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The Impact of SOX Adoption on the Compensation of Non-US Companies' Boards: The Case of Canadian Companies

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The purpose of this article is to study the relationship between the adoption of the Sarbanes-Oxley Act (SOX) and the compensation of the board of directors of Canadian companies listed on US stock markets. The SOX act, promulgated on 30 July 2002 and the rules adopted by the Securities and Exchange Commission (SEC) require, among furthermore, a majority of independent directors on boards. The literature focuses on two main differences between US companies and Canadian companies: more concentrated ownership and the smaller market capitalization of Canadian companies. Therefore, a consistent application of SOX on all the companies that differ at the base, in their size and structure, may have a different impact on the costs of compliance. Using a sample of 17 Canadian companies listed on US stock exchanges from 2001 to 2004, our analysis show that there is a link between the adoption of SOX and the increased in the cash compensation of the board of directors. The results also show that the effect of SOX is different depending on the company's size.

Keywords: *SOX, Board of directors, Board compensation, Canadian companies*

JEL Classification: *G380*

1. Introduction

The US regulations including the Sarbanes-Oxley Act (SOX), the rules adopted by the Securities and Exchange Commission (SEC), the New York Stock Exchange (NYSE) and National Association of Securities Dealers (NASD) focus on the importance of independent directors on the board of directors and its committees. SOX focuses mainly on the audit committees of public companies. Article 301 (Public Company Audit Committes) requires that each member of the audit committee be independent. The rules adopted by the NYSE and NASDAQ require companies to have a majority of independent directors and compensation committees and appointment / fully independent governance. (The SEC Release No. 34-48745).

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According to several authors, board independence is important for the preservation of shareholder wealth (Berle and Means, 1932; Fama and Jensen, 1983; Jensen, 1993). However, the effectiveness of independent directors is limited due to information asymmetry compared to the internal board members. Indeed, most studies find no significant relationship between board independence and firm performance (Agrawal and Knoeber 1996; Bhagat and Black, 2002). Also, several authors have shown that there is an increased cost due to increased regulation (Wintoki, 2007; Bruno and Claessens, 2010; Litvak, 2007; Butler and Ribstein, 2006). Besides Linck, Netter and Yang (2009) found that the application of SOX increases the costs of remuneration of the directors by increasing their workload and their risks. Chhaochharia and Grinstein (2007) found that high compliance costs of new regulations have had major consequences for small businesses.

The purpose of this article is to show the impact of the application of Sox on other companies than American companies in term of board fees. Our goal is to analyze how does SOX, which is an international law enforcement, affected the costs of remuneration of directors of foreign companies such as Canadian companies listed on US markets. Indeed, SOX does not apply only to US companies, but all companies whose securities are traded on US exchanges (Litvak, 2007). Many of these companies are non-US companies with multiple differences such as the company's structure and size.

According to Gray (2005), in the case of Canadian companies, these differences imply first, a more concentrated ownership, compared to US companies. This feature could be decisive for the increased independence of the Board.

Another difference is the fact that many Canadian companies are characterized by a market capitalization which is smaller than US. Canada unlike the United States, do not have a national securities commission and is characterized by a large number of actors involved in the regulation of financial markets (Carnaghan and Gunz, 2007).

The cross listing of Canadian companies allow us to conduct this study. In addition, mandatory vs voluntary approaches (Canadian regulation on board of directors is non-mandatory, e.g. policy Statement 58-201 in Canada. See Khemakhem, Baillargeon and Gélinas (2014) for further information.) and the different dates of entry into force of governance reforms in both countries are favourable to the realisation of this work. There are several studies that have examined the analysis of the costs and benefits of SOX on US companies (Butler and Ribstein, 2006; Linck, Netter and Yang, 2009; Wintoki, 2007), or foreign companies (Litvak, 2007). However, the analysis of the impact of SOX on the costs of remuneration of Canadian boards remains little explored in the literature.

