.00	0.76	2.66***	-0.76	-2.66***
State at 10% (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00				
State at 20% (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00				
Widely held financial institutions at 10% (%)	0.00	0.00	15.00	0.00	10.00	0.00	15.00	0.00	1.57	0.52	-1.05	0
Widely held financial institutions at 20% (%)	0.00	0.00	10.00	0.00	5.00	0.00	15.00	0.00	1.20	1.20	-0.60	-0.60
Widely held firms at 10% (%)	0.00	0.00	5.00	15.00	0.00	0.00	5.00	0.00	1	1	0	0
Widely held firms at 20% (%)	0.00	0.00	5.00	15.00	0.00	0.00	0.00	0.00	1.41	0	0	1.41
Miscellaneous at 10% (%)	0.00	0.00	30	5.00	0.00	0.00	10.00	0.00	3.38***	1.13	0	2.25**
Miscellaneous at 20% (%)	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	1.41	0	0	1.41
Foreign firms (%)	0.00	Na	10.00	Na	0.00	Na	0.00	Na	2.05**	0	0	2.05**

Table 10 (continuous)

1	2	3	4	5	6	7	8	9	10	11	12	13
Multiple classes	0.00	Na	20.00	Na	10.00	Na	15.00	Na	2.01**	0.50	-1.00	0.50
Non voting shares	0.00	Na	10.00	Na	0.00	Na	5.00	Na	1.66*	0.83	0	0.83
Ratio of vote O=20%C	20.00	19.19	18.36	19.36	19.16	Na	19.32	Na	-1.52	0.15	0.78	-0.88
Existence of second ultimate owner at 10% (%)	5.00	Na.	15.00	Na.	30.00	Na.	55.00	Na.	0,78	1,94*	-1,94*	-3,10**
Existence of second ultimate owner at 20% (%)	0.00	Na.	10.00	Na.	0.00	Na.	20.00	Na.	1,23	2,47**	0	-1,23
Ultimate owner alone at 20%	Na	100	Na	100	Na	Na	Na	Na	Na	Na	Na	Na
First ultimate ownership	3.81	Na	18.77	Na	17.36	Na	23.58	Na	2.52**	1.05	-2.28**	-0.81
First ultimate control	3.81	Na	24.94	Na	17.36	Na	26.85	Na	3.41***	1.53	-2.19**	-0.31
Second ultimate ownership	0.58	Na	4.40	Na	3.47	Na	9.22	Na	1.39	2.10**	-1.06	-1.76*
Second ultimate control	0.58	Na	5.07	Na	3.95	Na	11.22	Na	1.53	2.47**	-1.15	-2.09**
Pyramidal holdings (%)	0.00	0.00	25.00	13.00	5.00	Na	25.00	Na	2.37**	1.90*	-0.47	0
Cross holdings (%)	0.00	0.00	10.00	0.00	5.00	Na	5.00	Na	1.43	0	-0.72	0.72
Reciprocal holdings (%)	0.00	Na	0.00	Na	0.00	Na	0.00	Na	Na	Na	Na	Na
Manager from the controlling family at 10% (%)	15.00	Na.	30.00	Na.	30.00	Na.	65.00	Na.	1,05	2,45**	-1,05	-2,45**
Manager from the controlling family at 20% (%)	15.00	Na.	25.00	Na.	25.00	Na.	45.00	Na.	0,71	1,42	-0,71	-1,42
Institutional investors	2,09	Na.	11,07	Na.	4,27	Na.	11,63	Na.	1,57	1,28	-0,38	-0,10
First ultimate ownership over first ultimate control	0,15	Na.	0,50	Na.	0,65	Na.	0,74	Na.	2,48**	0,66	-3,58***	-1,76*
Second ultimate ownership over second ultimate control	0,05	Na.	14,45	Na.	0,26	Na.	0,50	Na.	0,75	1,92*	-1,66	-2,83***
First block over second block	6,29	Na	4,54	Na	2,56	Na	3,42	Na	-1,08	0,53	2,29*	0,69
First ultimate ownership over second ultimate ownership	9,20	Na.	185,41	Na.	33,60	Na.	124,25	Na.	3,85***	1,98*	-0,53	1,34
First ultimate control over second ultimate control	0,87	Na.	63,23	Na.	3,64	Na.	42,76	Na.	4,10	2,57**	-0,18	1,34
Concentration (sum of the five blocks)	9.11	Na	33.20	Na	32.93	Na	42.44	Na	2.90***	1.14	-2.86***	-1.11
Total assets	66215245.1	Na	54195172	Na	76245.30	Na	15603.50	Na	-0.68	-0.003	3.76***	3.09***
Market capitalisation	77773516.2	Na	10522780	Na	782.6	Na	2716.8	Na	-12.84***	0	14.85***	2.01**

*** significatif at 1% ** significatif at 5% *significatif at 10%
na : not available

Finally, we address an international comparative analysis. Results are reported in table 11. Overall, we report that ownership in Canada is, on average, as much concentrated as the ownership in West Europe and East Asia.

