

THREE INSIGHTS FROM THE CANADIAN D&O INSURANCE MARKET: INERTIA, INFORMATION AND INSIDERS¹

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ABSTRACT

This paper contributes to our understanding of the role of Director's and Officer's insurance by answering three very specific questions: Do directors and corporations actively optimize their decision to purchase D&O insurance? Can we devise a profitable investment strategy based on the D&O insurance information? And does D&O insurance motivate managers to increase profitability? To answer the first question, I will argue that the most important determinant of D&O purchase in any year is whether the firm purchased it in the previous year so that managers do not appear to reassess actively their need for such coverage very often. For the second question, I find that there are profitable investment strategies that entail the purchasing of the stock of corporations that have relatively high directors' and officers' insurance unit price (premium divided by coverage) and sell the stock of corporations that have relatively low directors' and officers' unit price. I attribute the profitability of the strategy to the fact that directors' and officers' insurance represents an aggregate measure of board efficiency and corporate governance health. Finally, using a cross section of Canadian unit trust companies, I show that D&O insurance seems to demotivate managers to extract cash flows from assets, although this demotivation does not seem to reach the stock market. Two important caveats are in order: I am using a very short time period and I am using only Canadian corporations. Sadly, information regarding directors' and officers' insurance has not been available for very long, and is still not available publicly in the United States.

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INTRODUCTION

A. CORPORATE DIRECTOR LIABILITY AND PROTECTION

As representatives of the corporation, directors and officers are liable for the corporation's actions.³ More importantly, the directors and officers are personally responsible for those actions, and accordingly their personal assets are at risk in the event of a lawsuit against the corporation and its management.⁴ Following the recent loss of confidence in corporate governance resulting from the debacle of corporate giants like Enron, Worldcom, Adelphia and Anderson, corporate managers are facing greater risk of lawsuits originating from angry shareholders who feel they were kept in the dark regarding the company's operations. According to a 2002 survey, 19% of firms had at least one lawsuit brought against their directors in the previous ten years.⁵ One way for a corporate director to protect his personal wealth is to have the corporation buy insurance on his behalf.⁶ This insurance is known as Directors' and Officers' (D&O) insurance.

A D&O insurance policy becomes applicable when a manager is sued in his capacity as a representative of the corporation.⁷ The insurance company indemnifies the corporation and/or the manager only if the manager acted in good faith on behalf of the company; i.e., managers are not covered in case of gross negligence or criminal behavior.⁸ Depending on the type of D&O contract, the manager could be indemnified directly, or the corporation could be compensated for the expenses incurred in the manager's defense.⁹ As with traditional insurance contracts, D&O insurance contracts stipulate a premium to be paid, a policy limit, and a deductible.¹⁰

3. M. Martin Boyer, *Directors' and Officers' Insurance and Shareholders' Protection 1* (Ctr. for Interuniversity Research and Analysis on Orgs., Working Paper No. 2003s-64, 2003), available at <http://www.cirano.qc.ca/pdf/publication/2003s-64.pdf>.

4. *Id.*

5. Tillinghast-Towers Perrin, *2002 Directors and Officers Liability Survey: US and Canadian Results*, Apr. 23, 2003, available at www.towersperrin.com/tp/getwebcachedoc?webc=TILL/USA/2003/200304/DO_summary2002a.pdf.

6. Boyer, *supra* note 3, at 1.

7. *Id.*

8. Sanjai Bhagat, James A. Brickley & Jeffrey L. Coles, *Managerial Indemnification and Liability Insurance: The Effect on Shareholder Wealth*, 54 J. RISK & INS. 721, 724 (1987); John M. R. Chalmers, Larry Y. Dann & Jarrad Harford, *Managerial Opportunism? Evidence from Directors' and Officers' Insurance Purchases*, 57 J. FIN. 609, 613 (2002).

9. Bhagat et al., *supra* note 8, at 724; Chalmers et al., *supra* note 8, at 613.

10. Bhagat et al., *supra* note 8, at 724.

It is important to note that D&O insurance is not the only way to protect managers against lawsuits. A corporation can also amend its charter so that the director liability is limited.¹¹ These limited liability provisions “all but eliminate the directors’ personal financial responsibility toward the firm and its shareholders.”¹² By 1996, more than 70% of American corporations adopted limited liability provisions.¹³ A third way that a corporation can protect its directors is through corporate indemnification plans. These plans give directors protection against third-party lawsuits because under these plans the corporations are responsible for indemnifying the directors for court expenses.¹⁴ Corporate indemnification plans protect directors who acted in the best interest of the corporation, even if they are found guilty, so long as the harm was caused while acting in the best interests of the corporation and the director did not reap any personal benefit from their conduct.¹⁵ The public data collected for this study makes no mention of corporate indemnification plans and because Canadian corporate law does not allow limited liability provisions,¹⁶ this study relies exclusively on D&O insurance to study the financial protection offered to corporate directors.

B. PAST RESEARCH

Because of the limited access to public information prior to 1990,¹⁷ only a few studies have been conducted on the demand for D&O insurance. Public information became available following the Cadbury Report in the United Kingdom and the Dey Report in Canada.¹⁸ Both reports recommended to their respective securities commission that more information be made available on the compensation of officers and directors.¹⁹ As a result, more information regarding managerial

11. Maria Gutierrez, *A Contractual Approach to the Regulation of Corporate Directors’ Fiduciary Duties* 17 (Universidad Carlos III de Madrid, Working Paper No. 0013, 2000).

12. Boyer, *supra* note 3, at 1.

13. Gutierrez, *supra* note 11, at 17.

14. *Id.*

15. *Id.*

16 R. Crête et S. Rousseau, *Droit des sociétés par actions*, 2e éd., Montréal, Éditions Thémis, 2008, 881 p.

17. Prior to 1990, the only information related to D&O insurance was collected via surveys by Wyatt, now part of Tillinghast-Towers Perrin. Boyer, *supra* note 3, at 8.

18. *Id.*

19. COMM. ON THE FIN. ASPECTS OF CORPORATE GOVERNANCE, REPORT OF THE COMMITTEE ON THE FINANCIAL ASPECTS OF CORPORATE GOVERNANCE § 3.2 (1992), available at <http://www.ecgi.org/codes/documents/cadbury.pdf>; TORONTO STOCK EXCH.

compensation is available in both countries, including the purchase of D&O insurance.

