Does Adopting High-Standard Corporate Governance Increase Firm Value? An Empirical Analysis Of Canadian Companies

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ABSTRACT

Research on the impact of corporate governance on firm value has provided inconclusive results. The findings vary depending on the sample, country of study (regulation, law, shareholder protection, market development, etc.) and methodology employed. Many studies are unable to detect significant connection between corporate governance and firm value.

Unlike the United States, Canada adopts a principles-based approach in corporate governance regulation. Canadian companies are required to disclose whether they comply with the corporate governance guidelines set up by authorities (such as the Toronto Stock Exchange) or explain deviations from the guidelines.

Using panel data from 2004 to 2008 in Canada the empirical analyses in this paper show that the finding on the connection between corporate governance and firm value is sensitive to the methodology employed. Controlling relevant information is crucial to the results. When the data is analyzed in a self-selection framework, it is found that some time-varying unobservable firm characteristics that make firms adopt high-standard corporate governance also increase firm value, and somewhat surprisingly, adopting better corporate governance practices per se seems to decrease firm value. The results support the view that firms use sound corporate governance to signal their favorable private information.

Keywords: Corporate Governance; Firm Value; Self-Selection; Canada

1.   INTRODUCTION

$\mathscr{R}$esearch on corporate governance has gained increasing attention and popularity during the past two decades. It has reached even a new level in the post-Enron environment. While individual studies are too many to list, reviews of relevant literature alone compile a long list (e.g., Bebchuk and Weisbach, 2010; Denis, 2001; Gillan, 2006; Shleifer and Vishny, 1997; Young, *et al.*, 2008). A central question in the corporate governance literature is whether sound corporate governance actually increases firm value. Many studies find strong positive association between corporate governance and firm value (e.g., Black, Love and Rachinsky, 2006; Chhaochharia and Laeven, 2009; Gompers *et al.*, 2003; Prevost, *et al.*, 2002), but many are unable to find such a connection (e.g., Bhagat and Bolton, 2008). Many others report mixed results (e.g., Aggarwal *et al.*, 2010; Bebchuk, *et al.*, 2009; Brown and Caylor, 2006; Chi and Lee, 2010). In general the findings vary depending on the sample, country of study (regulation, law, shareholder protection, market development, etc.) and methodology employed.

While competing theories exist on corporate governance, in North America corporate governance is prominently regarded as a mechanism to address the agency problem (Clarke, 2004; Fama and Jensen, 1983; Jensen, 1986). When firms are supposed to adopt corporate governance practice (and other strategies) to maximize

shareholder value, controlling shareholders and/or the management may prevent the adoption of sound governance mechanism because of various costs associated with such adoption, both in terms of implementation costs and private cost in the form of reduced ability to expropriate other shareholders. In general the overall costs and benefits associated with the adoption of corporate governance attributes depend on various firm-level and country-level characteristics (Doidge *et al.*, 2004).

A key issue in empirical corporate governance research is the quality of information and appropriate control of relevant information in a research design (more generally this point applies to most empirical studies in corporate finance). While most corporate strategies – financing, capital budgeting, dividends, growth, corporate governance, risk management, etc. – are all connected in an endogenous and complicated fashion, corporate governance theories do not provide a definitely clear set of relevant firm characteristics that need to be controlled when one studies the association between corporate governance and firm value. Prior literature can provide some guidance, but the information to be used or controlled in an empirical study often differs based on the objective of the study, country of study, sample, and more importantly, the availability of relevant information. For example, in some corporate governance studies of the U.S. market (e.g., Chhaochharia and Laeven, 2009), a dummy control variable on American Depositary Receipt (ADR) is introduced to distinguish its unique nature of business. But the ADR dummy is not used in most other U.S. studies.

The contributions of this paper are twofold. First, it empirically shows the impact of employed methodology when studying the connection between corporate governance and firm value. While most prior empirical research on corporate governance employs cross section or pooled regressions, it leaves open the possibility that endogeneity or bias due to omitted firm characteristics explain the observed correlations. The panel data methodology can address this concern (Green, 2008). Some literatures (e.g., Black, Love, and Rachinsky, 2006; Gupta *et al.*, 2009) do utilize panel data models, but usually do not show the comparative results. This paper provides clear evidence that results from pooled regressions can be unreliable or even misleading.