Table 11

International comparison

The newly-assembled data for a total number of 5,089 publicly-traded corporations (1120 Canadian firms and 3969 US firms), including both financial institutions and non-financial institutions, are collected from the Financial Post (FP) "Survey of Industrials" (1996) and *Intercorporate Ownership in Canada* from Statistics Canada (1996) for Canadian Data and Worldscope Global 1996 Discloser and Securities & Exchange Commission Web site for US Data.

	Mean						
	US (N=3969)	CAN (N=1120)	North america (N=5089)	Asia (N=2611)	East europe (3740)	Whole world (N=810)	UK (N=30)
1	2	3	4	5	6	7	8
First block	18.74	33.79	22,05	Na	Na	Na	Na
Second block	6.33	6.83	6,44	Na	Na	Na	Na
Third block	3.06	1.70	2,76	Na	Na	Na	Na
Fourth block	1.41	0.30	1,17	Na	Na	Na	Na
Fifth block	0.59	0.08	0,48	Na	Na	Na	Na
Widely held at 10% (%)	38.96	17.79	34,30	19,75	15,13	19,62	63.33
Widely held at 20% (%)	69.25	36.35	62,01	42,89	38,34	32,22	86.67
Ultimate owner at 10% (%)	60.63	81.54	65,23	80,25	84,87	80,38	36.67
Ultimate owner at 20% (%)	30.20	62.69	37,35	57,11	61,66	67,78	13.33
Family at 10% (%)	38.27	56.17	42,21	40,99	54,24	40,71	23.33
Family at 20% (%)	19.94	40.85	24,54	38,3	43,88	35,05	13.33
State at 10% (%)	0.23	4.42	1,15	5,98	3,18	18,86	0.00
State at 20% (%)	0.078	2.02	0,51	4,64	3,33	17,24	0.00
Widely held financial institutions at 10% (%)	19.94	17.81	19,47	21,09	21,63	7,65	6.67
Widely held financial institutions at 20% (%)	5.16	11.07	6,46	5,00	10,21	4,69	0.00
Widely held firms at 10% (%)	4.46	10.80	5,86	12,20	1,45	3,21	0.00
Widely held firms at 20% (%)	2.40	9.68	4,00	9,16	2,16	4,6	0.00
Miscellaneous at 10% (%)	3.02	10.79	4,73	Na	3,47	9,94	6.67
Miscellaneous at 20% (%)	1.28	4.92	2,08	Na	1,40	6,21	0.00
Foreign firms (%)	1.09	7.41	2,48	Na	Na	Na	Na
Multiple classes (%)	8.39	15.98	10,06	Na	16,52	Na	Na
Non voting shares (%)	1.60	6.83	2,75	Na	Na	Na	Na
Ratio of vote O=20%C	19.32	18.31	19,10	19,76	19,34	Na	Na
Existence of second ultimate owner at 10% (%)	22.67	37.40	25,91	Na	Na	Na	Na
Existence of second ultimate owner at 20% (%)	4.98	15.98	7,40	Na	Na	Na	Na
Ultimate owner alone at 10%	77.33	62.60	25,91	67,8	54,91		Na
Ultimate owner alone at 20%	95.02	84.02	7.40	Na	54,69	75,48	Na
First ultimate ownership	14.61	25.61	17,03	15,70	34,60	Na	Na
First ultimate control	16.01	31.56	19,43	19,77	37,75	Na	Na
Second ultimate ownership	2.96	5.85	3,60	Na	Na	Na	Na
Second ultimate control	3.31	8.04	4.35	Na	Na	Na	Na

1	2	3	4	5	6	7	8
Pyramidal holdings (%)	8.52	33.81	14.09	38.7	18.56	25.75	0.00
Cross holdings (%)	1.15	8.18	2.70	10.1	6.24	3.15	0.00
Reciprocal holdings(%)	0.13	2.60	0.67	Na	0.76	Na	Na
Manager from the controlling family at 10% (%)	27.45	44.32	31.16	57.1	66.04	Na	Na
Manager from the controlling family at 20% (%)	16.14	34.10	20.09	Na	66.78	Na	Na
Institutional investors	12.38	14.66	12.88	Na	Na	Na	Na
First ultimate ownership over first ultimate control	0.56	0.67	0.58	0.75	0.87	Na	Na
Second ultimate ownership over second ultimate control	0.20	0.31	0.22	Na	Na	Na	Na
First block over second block	5.24	4.53	5.08	Na	Na	Na	Na
First ultimate ownership over second ultimate ownership	34.69	168.61	64.16	Na	Na	Na	Na
First ultimate control over second ultimate control	3.42	57.06	15.23	Na	Na	Na	Na
Concentration (sum of the five blocks)	30.13	42.7	32.90	Na	Na	Na	Na
Total assets	3.63 e6	2.18 e6	3310880.33	Na	Na	Na	Na
Market capitalisation	2.013 e6	672955	1718079.50	Na	Na	Na	Na

Na : not available

Results in Table 11 infer that Canadian traded firms have the highest deviation from the one-share-one-vote rule. In that, they have the lowest required capital (18.31%) to get 20% of firm control. The control of firms by families and widely held financial institutions is quite similar in West Europe and East Asia. The State controlled firms are most pronounced in East Asia.