The first studies that used the newly available public data in Canada and the United Kingdom were conducted by J.E. Core and N. O'Sullivan.²⁰ Using a sample of 222 firms whose fiscal year ended between May 31, 1994 and December 31, 1994, Core found that the most important determinants of whether D&O insurance was purchased were the risk of a lawsuit and the cost of financial distress.²¹ In a follow-up article, Core found that the factors explaining premiums were about the same as the factors explaining the demand for D&O insurance.²² Core's results are supported by O'Sullivan who concluded that in the United Kingdom, D&O insurance coverage and managerial share ownership are corporate governance instrument substitutes.²³ Moreover, Core and O'Sullivan suggested that D&O insurance acts as a monitoring device.²⁴

If D&O insurance reduces the expected cost of bankruptcy and acts as a corporate governance instrument or monitoring device, one should expect that stock returns should be positively correlated with D&O insurance purchases. Surprisingly, however, D&O insurance does not seem to have any impact on stock returns.²⁵

More recently, a study conducted by J. Chalmers, L. Dann, and J. Hartford examined the interaction between D&O insurance coverage and initial public offering (IPO) under-pricing.²⁶ This study looked at an original sample of firms that went public between 1992 and 1996.²⁷ The Chalmers study found that corporations with substantial D&O insurance coverage were, on average, more likely to be sued in the future for

COMM. ON CORPORATE GOVERNANCE IN CAN., WHERE WERE THE DIRECTORS? GUIDELINES FOR IMPROVED CORPORATE GOVERNANCE IN CANADA § 5.50 (1994).

20. John E. Core, *On the Corporate Demand for Directors' and Officers' Insurance*, 64 J. RISK & INS. 63, 64, 70 (1997); Noel O'Sullivan, *Insuring the Agents: The Role of Directors' and Officers' Insurance in Corporate Governance*, 64 J. RISK & INS. 545, 546 (1997).

21. Core, *supra* note 20, at 70, 81.

22. See John E. Core, *The Directors' and Officers' Insurance Premium: An Outside Assessment of the Quality of Corporate Governance*, 16 J.L. Econ. & Org. 449 (2000); Core, *supra* note 20.

23. O'Sullivan, *supra* note 20, at 554.

24. O'Sullivan, *supra* note 23, at 554. See generally Core, *supra* note 22 (suggesting that D&O premiums contain useful information about the quality of corporate governance).

25. Bhagat et al., *supra* note 8, at 722.

26. Chalmers et al., *supra* note 8, at 609-10.

27. *Id.* at 610-611.

mispricing.²⁸ More specifically, the study found that the three-year performance is negatively related to the amount of D&O insurance purchased at the IPO.²⁹ Put another way, the greater the D&O insurance coverage, the less underpriced the stock was at the time of the initial public offering.

The liability crisis of the late 1970s and early 1980s was a period of intense uncertainty for insurance companies, especially D&O insurance providers. This crisis affected all types of liability insurance including personal automobile liability insurance, medical malpractice, product liability and general liability.³⁰ This uncertainty is attributable to changes in the legal environment.³¹ As changes in the legal environment were an undiversifiable risk for insurers, the law of large numbers no longer applied to these insurance products.³² As a result, diversification was necessary to cover for legal environment risks.³³ The increased economic importance of mutual insurance companies resulted directly from this liability crisis.³⁴ This organizational response from the insurance industry was also accompanied by a contractual response: The introduction of “claims made and reported” (CMR) insurance policies.³⁵

Most D&O insurance contracts are written on a CMR basis.³⁶ CMR contracts differ from regular occurrence based contracts in that they cover losses that are made and reported during the policy year, even though such claims may have been incurred in previous years.³⁷ Regular occurrence based contracts cover losses that are incurred during the policy year no matter when the claim is reported in the future.³⁸

28. Chalmers et al., *supra* note 8.

29. *Id.* at 633.

30. See generally George L. Priest, *The Current Insurance Crisis and Modern Tort Law*, 96 YALE L.J. 1521 (1986). For a discussion on the insurance crisis and D&O insurance see, Roberta Romano, *The Shareholder Suit: Litigation Without Foundation?*, 1 J.LAW, ECON & ORG. 55, 68-9 (1991).

31. Neil A. Doherty, *The Design of Insurance Contracts When Liability Rules are Unstable*, 58 J. RISK & INS. 227, 227 (1991).

32. *Id.*

33. *Id.* at 227-28.

34. *Id.*

35. *Id.*

36. Boyer, *supra* note 3, at 7.

37. *Id.* “For example, suppose that an incident occurs in 1995 but is not reported until 2000 when a claim is filed. Under a CMR contract, all the financial responsibility for the loss falls upon the 2000 insurer. Under an occurrence based insurance contract, it is the 1995 insurer who is responsible.” *Id.*

38. *Id.*

Past behavior has a double importance in designing the current year's insurance contract. Firstly, past behavior could be an indication of current behavior so that any information related to the insured's risk gathered in the past will be used as a signal regarding the insured's current risk.³⁹ This is true both for occurrence based and CMR contracts.⁴⁰ Secondly, past behavior is an indication of current losses paid in the case of CMR contracts.⁴¹ Thus past behavior becomes doubly important when the insurance contract is written on a CMR basis.

C. FINDINGS

The findings of this study are based on an original data set of publicly traded Canadian corporations that filed their annual reports between January, 1 1993 and December 31, 1998. Canadian data is used because basic D&O insurance information (policy limit, deductible and premium) is made public in the corporations' management proxies and information circulars (information that is absent from standard reporting documents in the United States).⁴²

The first point this paper makes is that there is a lot of inertia embedded in the decision to purchase D&O insurance, as much as to the amount of coverage chosen. This result is not completely new, but it is important to mention when trying to explain why firms purchase insurance and in what amount. It appears that when asked whether to purchase D&O insurance and in what amount, firms answer by a question: What did we do last year? The only noticeable variation from year to year is the premium paid.