Second, and more importantly, this paper investigates the effect of corporate governance in a self-selection framework. This is, to the best of our knowledge, the first attempt of such a model on Canadian corporations. Unlike the U.S., Canada adopts a flexible principles-based approach to corporate governance regulations. Firms are allowed to choose governance practices and explain any deviation from the recommended guidelines. While most previous Canadian studies find not significant association between corporate governance and firm value (Adjaoud *et al.*, 2007; Gupta *et al.*, 2009; Klein *et al.*, 2005), this paper provides a fresh perspective on this lack of impact by corporate governance. The results of the self-selection model suggest that firms may use corporate governance to signal to the market some desirable (but unobservable) characteristics; however, adopting sound corporate governance per se may actually reduce their firm value.

1.1   Canadian Approach to Corporate Governance: Comply or Explain

Despite the close connections in business and financial market between Canada and the U.S., the corporate governance in the U.K. actually has a more profound impact on Canadian regulations and practices. Deeply rooted in a laissez-faire culture, the U.S. adopts a rules-based approach toward corporate governance regulation that is aimed at mandatory compliance with legislations and stock exchange requirements, with a great emphasis placed on regulatory enforcement than voluntary compliance. The Sarbanes-Oxley Act of 2002 adopts even more mandatory rules that firms listed in the U.S. markets have to follow. Despite these mandatory requirements the rules in the U.S. (such as those of NYSE and NASDAQ) are generally more empowering than the corporate governance guidelines that Canadian and U.K. companies are encouraged to follow.

The corporate governance reform movement in Canada started in 1970s when Canadian lawmakers imposed greater fiduciary duties on corporate directors and executives. Due to the lack of a national regulation body such as the SEC in the U.S., Toronto Stock Exchange (TSE) has largely assumed the responsibility of promoting and regulating corporate governance practices in Canada. In 1994, under great influence of the work of the Cadbury Committee in the U.K., TSE conducted a landmark study on corporate governance reform that generated the milestone report "*Where Were the Directors? Guideline for Improved Corporate Governance in Canada*", which is commonly referred to as the Dey Report. The Dey Report made 14 recommendations focused on the board of

directors and its relationship with shareholders and management.[1] Although these recommendations do not possess the same power of regulation, companies are required as a condition of listing on the TSE to publicly disclose the extent of their compliance with the recommended best practices and to describe the procedures implemented to meet the same corporate governance objectives wherever their practices deviate from such guidelines.[2] This principles-based approach is generally consistent with the approach taken in the U.K. The choice of such a "comply-or-explain" approach is usually attributed to a relatively small talent pool for corporate directors in Canada and the large number of small Canadian public companies that lack the financial resources to comply with the more stringent requirements enunciated in the U.S. Rooted in the belief that "one size does not fit all", the principles-based approach essentially lets the capital markets be the judge of corporate governance practices (Broshko and Li, 2006). Nevertheless, there is evidence that the corporate governance reform movement in Canada is still in an earlier stage of development than it is in the U.S. and the U.K.

1.2   Evidence from Canada, Germany, and U.K.

Data on Canadian corporate governance has been available only since early 2000s. Both Klein *et al.* (2005) and Adjaoud *et al.* (2007) work on a cross-section of Canadian firms in 2002, and do not detect a significant connection between the composite corporate governance index (reported by the *Globe and Mail*; see details below) and most measures on firm value. However, both papers acknowledge that endogeneity is a potential problem is their research design, but neither explicitly deals with this issue due to the limit of the cross-sectional data, which leaves room for future research. Interestingly, working with a similar sample in 2002, in an event study Foerster and Huen (2004) finds a significantly positive association between the governance scores and excess stock returns in a two-day window around the release of the governance scores by the *Globe and Mail*. Working with a multiple-year (2002-05) data sample and panel data methodology, Gupta *et al.* (2009) does not find an association between the composite or sub-category corporate governance scores and various measures of firm value.