Our analysis contributes to the debate on the uniform application of SOX on all the companies listed on US exchanges, including foreign companies whose country of origin have different laws and practices.

Our results show that there is a link between the entry into force of SOX, which imposes certain characteristics of the board, and the costs of remuneration of directors of Canadian companies listed on US stock markets.

2. Literature Review and Hypotheses

Several studies show that the introduction of new rules may affect the value of the firm. Indeed, Chhaochharia and Grinstein (2007) and Wintoki (2007) find that SOX in the US has negatively affected the value of some US companies.

Wintoki (2007) emphasizes the fact that it is the small companies that have suffered most from the implementation of SOX because of higher costs. His results indicate that boards are generally structured according to economic efficiency and maximizing the company's value. Therefore, a company whose optimal board structure requires more internal directors on the board could have less benefit from the new governance rules requiring more independent directors on the board.

Arcot and Bruno (2005) argue that the rules of governance are an exercise of checking boxes for businesses, where more marked boxes means better corporate governance. If the effectiveness of corporate governance following the adoption of SOX is still estimated in the years that follow, compliance costs them are more obvious. To meet the new requirements companies must assess and document their existing control systems, determine what changes are necessary to improve these systems to implement the changes and test the effectiveness of internal controls established. The costs of achieving these tasks include increasing salaries and benefits, external consulting fees and new and appropriate technologies (hardware and software) (Eldridge and Kealey, 2005). In addition, the increased responsibility of directors and officers, generated by this wave of regulatory provisions, serves to discourage entrepreneurial behavior (Gray, 2005).

The compliance cost with SOX is according to different estimates in the tens of billions of US dollars (Gray, 2005). This significant financial burden fell disproportionately on small companies before SOX, had fewer outside directors that large companies according Linck et al. (2009). Indeed, their study shows that spending by smaller companies towards the compensation of directors appear to have greatly increased. According to this, they went from $ 21,688 to $ 40,783 for medium enterprises between 2001 and 2004. For small businesses, compensation for outside directors increased from $ 7.25 to $ 9.76 per $ 1,000 in net sales during the same period, compared to an insignificant increase of $ 0.20 per $ 1,000 in net sales for large companies.

The costs of SOX compliance are disproportionate specifically for small businesses. To avoid SOX, some small businesses have chosen to become private, or to reduce the number of public registered shareholders below 300, which is the application threshold imposed by the Securities and Exchange Act of 1934, including SOX belongs. Butler and Ribstein (2006) conclude that there is no justification to impose new laws, even if they could reduce fraud, and as long as compliance costs outweigh any potential benefit from the reduction of fraud.

In this regard, Morgenstern, Nealis and Kleinman (2004) argue that the small cap issuers generally have a more limited financial strength (often with less experience in the public sector) and major emitters. Small businesses, according to these authors, have sometimes only one financial officer and no internal staff. CFOs of these companies regularly play multiple roles in finance, administration and operations. These transmitters may find that management spends a lot of time to the disclosure required by the SEC and compliance rather than operations and profitability.

Morgenstern, Nealis and Kleinman (2004) and point out that small issuers that have insufficient resources and a limited number of qualified administrators, will be less able to recruit, reward, or retain the talent needed. Their empirical data show that the costs of administrator's retention increase when the size of the company decreases. Morgenstern, Nealis and Kleinman (2004) conclude that the Sarbanes-Oxley (SOX) must be reconsidered with a significant sensitivity of its impact on mid-cap issuers, private companies and general capital markets. For SOX achieve its objectives, the rules must make a stronger distinction between issuers by market capitalization or income.

Bruno and Claessens (2010) found that strong governance practices are less profitable for small businesses, probably because of the high costs in terms of monitoring, time and resources that exceed the benefits. The same authors argue that it is better to leave the control of managers to market forces and that SOX imposes an unnecessary bureaucratic weight.