The second result relates to the informational value to investors of making public the D&O insurance coverage. In a world where insurers are examining thoroughly the risk level of their clients, one would expect that an investment strategy based on the perceived risk levels of Canadian corporations should be profitable. How should one infer from the management proxy and information circular an insurer's assessment on one firm's riskiness? I will argue that the unit price of insurance (that is the premium-to-limit ratio) is a good indicator. This indicator should also have more explanatory power for large firms because an insurer should be

39. *Id.*

40. *Id.*

41. *Id.*

42. Sean J. Griffith, *Uncovering a Gatekeeper: Why the SEC Should Mandate Disclosure of Details Concerning Directors' and Officers' Liability Insurance Policies*, 154 U. PA. L. REV. 1147, 1200 (2005-2006).

spending more time auditing the internal procedures and financial health of a larger corporation because it has more to lose by not doing so. Using a limited number of yearly data points, I found that large firms who face a higher unit price of insurance are more likely to experience a low market return than large firms who face a lower unit price. The evidence for this is not as robust for smaller firms unless the first year of data, 1994, is not considered. An investment strategy that would be long in low unit price firms and short in high unit price firms would, on average, earn a five-year return of 25% from 1994 through 1998. This result supports the position that D&O insurance information is valuable to investors and should therefore be made public in the public firms' management proxies.

Finally, the third result of the paper is based on a particularity of the Canadian securities market: the existence of income trust companies. Income trusts in Canada, which are similar to the now defunct limited master partnerships in the United States, are characterized by a dual-class structure, which presumably, reduces investor protection. If that is the case, then the moral hazard problem for managers of having D&O insurance (that is, not investing as much effort in generating wealth for the shareholders) should be more evident for income trust than for stock corporations. I found that a measure of accounting performance (growth of the earnings before interest, taxes, depreciation and amortization) is lower when coverage is larger, but that does not translate into lower stock market performance (measured as the total yield).

Data Collection and Data Source

The financial data used in this study was obtained from three different sources: Compustat, Stock Guide and CanCorp Financial. The use of three different sources allowed for a larger data set compared to Compustat alone. Unfortunately information was not always the same for corporations whose financial information appeared in more than one source. If that occurred, a lexicographic approach to the problem was utilized, trusting the Compustat entry over the other two, and the Stock Guide entry over CanCorp's. Stock prices and total returns were drawn from the TSE-Western tapes. All values are in Canadian dollars; any U.S. dollar figure has been converted to Canadian dollar using the exchange rate at the fiscal year-end of each company. Precise information was collected regarding executive compensation of publicly traded Canadian companies listed on the Toronto Stock Exchange. Companies traded on the TSE are required to

make public much more information concerning their D&O policies than was previously required, including coverage limits and premiums.⁴³

Information regarding D&O insurance purchases and executive compensation of publicly traded Canadian companies listed on the Toronto Stock Exchange was collected from the annual management proxies and information circulars. These management proxies also gave information related to the firm's block holders, board member compensation and ownership, as well as the type and number of shares held by each officer (regular or multi-voting).⁴⁴ These proxies also report the basic information regarding D&O coverage, such as whether the corporation had D&O insurance, the D&O insurance policy limit, and occasionally the deductible and the premium paid.⁴⁵

The original sample included 354 Canadian corporations drawn from 7 economic sectors: bio-pharmaceutical, forest and paper, industrial products, technological, consumer products, merchandising, and communication and media. These sectors were chosen based on the Toronto Stock Exchange (TSE) sector list drawn from the TSE Fact Book. Two important sectors of the Canadian economy, financial institutions, and mining and natural resources, were deliberately omitted to keep the sample more homogenous. Because of holes in the data 27 firms, mainly smaller firms were deleted from the start. There is no survivor bias because we collected data on new companies, as well as companies that disappeared during the sampled years. Because of this incomplete panel, the study was left with 1594 observations, which gave an average of 4.9 years per company (out of a maximum of 7). Of the 327 firms used in the final sample, close to 60% had information for 5 years or more, including 22% for all the years. Of the sample in this study, 73.4% of the firms (241 firms) purchased D&O insurance at least once during those seven years. Of the 327 firms, over 17% did not exist anymore at the start of 2000. Table 1.1 presents a

43. Griffith, *supra* note 42, at 1200. Since 1996 all this information is available on the Ontario Securities Commission's internet site (<http://www.sedar.com>). *Id.* Prior to 1996, the information was collected directly from companies or purchased from Micromedia. Martin Boyer, *Is the Demand for Corporate Insurance a Habit? Evidence of Organizational Inertia from Directors' and Officers' Insurance* 12 (Ctr. for Interuniversity Research and Analysis on Orgs., Working Paper No. 2004s-33, 2004), available at <http://www.cirano.qc.ca/pdf/publication/2004s-33.pdf>.

44. M. Martin Boyer, *Is the Demand for Corporate Insurance a Habit? Evidence from Directors' and Officers' Insurance* 12-13 (Ctr. for Interuniversity Research and Analysis on Orgs., Working Paper No. 2003s-42, 2003), available at <http://www.cirano.qc.ca/pdf/publication/2003s-42.pdf>.

45. *Id.* at 13.

detailed table of the number of firms, divided by sector, per year included in the sample.

Table 1.1. Number of firms per year by economic sector								
Year	1993	1994	1995	1996	1997	1998	1999	
Sector								% of total
Bio-pharmaceutical	4	9	10	13	19	19	16	5.83
Forest and Paper	19	27	31	32	29	29	25	12.11
Industrial Products	30	63	79	82	83	80	64	30.18
Technological	5	15	21	28	37	36	33	11.04
Consumer Products	21	38	44	47	48	48	37	11.75
C&I Products	4	5	9	8	8	8	7	3.07
Merchandizing	15	27	33	36	35	29	23	12.42
Media	<u>9</u>	<u>18</u>	<u>21</u>	<u>22</u>	<u>17</u>	<u>17</u>	<u>17</u>	<u>7.56</u>
Total	107	202	248	268	276	266	222	1594

For each economic sector, all corporations listed in the TSE publication and traded on the exchange were included in the data set for each year of the sample. This exercise yielded a total of 1519 observations. Because of incongruities in the financial and management proxies (for example board or CEO ownership of more than 100% of the company's stock or no trading in the stock during the year) a high number of observations were deleted from the original data set, so that the final data set included 1407 observations for 318 firms. Table 1.2 presents the statistics related to D&O insurance penetration by industry.