Two other countries with a similar corporate governance regulation approach that have been studied are Germany and the U.K. Goncharov *et al.* (2006) investigates the impact of compliance with the German corporate governance code on stock valuation in a self-selection framework. They find that compliance with the Code is value-adding after controlling for the endogeneity bias. Also working with a sample of German companies, Talaulicar and Werder (2008) employs the cluster analysis technique to identify discrete groups of companies with similar patterns of code observance. They find that companies with very similar rates of overall compliance can be assigned to different clusters based on different patterns of code conformity.

Weir and Laing (2000) works with a sample of 200 firms from the U.K. in 1992 and 1995 and reveals mixed evidence that governance structures are associated with performance. Although some particular compliance (e.g., a remuneration committee) with the Cadbury recommendations seems to be related to better performance, complete compliance with the recommended model of corporate governance does not appear to be associated with firm performance.

The remaining of the paper proceeds as following. Section 2 describes the data and provides its descriptive statistics. Section 3 introduces three model options and collects the empirical results of each model with comments and discussions. The concluding remarks are in Section 4.

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[1] Two follow-up projects of the Dey Report make further recommendations on a broad range of issues in corporate governance: "*Five Years to the Dey: Report on Corporate Governance*" (1999) conducted by TSE and Institute of Corporate Directors, and "*Beyond Compliance: Building a Governance Culture*" (2001, commonly known as the "Saucier Report") conducted by Charted Accountants of Canada, TSE, and Canadian Venture Exchange.

[2] There are a few exceptions of mandatory rules such as those relating to audit committees.

2.   DATA

2.1   Data Sources

The corporate governance scores used in this study are from the Report on Business (ROB) published annually by a Canadian national newspaper the *Globe and Mail*. Since the report was first published in 2002 the questions and scoring system have become increasingly comprehensive. In general the questions are grouped in four categories: board composition, shareholding and compensation, shareholder rights, and disclosure.[3] In 2008 the four categories count for 37%, 25%, 28%, and 10%, respectively, of the overall score. The maximum score is 100.

The financial data used in this study are collected from the *System for Electronic Document Analysis and Retrieval* (SEDAR) databases. SEDAR, established by Canadian Securities Administrators, provides access to most public securities documents and information filed by public companies and investment funds. Stock prices are obtained from DataStream.

2.2   Summary Statistics

During the period of 2004-2008 the *Globe and Mail* corporate governance reports cover between 180 and 218 Canadian corporations each year. In this study we work on a sample of firms that are in the report every year. A few such firms have to be dropped due to mergers and acquisitions since 2008 (financial data are no longer included in databases). Eventually we have a balanced-panel sample of 106 firms over a 5-year period, i.e., 530 firm-year observations.

Table 1: Descriptive Statistics

ROB is the corporate governance score reported by the *Globe and Mail*. Management ownership is the percentage of shares held by the top five executives in management. Widely-held is a dummy variable equal to one if the company is widely held (no single investor holds 10% or more of the shares). CEO/Chair split is a dummy that equals one if different individuals occupy the CEO and Chair of the board positions. Natural Resources, Utility, and Financial are sector dummies. Cross-listing is a dummy that equals one if a company is cross-listed on TSX and another stock exchange (e.g., NASDAQ, NYSE).

The firms are grouped into two subsamples depending on whether its ROB score is lower or higher than the average in each year. ***, **, and * indicates statistical significance at 1-, 5-, or 10-percent level respectively.