As a matter of fact, family control is more pronounced in Canada than in US. In particular, while US families control 38.27 (19.94), Canadian families control 56.17 (40.85) percent at 10 (20) percent threshold. The difference between the two countries is statistically significant for the two cut-off levels. Similarly, Mara and Lang (2000) reported for their overall Western European corporations that family control is 54.24 (43.88) percent at 10 (20) percent cut-off, and Claessens et al. (1999) found that families in East Asia control 40.99% (38.30%) at 10 (20) percent cut-off level.

Financial institutions, in Canada (US), control 17.81 (19.94) percent of publicly traded companies at 10 percent cut-off, this proportion becomes 11.07 (5.16) at 20 percent cut-off. We can infer from this result, that financial institutions control in the two countries tends to be alike at 10 percent cut-off. However at 20 percent cut-off, it becomes sharply more pronounced in Canada than in US, reflecting a more ownership concentration in the former country and that financial institutions play only a minor role in US. The result for Canada is close to that of Western European countries (21.63 and 10.21 percent at 10 and 20 percent cut-off respectively). Canadian financial institution control is even directly compared to those reported for Italy and Spain.

We should note that the Canadian government is playing relatively important role with a stake control of 4.42 (2.02) percent at 10 (20) percent cut-off, conversely, the US government corporate control is rather nonexistent (0.23 and 0.079), the difference between the two countries is significant. On the other hand, in comparison with Canada, the State usually plays a more important role as the controlling shareholder in East Asia and continental Europe (at 20% cut off). This is especially true for Italy, where the State controls more than 10 percent of votes in almost 10 percent of listed firms.

On the other hand, the highest ultimate ownership and control stakes are reported within Western European firms, followed by Canadian firms. The firms with members related to the controlling families are most pronounced within Western European firms, followed by East Asian firms, then by Canadian firms. However the use of multiple class of shares is quite the same within Western European and Canadian firms. Finally, we report that pyramidal and cross holdings in Canada (33.81% and 8.18% respectively) are closer to what is reported in East Asia (38.7% and 10.10% respectively).

The differences of corporate ownership structure around the world may be related to differences in regulations across countries, i.e., differences in the percentages of shares required to entitle shareholders to call an extraordinary meeting, to caps on ownership of financial companies. Also, Canadian banks have historically faced very stringent limits on the ownership of non-financial corporations. Thus, it is not surprising to find the role of widely-held financial institutions greatly diminishes at the 20 percent level for all countries. We should note that US securities laws and other rules discourage concentrated active stockholding, protect investors and sustain market liquidity. The apparent success of US market is related to its corporate structure: disclosure requirements, one-share one-vote rules, and sanctions against insiders trading. Other important features documented through our investigation, is the high probability of expropriation of the minority interest by large controlling owner in Canadian corporate firms, this is evidenced by the high separation (divergence) between cash flow rights and control rights.

On balance, our results show that despite the similarities in institutional indexes between Canada, UK and US, the Canadian corporate structure has very different patterns from those in UK and US. So the puzzle of why corporate ownership around the world (particularly in Canada) is different still deserves more attention from financial academicians.

7. Summary and Conclusions

Overall, we find that controlling shareholders of Canadian traded companies use pyramids, cross-holdings, reciprocal holdings, point related members into top-management positions, and use multiple class of voting shares more frequently to gain control than the controlling shareholders of US traded companies do. These findings, accentuate the difference between Canadian and American corporate structures, and mainly reveal the power the ultimate owner has in Canada and signal his opportunities to expropriate minority interests.

Finally, in contrasting our results to those reported in West Europe and East Asia, we find differences of control in Canadian firms compared to US firms and other Western European and East Asian ones. These differences may be related to differences in regulations across countries, i.e., differences in the percentages of shares required to entitle shareholders to call an extraordinary meeting, to caps on ownership of financial companies. The apparent success of US market is related to its corporate structure: disclosure requirements, one-share one-vote rules, and sanctions against insiders trading. However, despite the similarities in institutional indexes between Canada, UK and US, the Canadian corporate structure has very different patterns from those in UK and US. So the puzzle of why corporate ownership structures around the world (particularly in Canada) are different even when institutional indexes are similar remains unanswered. More particularly, why Canadian ownership structure is so different from its American neighbour? The answer to this question that motivates the present study is not related to the judicial systems or some other institutional factors. The reason is rooted in the differences of the political systems, and issues not studied before and which is the contribution of this research.

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