In this vein, we look at the consequences for foreign issuers subject to SOX, including Canada and whose capital structure is different from that of US companies. Because of their activity, many Canadian companies are subject to US regulations. There are several differences between the Canadian and US regulations relating to governance, namely the adoption approach (mandatory / voluntary) or the effective date but also in the financial structure of the companies (Carnaghan Gunz, 2007). Indeed, Canadian companies are characterized by low market capitalization compared to the US. Canadian companies also have a more concentrated ownership and higher homestead that US companies. In Canada, the regulations relating to the Board of Directors is mostly voluntary. Indeed, the independence of the board is not mandatory in Canada.

Given these characteristics, we expect that the costs relating to the remuneration of directors in Canadian companies, subject to US regulations, be increased after the adoption of SOX and the fact that this increase is different depending on the size of companies. We therefore test the following hypotheses:

H 1: The adoption of SOX increases the board of directors' fees of Canadian companies listed in US financial markets.

H 2: The effect of the adoption of SOX depends on company size.

3. Research Methodology

3.1. Sample Selection and Data Collection

Our starting point is the set of Canadian companies listed on US stock market from 2001 to 2004 before the entry into force of Canadian regulation. Financial sector companies are eliminated cause of their special regulations. Companies that have experienced significant variations in size are eliminated to allow us to analyze the size effect.

The final sample was 17 for a total of 64 firm-year observations. Table 1 details the sample selection.

Table 1. *Sample Selection*

	Total
Listed companies in both Canadian and American stock markets from 2001 to 2004	122
Companies whose total assets doubled or decreased by half between 2001 to 2004	34
Financial companies	12
Delisted companies between 2001-2004	32
Missing data	44
Total	**17**

Data collection period is from 2001 to 2004:

- From 2001 to 2002 – is the period of time before the implementation of SOX.
- From 2003 to 2004 – is after the implementation of SOX and before the adoption of the Canadian regulations on board of directors (Canadian regulation on board of directors, especially policy Statement 58-201 is adopted since 2005).

Data on the remuneration of directors were collected manually in circulars available at SEDAR.com. Financial data are extracted from the Global Compustat database.

3.2. Proposed Model

We use the following model:

$$Compensation = Post\ SOX + Size + ROA + MTB$$

With:

Compensation: cash compensation of the board of directors.
POSTSOX: dummy variable; 1 for 2003,2004 and 0 otherwise.
Size: Log of market value of equity.
ROA: Return on assets ratio.
MTB: Market to book ratio.

4. Analysis and Results

We use the analysis of covariance (ANCOVA) due to the small sample size. The ANCOVA analysis is a statistical method to test by a general linear model, the effect on a continuous dependent variable of one or more categorical predictors, regardless of the effect of other continuous quantitative factors, known covariates. In other words, the ANCOVA is a combination between an ANOVA and a regression.

Moreover, Tables 2 and 3 show that there is an increase in board compensation after SOX (see the middle that increases after SOX). The tables of descriptive statistics show that the direction of change is positive (the mean before and after SOX).

The tables 2 and 3 show that, after SOX application, the mean remuneration increases. The SOX variable has a significant effect on the cash compensation of directors in table 4. These results support our hypothesis (H1).

It demonstrates that SOX increases the costs of remuneration of directors of Canadian companies listed on US financial markets.

Table 2. *Board Cash Compensation before SOX (Mean compensation for 2001-2002)*

No. of observations	**Mean**	**Standard-Deviation**	**Minimum**	**Maximum**
34	18 671.18	12175.51	2 500.00	50 000.00

Table 3. *Board Cash Compensation after SOX (Mean compensation for 2003-2004)*

No. of observations	**Mean**	**Standard-Deviation**	**Minimum**	**Maximum**
34	25 316.76	17161.79	7 500.00	100 000.00

We carried out another ANCOVA analysis to find if SOX has had a different effect on small and large companies. We used the interaction between the variable size and variable SOX. Table 5 presents the results of this analysis. We see that the interaction (Size* SOX) is significant (Table 5) it confirms our hypothesis H 2 and indicates that the effect of the law is different depending on firm size.