	All firms		Below-average firms		Above-average firms		Difference in sub-sample means
	Mean	**Std Dev**	**Mean**	**Std Dev**	**Mean**	**Std Dev**	
Tobin's Q	1.76	1.49	1.86	1.75	1.65	1.12	0.20
ROB Score	73.45	13.89	62.34	8.20	85.62	6.91	-23.27 ***
Assets ($mil)	33,065	89,859	12,184	27,120	55,927	122,922	-43,743***
Sales ($mil)	6,699	8,683	6,419	9,456	7,005	7,736	-586
ROA (%)	4.75	8.84	4.52	10.01	4.99	7.33	-0.46
Leverage	3.58	5.72	2.39	3.47	4.88	7.21	-2.49 ***
Management Ownership (%)	2.79	8.96	4.18	11.24	1.27	5.05	2.91 ***
Widely-held	0.41		0.21		0.62		-0.42 ***
CEO/Chair Split	0.82		0.74		0.90		-0.16 ***
Natural Resources	0.32		0.30		0.35		-0.05
Utilities	0.12		0.08		0.17		-0.10 ***
Financial	0.19		0.14		0.24		-0.09 ***
Cross-listing	0.45		0.35		0.57		-0.22 ***
# of firm-years	530		277		253		

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[3] For more details of the methodology employed in 2009 see http://www.theglobeandmail.com/report-on-business/board-games/board-games-2009/article1375949/#custom.

As shown in Table 1, Canadian firms that adopt better-than-average corporate governance are, on average, bigger (as measured by total asset), with higher leverage, and lower management ownership. Their average Tobin's Q is lower than that of the firms adopting below-average governance practices, but the difference is not significant. In the meantime, firms with above-average corporate governance are more likely to be widely held, to have split CEO and Chair of the board positions, and to be cross-listed in another stock exchange (mostly NYSE or NASDAQ).

3.   EMPIRICAL METHODOLOGIES AND RESULTS

A typical inquiry into the association between corporate governance and firm value is as following:

$$FV_i = X_i^{'}\beta + \delta * CG_i + \varepsilon_i \tag{1}$$

where FV is a measure of firm value such as Tobin's Q, and CG is some measure on corporate governance. In this paper two measures on corporate governance are considered: the corporate governance score provided by Report on Business at the *Globe and Mail*, and a dummy variable with one representing an above-average corporate governance score. *X* is a collection of control variables that may affect firm value so that the effect of corporate governance, δ, can be separated from other factors'.

To follow the literature (Adjaoud, *et al.*, 2007; Bebchuk *et al.*, 2009; Black *et al.*, 2006a, 2006b; Bozec *et al.,* 2010; Gompers *et al.*, 2003; Gupta, *et al.*, 2009; Klein, *et al.*, 2005) a number of control variables are selected in our empirical analyses.

Firm size, as measured by logarithm of total assets and sales, is to control for potential advantages from economies of scale and scope, market power, and market opportunities. Leverage (debt/equity ratio) controls for different risk characteristics.

Dummy variables are appointed for companies in the *utility*, *financial services* and *natural resources* sectors. These dummies take care of the unique government regulation in the utilities sector, the special relationship between book and market values in the financial sector, and the difficulty of valuing reserves in the natural resources sector. These difficulties often cause researchers to eliminate such firms from their samples, but such elimination would lose too much information (over 60% of the firms in the sample) given the composition of the Canadian economy. This choice is consistent with Klein *et al.* (2005) among others.

To classify the ownership, a firm with no block holders (10% or higher) is labeled *widely-held*. Also controlled is the collective stock holding in the company by top management. A dummy is used for the split position of CEO and Chair of the board of directors to indicate the structure of the board. To control whether a company is subject to another set of corporate governance regulations, a *cross-listing* dummy indicates if the firm is also traded on another exchange (e.g., NYSE, NASDAQ).

3.1   Pooled Regression Model

Empirical corporate governance studies may work with a cross-section of data (e.g., Klein *et al.*, 2005, and Adjaoud *et al.*, 2007) or data over a number of periods (e.g., Gupta *et al.*, 2009). When working with data over a period of time, for various reasons, researchers often run pooled regressions with year-dummies to control the special effect of each period.

In Table 2 the results with the two measures of corporate governance are almost identical except that the corporate governance score (CG) is significant at 10% level while the corporate governance dummy (CD) is not. This weak or lack of connection between corporate governance and firm value in Canada is consistent with the findings in the literature (Adjaoud *et al.*, 2007; Gupta *et al.*, 2009; Klein *et al.*, 2005).