Insurance penetration was calculated as the proportion of corporations that purchased D&O insurance. On average, 70% of the firms purchased D&O insurance, although penetration seemed to increase over the years (67% in 1993, 73% in 1998). D&O insurance penetration in the data set

was slightly below that reported by Tillinghast-Towers Perrin (1999), for the year 1998, but higher than Core (1997) for the years 1993 to 1994.⁴⁶ In the case of Tillinghast-Towers Perrin, 84% of Canadian corporations were reported to purchase D&O insurance in 1998.⁴⁷ That is a full ten percentage points higher than in the sample used for this study. My understanding is that these differences are explained by four important factors. First, Tillinghast-Towers Perrin relied on a corporation survey that biased their results because of the type of respondent. Second, the number of corporations polled was smaller than the entire sample of possible companies. Third, the same companies were not polled every year, so that it was difficult to keep a tab on the actual trend in the industry. Finally, the data set constructed for this study does not include financial firms, mining firms, public utilities and not-for-profit firms.

46. See Tillinghast-Towers Perrin, *1999 Directors and Officers Liability Survey: Executive Summary of U.S. and Canadian Results* (1999) (on file with the Connecticut Insurance Law Journal); Core, *supra* note 20.

47. Tillinghast-Towers Perrin, *supra* note 46. By comparison, D&O insurance penetration in the United States was 84% in 1993 and 92% in 1998.

Table 1.2. D&O insurance penetration by economic sector and fiscal year						
Fiscal Year	1993	1994	1995	1996	1997	1998
Sector						
Bio-pharmaceutical	88%	92%	92%	90%	90%	89%
Forest and Paper	59%	58%	63%	64%	67%	70%
Industrial Products	68%	69%	71%	76%	74%	64%
Technological	90%	90%	84%	70%	68%	74%
Consumer Products	68%	65%	70%	67%	63%	67%
Merchandizing	52%	57%	58%	56%	55%	55%
Media	77%	78%	78%	73%	79%	85%
Weighted Average	67%	69%	71%	70%	71%	73%
Percentage of corporations by economic sector and by year that carry D&O insurance. The weighted average is calculated by taking into account the number of firms by industry.						

In the case of Core (1997), 63% of corporations whose fiscal year ended between June 1, 1993 and May 31, 1994 were reported to have D&O insurance.⁴⁸ Although Core relied on the same public information source as this study, his sample of companies was different because he included public utility, financial and mining corporations.⁴⁹ This explains why Core's sample consisted of 222 companies, compared to the 181 companies (1993) and 238 companies (1994) used in this study.

48. See Core, *supra* note 20, at 70.

49. Boyer, *supra* note 44, at 1, 10.

I. RESULTS

A. INERTIA

The first argument presented in this paper is that risk management in corporations in general, and D&O purchases in particular, are subject to inertia. An organization plagued with inertia is one that is unwilling to change ex post what it did ex ante.⁵⁰ Applied to the particular case of insurance purchases, inertia means that the current insurance contract specifications are better explained by the managers' previous contract choice than by the current economic condition of the firm. To show that inertia plays a role, my contention is that the traditional financial and governance measures that have been used to explain risk management decisions do not work as effectively as a measure of organizational inertia.

To support the existence of inertia in D&O insurance purchased, it is interesting to note that firms that purchase D&O insurance do so for all the years, and firms that do not, never do. This does tell a lot about the presence of inertia in that the best predictor of a corporation buying D&O insurance this year is whether it purchased insurance last year. One can imagine that managers that were never covered under a D&O insurance policy do not request it because they do not see its use; and managers that have had it cannot think why they would get rid of it.

Why are financial and governance considerations not relevant? One possible explanation relies on the *CMR* structure of D&O insurance contracts. *CMR* contracts act as a lobster trap: corporations who purchase it one year can never realistically get rid of it in the future.⁵¹ Purchasing a *CMR* contract is tantamount to choosing to be consistently insured since firms find it difficult to drop coverage once it is purchased.⁵² Indeed, if a firm cancels its *CMR* insurance policy at a given time, it implicitly decides to drop the coverage in the future for any and every past loss that might have been incurred, but not yet reported.⁵³ And even if the firm decides to reinstate its coverage in later years, it usually will not be covered for past occurrences that have not yet been reported.⁵⁴ Dropping a contract written on a *CMR* basis, such as a D&O insurance contract, is therefore very risky.

50. *Id.* at 14.

51. *Id.*

52. Boyer, *supra* note 3, at 7.

53. James Povlich, *Risk financing solutions to employment practices liability*, RISK MANAGEMENT, May 1994, at 57, 58.

54. Boyer, *supra* note 44, at 14.

The structure of a CMR contract explains why firms never drop coverage, but it does not explain why some firms never purchase the insurance. This latter fact is better explained by considering that some firms view D&O insurance as destructive since it arguably reduces the directors' incentives to work hard.⁵⁵ Either way, both managerial habit (including the CEO's beliefs) and the stated inertia associated with CMR contracts explain the decision to purchase D&O insurance.

The choice of a deductible and policy limit is also very stable over the years. After controlling for the six traditional reasons that explain why corporations purchase insurance (managerial risk aversion, asset substitution, under investment, real services, bankruptcy, and convexity of the tax schedule), the Boyer study finds that nothing explains D&O policy limits and deductibles in a given year as much as the previous year's limit and deductible.⁵⁶ A possible explanation comes from the method used to sell D&O insurance policies. D&O insurance is mainly sold by insurance brokers who negotiate with insurance companies on behalf of the insured.⁵⁷ In Canada, the top two insurance brokers hold a 66% market share in terms of the number of accounts (it is the top four brokers in the U.S. that hold that much market power).⁵⁸ In premium terms, the top two insurers hold a 50% market share in the United States, and the top three D&O insurers (AIG, Chubb and Lloyd's) collect about 65% of the premiums.⁵⁹ In Canada, a majority of corporations receive their D&O insurance coverage from one unique insurer.⁶⁰

Another interesting feature of D&O insurance is the existence of so-called policy limit sticky points. Indeed, coverage limits are sold by layers of \$1,000,000, although the most important steps appear to be \$5,000,000, so that we see a clustering of D&O limits around a few sticky points.⁶¹ For instance, out of the 173 Canadian listed firms that purchased D&O insurance in 1998, two-thirds chose one of six policy limits: \$5,000,000 (18 times), \$10,000,000 (43 times), \$15,000,000 (12 times), \$20,000,000 (18 times), \$25,000,000 (10 times) and \$50,000,000 (13 times).⁶² Other years have similar sticky points.