Table 4. ANCOVA - SOX effect on board compensation

Variables	DDL Num.	DDL den.	F	P value
SOX	1	46	7.83	0.0075***
Size	1	46	5.10	0.0286**
ROA	1	46	0.19	0.6651
MTB	1	46	5.88	0.0193**

Note: *** sign. at 1%** sign. at 5 %* sign. at 10 % level.

Table 5. ANCOVA - Combined effect of SOX and companies' size on board compensation

Variables	DDL Num.	DDL den.	F	P value
SOX	1	46	18.36	<0.0001***
Size	1	46	3.98	0.0520*
SOX *Size	1	46	4.50	0.0394**
ROA	1	46	1.65	0.2049
MTB	1	46	2.17	0.1479

Note: *** sign. at 1%** sign. at 5 %* sign. at 10 % level.

Where:

Independent variable: directors' cash compensation.
SOX : dummy variable ; 1 for years 2003,2004 and 0 otherwise.
Size: Log of market value of equity.
ROA : Return on assets.
MTB : Market to book.

The results show that there is a link between the entry into force of SOX that imposes certain characteristics of the board and the directors' cash compensation of Canadian companies listed on US financial market. The cash compensation of Canadian boards increased after the implementation of the Sarbanes-Oxley Act in 2002.

5. Conclusion and Discussion

The literature highlighted the impact of board independence on the financial performance of the firm (Agrawal and Knoeber 1996; Bhagat and Black, 2002, Bhagat and Bolton, 2008). Other studies such as Bruno and Claessens (2010), Butler and Ribstein (2006) Litvak (2007) and Wintoki (2007) found a significant compliance costs for US companies following the enactment of SOX. However, very few studies have addressed the impact of SOX on the costs of compliance of foreign inter-listed companies in US stock exchange. However, it is interesting to study the effect of a uniform application of SOX on all the companies on US exchanges, including foreign and whose country of origin are characterized by different laws and governance practices of the US.

The Canadian context offers a special opportunity for research because that the most part of the voluntary on board is non-mandatory. In addition, the different dates of entry into force of the respective reforms in both countries allow the realization of the study.

Our results confirm that there is relationship between the adoption of SOX and the remuneration of directors and that, controlling for the ROA ratio, MTB ratio and for the size variable.

We find that the cash compensation of the board increased after the implementation of the Sarbanes-Oxley Act in 2002. This may be attributed to the increase of tasks and responsibilities of the board after SOX and consequently an increase in his pay.

Our findings join those of Linck, Netter and Yang (2009) regarding the effect of SOX depending on company size. Moreover, we find that SOX has influenced in different ways small and large companies. Company size seems to be a main factor influencing the increase of board cash compensation.

Combined with SOX entry in to force, the company size has a significant effect on board compensation indicating that the impact of SOX adoption depends on company's size.

The compliance with the provisions of SOX could be more difficult for smaller size companies than for larger ones and this is due to their ability to face the increase of compliance cost.

The compliance fees could also be a barrier for small non-US companies for being listed on US stock markets.

Our results may suffer from certain limitations inherent to the sample selection and variable measures, including the dependent variable, the remuneration of directors. Note that, in contrast to other

studies (Linck, Netter and Yang, 2009; Wintoki, 2007), which use the total compensation (cash compensation and options), we use only cash compensation. This choice is result of insufficient or even the lack of data on options compensation for several Canadian firms. Some limitations of generalizability of the results are due to the small number of sample firms. Conducting the study on a larger sample and more years will allow better generalizability of the results. Also, our study did not reveal the quantified impact of increased costs for Canadian companies. Future research may investigate the effect of SOX on increased cost and financial performance of non-US firms listed on US capital market.

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