Table 2: Results of Pooled Regression

The logarithm of Tobin's Q is the dependent variable in the regressions. CG is the corporate governance score reported in the ROB by the *Globe and Mail*. CD is a dummy variable of corporate governance that equals one if a firm's CG score is above average in that year and zero otherwise. TA and SA are the logarithm of total assets and sales (measured in million dollars) respectively. RA is return to assets. LV represents the logarithm of leverage. WH is a dummy variable equal to one if the company is widely held. SP is a dummy that equals one if different individuals occupy the CEO and Chair of the board positions. MO is the logarithm of management (top five executives) ownership (common shares, as a percentage) in the company. NR, UT, and FI are sector dummies for natural resources, utility, and financial industry respectively. CL is a dummy that equals one if a company is cross-listed on TSX and another stock exchange (e.g., NASDAQ, NYSE). Y5 to Y8 are year dummies for the years 2005 to 2008.

***, **, and * indicates statistical significance at 1-, 5-, or 10-percent level respectively.

Variable	Model 1	Model 2
CG	0.003*	
CD		0.047
TA	0.019	0.019
SA	-0.080***	-0.080***
RA	0.011***	0.011***
LV	-0.132***	-0.127***
WH	0.066	0.079*
SP	-0.068	-0.063
MO	-0.003	-0.004
NR	-0.082*	-0.080*
UT	-0.197***	-0.192***
FI	-0.107	-0.113
CL	0.050	0.059
Y5	0.054	0.067
Y6	0.028	0.021
Y7	0.067	0.071
Y8	-0.181***	-0.171***
constant	1.610***	1.770***
R-squared	0.371	0.370

3.2   Fixed Effects Panel Model

As discussed earlier, a key issue in empirical governance studies is to control all the potentially relevant factors to isolate and focus on the effect of corporate governance on firm value. However, the list of potentially relevant factors is long and prior literature only provides partial guidance. If the missing (maybe unobservable) firm characteristics are correlated with the observable firm characteristics included in regression (1), this correlation can cause biased or even misleading results. The pooled regression specification is particularly vulnerable to the issue of omitted variables. Fortunately the fixed-effect estimation of panel date can address this issue by eliminating the effects of any unchanging firm characteristics (Green, 2008).[4] Panel data on corporate governance have been available only in the past few years, and there have been a limited number of attempts with such data (Black *et al*., 2006a; Black, Love, and Rachinsky, 2006; Gupta *et al*., 2009).

In Table 3 the results with the two measures of corporate governance are very similar, but with some important differences compared to those in Table 2. First, the significance of the corporate governance dummy (CD) suggests that, in general, adopting better-than-average corporate governance may reduce the firm value. Second, the corporate governance score (CG) is no longer significant in Model 1, which is consistent with the findings in previous Canadian studies (Klein *et al*., 2005, Adjaoud *et al*., 2007, and Gupta *et al*., 2009). Third, and very importantly, the sign and significance of several control variables are different from the results reported in Table 2. For example, while the size of the firm as measured by total assets (TA) seems to be unrelated to firm value in Table 2, it becomes significant with a changed sign in Table 3. The opposite occurs for leverage (LV).

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[4] Although we believe that the fixed effects model is more appropriate in this context due to the potential correlation between observable (including corporate governance measures) and omitted unobservable firm characteristics, as a robustness check the random effects model is also estimated, whose results in most cases are not significantly different from those of the fixed effects model as per the Haussman Test. The results of the random effects model are not reported to save space.

Table 3: Results of Fixed Effects Panel Estimation

The logarithm of Tobin's Q is the dependent variable in the regressions. The explanatory variables' descriptions are the same as those in Table 2. The model is estimated with the within-group procedure. ***, **, and * indicates statistical significance at 1-, 5-, or 10-percent level respectively.