55. See *ECONOMIST*, June, 2003 at 14.

56. Boyer, *supra* note 44, at 18.

57. *Id.* at 5.

58. Boyer, *supra* note 3, at 7.

59. Boyer, *supra* note 44, at 5; Boyer *supra* note 3, at 7.

60. Tillinghast-Towers Perrin, *supra* note 5, at 6.

61. Boyer, *supra* note 3, at 7

62. *Id.*

B. INFORMATION

Insurance companies that write D&O insurance will, presumably, use all available information as to a company's financial condition and the efficiency of its governance procedures. Because of the amount of money involved in the event of a lawsuit, or only because of their extensive expertise in handling D&O claims, insurers have access to information that is not available to other agents in the economy.⁶³ Insurers could, for example, conduct background checks on some of the firm's board members to better assess their competency and ultimately the real risk of a lawsuit.⁶⁴ Gathering this information may not be possible for investors. Due to the fact that the insurer's assessment of the firm's risk enters a ratemaking matrix that yields only a premium given the amount of coverage demanded,⁶⁵ we may wonder whether there is any information embedded in the premium per dollar of coverage. Put in another way that has more appeal to a financial economist, one could ask whether a profitable investment strategy based on the D&O information contained in the management proxies and information circular could be designed.

Before presenting these results, let us examine how D&O insurance prices evolved during the years under study (1993-1998). Table 2.1 shows the evolution of the premium-to-limit ratio over the six years of my sample, for different cut-off points.

63. See Core, *supra* note 22, at 453.

64. *Id.*

65. *Id.* at 454.

Table 2.1 Premium in Canadian dollars for each thousand dollars of D&O insurance coverage (1993-1998)							
Year	1993	1994	1995	1996	1997	1998	Δ94 – 98
Number of observations	88	150	169	179	186	163	
95%	11.91	13.75	15.00	15.00	13.33	9.40	- 31.6%
75%	5.23	5.85	4.80	4.50	4.40	4.35	- 25.6%
50% (median)	3.12	3.02	3.08	2.79	2.60	2.60	- 13.9%
25%	2.23	2.06	1.99	1.89	1.67	1.75	- 15.0%
5%	1.22	0.70	0.86	0.82	0.80	0.52	- 25.7%

We see in the table that, from 1994 to 1998, the average premium went down for every tranche by an average of 20% and by an average of 25% from 1993 to 1998. As the price of each unit of coverage fell from 1993 through 1998, not all corporations answered according to well known principles of microeconomics by purchasing more coverage. We can observe in Table 2.2 that firms that were small demanders of D&O insurance responded to a reduction in price by decreasing their D&O insurance coverage.⁶⁶

66. This raises an interesting possible area of economic inquiry in that we may have, in this particular instance, an example of a Giffen good.

Table 2.2 D&O insurance policy limit in thousands of Canadian dollars (1993-1998)							
Year	1993	1994	1995	1996	1997	1998	Δ 94 – 98
Number of observations	95	158	177	189	193	170	
95%	390,054	436,363	493,866	486,940	648,078	755,244	73.1%
75%	148,452	153,239	138,737	148,483	175,324	199,505	30.2%
50% (median)	84,521	75,510	71,480	72,267	75,659	64,841	-14.1%
25%	34,630	31,339	31,912	32,814	33,764	29,321	-6.44%
5%	9,686	9,819	9,348	9,600	10,292	8,048	-18.0%

At the same time as the unit price was falling, the average firm size was not increasing much either in terms of assets or market value of equity as we can see in Table 2.3.

Table 2.3 Evolution of firm size as measured by the log of assets and the log of the market value of equity (1993-1998)						
Panel A. Assets						
Year	1993	1994	1995	1996	1997	1998
Number of observations	95	158	177	189	193	170
95%	7.92	8.16	8.22	8.24	8.15	8.68
75%	6.49	6.44	6.48	6.29	6.49	6.75
50% (median)	5.03	4.95	5.19	5.17	5.33	5.59
25%	3.85	3.93	4.00	4.13	4.11	4.18
5%	2.59	2.88	3.16	3.36	3.04	2.71
Panel B. Market value of equity						
Year	1993	1994	1995	1996	1997	1998
Number of observations	90	156	173	187	191	169
95%	7.65	7.66	7.89	7.74	8.06	8.16
75%	6.54	6.22	6.16	6.26	6.48	6.48
50% (median)	4.79	4.70	4.88	5.16	5.22	4.99
25%	3.92	3.80	3.76	4.01	4.08	3.78
5%	1.92	2.27	2.40	2.75	3.05	2.03

The next analysis is by no means robust to many attacks from econometricians and statisticians; but the D&O insurance information is available only once a year, which makes portfolio investment decisions possible only once a year. As a result, only five years' data are available to assess the profitability of the investment strategy, based on the aggregate

information revealed in a firm's management proxy and information circular. The goal is to see whether the unit price of D&O insurance is a profitable decision criterion for portfolio allocation. To do so requires splitting the data set into different investment baskets. The investment strategy would be to sell short the least profitable basket and use the proceeds to invest in the most profitable basket. The hypothesis is that unit price is a measure of the firm's riskiness that is not otherwise observable by investors. As a result, firms that purchase insurance with a low unit price should be more profitable than firms that purchase insurance with a high unit price. The unit price will thus determine, for each year, two baskets of firms with approximately the same number of firms in each basket.

Hypothesis 2.1 Firms faced with a higher unit price of D&O insurance should be less profitable.