Variable	Model 1	Model 2
CG	0.002	
CD		-0.061*
TA	-0.200***	-0.191***
SA	-0.065***	-0.068***
RA	0.008***	0.008***
LV	0.026	0.027
WH	0.007	0.011
SP	0.056	0.057
MO	-0.005	-0.006
Y5	0.077***	0.081***
Y6	0.092***	0.081***
Y7	0.154***	0.153***
Y8	-0.082***	-0.078***
R-squared	0.366	0.369

The observations on the difference between OLS and fixed effects results are consistent with the findings in Black, Love and Rachinsky (2006), which works on a panel data sample over the period 1999 to 2005 from Russia. Black, Love and Rachinsky (2006) is the only literature (as we realize) that reports comparative results of OLS and panel data estimations. Since the fixed effects panel estimation essentially controls *all* the firm characteristics (observable or unobservable) that do not change over time, the difference between Tables 2 and 3 shows the importance of controlling these firm characteristics in governance research and that failing to do so may yield misleading results. Empirical results based on cross-sectional or pooled regressions, not matter how comprehensive the control variables are, are vulnerable to this challenge.

3.3   A self-Selection Investigation

The Canadian approach to corporate governance regulation is to allow corporations to choose the appropriate governance practices and let the market be the judge (as reflected in measures such as Tobin's Q). In such an environment the general assumption is that firms adopt appropriate governance practices to maximize the firm value. This "choose-your-own-governance" approach suggests that the mechanism of self-selection may be at work.

Regression (1) cannot be consistently estimated due to the interconnection between the corporate governance measure and control variables, especially when the corporate governance is measured by a dummy. The estimates of regression (1) may be misleading if a typical firm that adopts high-standard corporate governance would have a higher firm value whether or not it adopted better corporate governance. The problem is one of self-selection. Self-selection models are discussed in Maddala (1983) and Green (2008) among others. Li and Prabhala (2007) is an excellent discussion on their applications in corporate finance.

While not in a complete self-selection model, Chhaochharia and Laeven (2009) investigates factors that make firms to adopt above-average corporate governance practice. Their findings are consistent with the agency theory. Goncharov *et al.* (2006) is an attempt on the self-selection model with German data in 2002 and 2003, which focuses on stock price and return as measures of firm performance. It finds clear evidence of self-selection in German corporate governance practices.

A popular solution to the self-selection issue is to estimate the model in two steps as proposed by Heckman (1979): a probit estimation of firms' corporate governance choices (above- or below-average), followed by a revised regression with the addition of inverse Mills ratio (IMR). As argued by Li and Prabhala (2007), the process of correction for self-selection can be viewed as including either an omitted variable (from a statistics perspective) or a measure of private information. The latter interpretation is of greater interest in finance research. While researchers

try the best to include all the relevant information in the probit model of firms' corporate governance choices, there are always some firm characteristics (maybe unobservable, potentially time-varying) for while data cannot be collected. Given the nature of the unobservable (or private) information the best one can do is to include its expectation (conditional on observable information) – the IMR – in the revised regression as an additional explanatory variable.

Table 4: Results of Probit Estimation

The dependent variable is the corporate governance dummy. The explanatory variables' descriptions are the same as those in Table 2. ***, **, and * indicates statistical significance at 1-, 5-, or 10-percent level respectively.

Variable	Coefficients
TA	-0.011
SA	-0.051
RA	0.016**
LV	0.538***
WH	0.878***
SP	0.363**
MO	-0.069**
NR	0.409**
UT	0.649***
FI	-0.541*
CL	0.493***
Y5	-0.188
Y6	-0.237
Y7	-0.081
Y8	-0.009
McFadden R-squared	0.236

The estimates reported in Table 4 show that, in general, firms that are more profitable, with higher leverage, widely held, with split CEO and Chair of the board positions, and lower management ownership are more likely to adopt above-average corporate governance standards, when the sector and years effects are controlled. These observations are generally consistent with the findings in the literature (e.g., Chhaochharia and Laeven, 2009). Firms with high leverage depend more on external financing, so they may adopt sound corporate governance to send a positive signal to the market (further discussion will be made on this point later on). Companies with dispersed ownership (i.e., no dominant owners) and the split of CEO and chair of the board positions generally have less conflict among shareholders so that they are more likely to adopt sound corporate governance. Unlike corporations in the U.S. where the major issue in corporate governance is to align managerial interest with that of shareholders, the Canadian governance challenge is how to temper the alignment of managerial and controlling shareholder interest to the detriment of minority shareholders (Sarra, 2003). Thus firms with lower management ownership are more likely to adopt sound corporate governance.

Although it is often believed that large firms have more resources or are under more pressure (due to their visibility in the market) to adopt sound governance practices, the firm size per se (measured by assets or sales) is not connected to adopted governance standards when other factors are controlled.

Table 5 shows the estimation results for the second step of the self-selection model, where the conditional expectation of the unobservable private information, the IMR, is added as an explanatory variable to the regression model. The results in Table 5 show some significant difference from those in Table 3. In particular, the significance of IMR suggests that the unobservable private information (or firm characteristics) that makes firms to adopt above-average corporate governance also helps to increase firm value. However, adopting above-average corporate governance per se actually reduces firm value. The combined effect of private information and corporate governance seems to be consistent with the weak or lack of impact of corporate governance reported in Table 3. When the regression is run for the two sub-samples, the impact of private information (the self-selection effect) is very strong for the above-average group but not significant for the below-average group.

Table 5: Panel Estimation with Self-Selection Adjustment

The logarithm of Tobin's Q is the dependent variable in the regressions. The explanatory variables' descriptions are the same as those in Table 2 with the addition of IMR. ***, **, and * indicates statistical significance at 1-, 5-, or 10-percent level respectively.

Variable	Whole sample	Above-average sample	Below-average sample
CD	-0.819***		
TA	-0.198***	0.055***	-0.148***
SA	-0.074***	-0.094***	-0.078***
RA	0.011***	0.010***	0.005***
LV	0.136***	0.106***	0.022
WH	0.224***	0.057	0.022
SP	0.132**	0.157**	0.051
MO	-0.023*	0.016	-0.005
Y5	0.041	0.042	0.054
Y6	0.028	0.021	0.049
Y7	0.139***	0.088***	0.113***
Y8	-0.081***	-0.121***	-0.143***
IMR	0.444***	0.571***	-0.220
# of firm-year obs	530	253	277
R-squared	0.378	0.936	0.884

Models that do not separate the two effects (such as those in Table 2 and 3) often detect no or marginally significant connection between corporate governance and firm value. Recognizing the importance (or the almost impossible task) of controlling all the relevant information, the self-selection model provides a fresh perspective on the impact of corporate governance. It suggests that caution should be taken when interpreting results in empirical corporate governance studies.

In a country like Canada where the regulation on corporate governance is in a flexible "comply-or-explain" framework companies are expected to choose the governance practice that best suits their needs. The findings in Table 5 suggest that corporate governance may serves as a signalling tool to the stakeholders. Certain firm characteristics, which can increase firm value, may be unobservable to investors. Firms with these favourable characteristics (or private information) signal to the market by adopting high-standard corporate governance. However, since adopting high-standard corporate governance per se can be very costly (e.g., Bauer *et al*. (2004) finds negative relationship between governance standards and earnings-based performance measures), firms without the favourable private information would choose not to adopt sound governance practices. The results in Tables 4 and 5 provide support to the view that unobserved firm heterogeneity (private information) may predict both governance and firm value, leading to a spurious correlation between the two (Black, Love and Rachinsky, 2006). This suggests that we should be very cautious to claim any causal relationship between corporate governance and firm value.

4.   CONCLUSION

While improving corporate governance is increasingly popular and seems be such a right thing to do, it is puzzling that almost no Canadian studies detect any association between corporate governance and firm value. Doesn't corporate governance matter in Canada?

This study provides a fresh perspective on this puzzle. There are actually two effects combined in the seemingly weak or insignificant connection between corporate governance and firm value. On one hand, some unobservable private information makes some firms to adopt sound corporate governance and the same information (or firm characteristics) increases firm value. On the other hand, adopting sound corporate governance per se actually hurts corporations by reducing their firm values.

In future research it may be interesting to investigate to gain some better understanding of these unobservable firm characteristics. It is also of interest to look at the impact on firm value of the components (i.e., board composition, shareholding and compensation, shareholder rights, and disclosure) of corporate governance scores.

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