An important component of D&O insurance is the sheer size of the corporation,⁶⁷ if only because there are more possible damages that one needs to cover in the event of a lawsuit when the corporation is larger.⁶⁸ Moreover, because lawsuits should be more costly for larger corporations, an insurer underwriting a D&O insurance policy should spend more time verifying governance practices and auditing the financial statements of larger corporations. Insurers should spend more time examining a large corporation and their assessment of the risk should be more precise.

To test this hypothesis, the data were split into four baskets: two size baskets and two unit price baskets. To limit the impact of important outliers in the sample,⁶⁹ the data were windsorized⁷⁰ by removing the company with the highest annual return and the company with the lowest; a total of eight observations per year were removed. The distribution of firms in each basket is displayed in Table 2.4.

67. See Griffith, *supra* note 43, at 1201 (discussing firm size as D&O premium factor).

68. Core, *supra* note 20, at 67-68, 73, 82 (discussing large firm size as a litigation factor). Firm size should be controlled for in portfolio allocation in accordance with the Fama and French model. Eugene F. Fama & Kenneth R. French, *Differences in the Risks and Returns of NYSE and NASD Stocks*, 49 FIN. ANALYSTS J., 37, 38-39 (1993) (explaining firm size as a factor of the three-factor model).

69. The outliers in the sample included an obvious data error, as one firm's return was 4800%.

70. See Karen Kafadar, *John Tukey and Robustness*, 18 STAT. SCI. 319, 322-23 (2003).

Table 2.4 Number of firms in each size and unit price basket										
Year	1994		1995		1996		1997		1998	
Number of firms	32	21	37	30	42	29	44	37	39	33
	21	30	32	40	32	43	35	43	35	39
The basket of firms in the table are					High unit price Large firm	Low unit price Large firm	High unit price Small firm	Low unit price Small firm		

The second hypothesis is that the D&O insurance information related to the unit price of insurance should be more informative for larger corporations than for smaller corporations. The difference in performance between firms that face a low unit price of D&O insurance and firms that face a high unit price of insurance should be more visible for larger firms.

Hypothesis 2.2 The predictive power of the unit price of D&O insurance should be greater for larger firms.

The average basket returns per year are displayed in the Table 2.5.

Table 2.5 Average annual return of firms in each size and unit price basket										
Year	1994		1995		1996		1997		1998	
Annual return (%)	10.3	-4.76	-3.78	2.00	22.6	24.3	17.6	42.0	-11.4	-6.41
	24.4	-1.55	6.99	27.7	34.4	23.7	9.88	8.46	-25.7	-11.6
All returns are calculated as $\frac{P_{\tau}}{P_{\tau-1}} - 1$ and presented as					High unit price Large firm	Low unit price Large firm	High unit price Small firm	Low unit price Small firm		

The hypothesis for the unit price is that, controlling for size and extreme outliers, firms that purchase D&O insurance at a relatively low

price per unit of coverage⁷¹ are more financially sound and face less corporate governance risk. As a result, on average, they should have higher returns. For small firms, this does not appear to be statistically significant. An investment strategy that would require investing the same amount of money in every small firm with a low unit price would only perform marginally better than the same strategy in every small firm with a high unit price. The five-year total return of investing in small firms faced with a low unit price is 49%, whereas the five-year total return of investing in small firms faced with a high unit price is 46%. Given the standard deviations, these total returns are not statistically significant.

For large corporations⁷² the difference is more pronounced. Except for the first year of the study, the average return for low unit price firms is always higher than for high unit price firms. The total return of investing in large firms faced with a low unit price is 61%, whereas the total return of large firms faced with a high unit price is 35%.

If 1994 is removed from the study for concerns associated with devising an investment strategy that uses only nineteen firms in the large firm with low unit price and small firm with high per unit price categories, the total return over four years is 23% for large firms with high unit price, 17% for small firms with high unit price, 69% for large firms with low unit price and 51% for small firms with low unit price. By "going long" with low unit price companies and "going short" with high unit price companies, an investor would have been able, over the years 1995-1998, to generate a sizeable profit margin⁷³.

The unit price of D&O insurance analysis has an interesting predictive power for the company's future profitability. As the unit price is higher, reflecting, in the insurer's mind a higher risk of litigation, future returns appear to be lower. This is even stronger for larger firms than for smaller firms, and supports this section's two hypotheses.

C. INSIDERS

One final insight from the Canadian market is associated with a particular aspect of Canadian security regulation: Income trusts. Trust

71. See the companies in the right two cells of Table 2.4 *supra* p.93.

72. See the companies in the top two cells of Table 2.4 *supra* p.93.

73. The profit margin would have been 46% for large companies and 34% for small companies.

agreements largely replicate the Canada Business Corporations Act (CBCA) provisions, but not completely as shown in Gillen (2006).

Income trusts operate, however, in the context of trust law that has not generally been developed with a view to the use of the trust as a structure for running a business ... (*and*) has thus not been developed with a view to protecting investors and does not contain the kinds of governance and shareholder remedy provisions that one typically finds in corporate statutes. Also, trust instruments of different income trusts differ from one to another in one or more aspects that create a source of potential confusion for unit holders since their governance knowledge of one IT may not be transferable or applicable to another.⁷⁴

An important aspect of Canadian income trusts is their dual-board structure.⁷⁵ As a result of this structure, income trusts have a board of directors as well as a board of trustees whose duty and privileges are not necessarily the same.⁷⁶ It is thus important to control for this aspect of income trusts in Canada.

This section will analyze D & O insurance's impact on the profitability of unit trusts. Income trusts are presumably riskier than stock companies from a governance point of view.⁷⁷ Additionally, being insured induces moral hazard problems.⁷⁸ Therefore it should be more likely that D&O insurance coverage will have a negative impact on performance for a unit trust. Performance was measured in two ways. First, it was measured by D&O insurance coverage's impact on an accounting measure that reflects the trust's earnings before interest, taxes, depreciation and amortization (EBITDA). This performance measure gives investors an idea of how much cash flow is generated by the income trust's activities.⁷⁹ Therefore, if moral hazard is present, income trusts should have lower EBITDA growth where managers are well protected by a D&O insurance policy. The second

74. Mark Gillen, *A Comparison of Business Income Trust Governance and Corporate Governance: Is There a Need for Legislation or Further Regulation?*, 51 MCGILL L.J. 327, 378 (2006).

75. CERTIFIED GEN. ACCOUNTANTS ASS'N. OF CAN., *DEMISTIFYING INCOME TRUSTS* 21 (2006). See Figure 2 *infra* p. 106 for an illustration of income trust corporate structure.

76. CERTIFIED GEN. ACCOUNTANTS ASS'N. OF CAN., *supra* note 75, at 21.

77. See Mark Gillen, *A Comparison of Business Income Trust Governance and Corporate Governance: Is There a Need for Legislation or Further Regulation?*, 51 MCGILL L.J. 327, 378 (2006) (stating that investors avoided investments in business income trusts due to unlimited liability concerns).

78. Eric D. Beal, *Posner and Moral Hazard*, 7 CONN. INS. L.J. 81, 84-85 (2001).

79. See, e.g., *Steiner Corp. v. Benninghoff*, 5 F. Supp.2d 1117, 1130 (D. Nev. 1998) (describing EBITDA as a cash flow measure).

performance measure is the total yield of the unit trust on the Toronto stock market. This total yield is calculated as the annual cash received during the year plus the unit trust price at the end of year divided by the unit trust price at the beginning of the year (i.e., $R_t = \frac{C_t + P_t}{P_{t-1}}$).

This data set is much different from the data set used in the two previous sections. This sample includes all 144 income observations reported in the Canadian Financial Market Research Center database as of December 31st 2005.⁸⁰

Income trusts in Canada are classified according to four categories: business, energy, utility and real estate (REITs).⁸¹ REITs are common and well known in the United States.⁸² The Canadian income trusts market breakdown is as follows: business trusts, fifty-five percent; utility trusts, ten percent; REITs, fifteen percent; and energy trusts, twenty percent.⁸³

The hypothesis is that the amount of insurance coverage should have a negative impact on a firm's performance. To measure coverage, the log of the D&O insurance policy limit as well as the binary variable determining whether the firm is at all insured were used. For firms that are not insured, the log of the policy limit variable was set to zero. These two variables should have a negative impact on performance.

The other variables used for regression control are: firm size; cash flow volatility; managerial compensation; board independence; and managerial entrenchment. For size, the log of the market value of equity was used, whereas stock price volatility in the year was used as a proxy for cash flow volatility. Stock price volatility is calculated as the annualized daily standard deviation of the stock returns. Both the directors' and the trustees'

80. The final sample includes 144 observations. The initial sample included all the relevant information for 237 income trusts whose fiscal year ended in 2005. Forty-eight were excluded because they were created in 2005 and another eighteen because they were created in 2004; it would have been impossible to calculate their performance. Another twenty-seven were excluded due to incomplete accounting data.

81. Canadian income trusts breakdown into three categories: business trusts; royalty trusts; and REITs. See CERTIFIED GEN. ACCOUNTANTS ASS'N OF CAN., *supra* note 75, at 61-64. Royalty trusts can further be broken down into energy and utility trusts. See Trust Units: Income Trusts, <http://www.investcom.com/incometrust/whatis.htm> (last visited Sep. 24, 2007).

82. See S. Titman & A. Warga, *Risk and the Performance of Real Estate Investment Trusts: A Multiple Index Approach*, 14 REAL ESTATE ECONOMICS 3, (1986).

83. See M. Boyer et al., *Income Trusts Governance and Performance: Time for a Post-mortem*, Mimeograph, HEC Montréal (2009).

compensation are controlled. This compensation is calculated as the log of the annual compensation of directors and trustees respectively. If the labour market is efficient, higher paid directors and trustees should have a positive impact on the income trust's performance. It is also important to control for the independence of the board of director and of the board of trustees, because independent boards are signs of good governance⁸⁴ and presumed to have positive impact on firm performance. This independence is measured as the proportion of independent directors on the board of directors, and as the proportion of independent trustees on the board of trustees. Two variables were included that measure the level of entrenchment of officers, directors and trustees. The first, *contract entrenchment*, is whether managers have access to a golden parachute or other anti-takeover measure that could reduce the managers' willingness to invest time and effort in the firm. The second, *insider power*, is measured as the sum of the voting rights of all investors holding more than 10% of the income trust's shares as a percentage of total voting rights.

Table 3.1 and Table 3.2 present the linear regression results that model the accounting performance and the stock market performance of the income trusts in 2005. Accounting performance is measured as the variation in the income trust's EBITDA from 2004 to 2005, and stock market performance is measured as the total yield of the income trust stock in 2005.

The two tables present five regression models, depending on the variables that are included in the regression. Model 1 is the most basic model; it only controls for D&O insurance coverage, firm size, and stock price volatility. Model 2 adds whether insurance is purchased to the regression. Model 3 has the highest goodness of fit of all five models;⁸⁵ and it adds managerial compensation to the regression. Model 4 adds the independence of the two boards to model 3 while Model 5 adds the managerial entrenchment measures to see if either plays any role in determining the income trust's performance. In all regression models a dummy variable was included⁸⁶ to control for the industry in which the income trust operates.

The log of the policy limit consistently has a negative impact on the accounting performance of the income trust through the five empirical models as illustrated in Table 3.1. In line with this hypothesis, it appears

84. Core, *supra* note 22, at 460.

85. The goodness of fit was measured by the adjusted R².

86. The dummy variables are not represented in the tables.

that the growth of cash flows is impeded by the amount of coverage for directors. This lends strong credence to the moral hazard hypothesis regarding D&O insurance protection since the growth of cash flows is lower when firms purchase more coverage, even after controlling for a multitude of other factors.

Table 3.1 The determinants of the performance of Canadian income trusts in 2005:					
Accounting returns as calculated by the growth of the earnings before interest, taxes depreciation and amortization					
	Dependent variable: $\frac{EBITDA_t}{EBITDA_{t-1}}$				
Independent Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Insured		0.349 (0.445)	0.281 (0.442)	0.277 (0.445)	0.328 (0.434)
Log (Limit)	-0.042** (0.015)	-0.060* (0.027)	-0.055* (0.028)	-0.055* (0.028)	-0.060* (0.029)
Firm Size	0.038 (0.107)	0.043 (0.107)	-0.033 (0.111)	-0.026 (0.113)	-0.003 (0.117)
Stock Price Volatility	-4.180** (1.127)	-4.195** (1.129)	-4.413** (1.118)	-4.218** (1.219)	-4.239** (1.227)
Director Pay			0.066* (0.028)	0.070* (0.029)	0.065* (0.030)
Trustee Pay			-0.019 (0.023)	-0.015 (0.027)	-0.013 (0.27)
Independence of Trustee				0.210 (0.779)	0.259 (0.790)
Independence of Directors				-0.471 (0.673)	-0.424 (0.685)
Insider Power					-0.250 (0.603)
Contract Entrenchment					0.187 (0.260)
R ²	0.156	0.154	0.176	0.167	0.159

The dependent variable is the one-year variation in the firm's earnings before interest, taxes, depreciation and amortization; OLS regression with sector (business, energy, utility and real estate income trusts) fixed effects and 144 observations. The ** (*) represents a coefficient that is significant at the 1% (5%) level. Standard errors are in parentheses.

Stock price volatility and the directors' total compensation are also significant through the different models in explaining performance. Volatility has a negative impact whereas director compensation has a positive impact. This suggests that the level of risk of a firm's operation does have an impact on its ability to generate future cash flows, perhaps because financiers are less likely to invest resources in firms that have riskier operations. In terms of managerial compensation, there is support for the labour market efficiency hypothesis; the more highly paid directors generate high cash flow growth, a signal that quality has its price.

While director compensation has a significant positive impact on EDBITDA growth, the trustees' compensation has no impact, or if any, it is negative. Is trustee compensation less efficient than director compensation? Do trustees not feel as much need to perform as directors? It is not possible to say for sure, but there is an indication that CEOs who are less scrutinized by investors are "really paid like bureaucrats".⁸⁷ This study found no other statistically significant variable in determining the accounting performance of Canadian income trusts.

In terms of stock market performance, D&O insurance protection has no impact on the total yield of income trusts in 2005; this is illustrated in Table 3.2. The only variable that appears to have a significant impact is the volatility of the stock price. Similar to its impact in the accounting performance regressions, stock price volatility, which is used as a proxy for cash flow volatility, has a negative impact on stock market performance. No other variable seems to be able to explain the income trusts' total yield.

87. See Michael C. Jensen & Kevin J. Murphy, *CEO Incentives – It's Not How Much You Pay, but How*, HARV. BUS. REV., May-June 1990, at 138. But see Brian J. Hall & Jeffrey B. Liebman, *Are CEOs Really Paid Like Bureaucrats?*, 113 Q.J.ECON. 653, 654 (1998) (arguing that CEOs are "not paid like Bureaucrats").

**Table 3.2 The determinants of the performance of Canadian income trusts in 2005:
Total stock market yield (cash plus capital gain return)**

Dependent variable: $R_t = \frac{C_t + P_t}{P_{t-1}}$					
Independent Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Insured		0.014 (0.092)	0.023 (0.093)	0.025 (0.093)	0.026 (0.094)
Log (Limit)	-0.001 (0.003)	-0.001 (0.006)	-0.003 (0.006)	-0.003 (0.006)	-0.003 (0.006)
Firm Size	0.003 (0.022)	0.004 (0.022)	-0.008 (0.023)	-0.006 (0.023)	0.016 (0.117)
Stock Price Volatility	-0.935** (0.231)	-0.936** (0.232)	-0.939** (0.234)	-0.958** (0.255)	-0.946** (0.254)
Director Pay			-0.001 (0.006)	-0.003 (0.006)	-0.003 (0.006)
Trustee Pay			0.004 (0.005)	0.004 (0.006)	0.004 (0.006)
Independence of Trustee				0.003 (0.163)	0.042 (0.164)
Independence of Directors				0.112 (0.141)	0.152 (0.142)
Insider Power					0.002 (0.001)
Contract Entrenchment					0.017 (0.054)
R ²	0.176	0.170	0.162	0.155	0.163

The dependent variable is the firm's one-year total stock market yield; OLS regression with sector (business, energy, utility and real estate income trusts) fixed effects and 144 observations. The ** (*) represents a coefficient that is significant at the 1% (5%) level. Standard errors are in parentheses.

An interesting conclusion to draw from this section is that, although D&O insurance coverage has a negative impact on the growth of the income trusts' cash flows, this impact does not appear to translate to a lower stock market return. There are two possible explanations for this. The first one is that there is too much noise in the stock market value. This explanation could be valid if the results were different when using the dividend yield rather than the total yields, but in this case they are not significant.⁸⁸ Even if the impact of D&O insurance coverage had a significant negative impact on the dividend yield, one would be hard pressed to imagine a reason why the impact on the capital gain yield would be positive. Why would investors attribute a positive growth option value to firms that have more D&O insurance coverage?

A second explanation is that using the total yield is too crude a measure to make any inference related to the impact of D&O insurance on firm performance. An alternative would be to use a simple capital asset pricing model (CAPM)⁸⁹ approach for 2004 to find the expected return for 2005, and then look at how much the actual return differed from the expected return. Another alternative would be to look at the total yield Sharpe ratio.⁹⁰ But, it is doubtful that any of these alternatives would change the results significantly.

II. DISCUSSION AND CONCLUSION

The goal of this paper was to: further our understanding of the motivations for a corporation to purchase directors' and officers' liability insurance; explore how investors could use the information; and whether D&O insurance coverage has any impact on firm performance. D&O insurance purchase decisions, based on the dataset of Canadian publicly traded companies from the late 1990's, are largely driven by managerial

88. In this case, the results were not significant and were not included in the data tables.

89. CAPM, "holds that rational investors value stocks according only to their expected return and nondiversifiable risk." Lynn A. Stout, *How Efficient Markets Undervalue Stocks: CAPM and ECMH under Conditions of Uncertainty and Disagreement*, 19 CARDOZO L. REV. 475, 475 (1997).

90. In order to calculate the Sharpe ratio you take the return net of the risk free rate and divide it by the standard deviation of the return. William F. Sharpe, *The Sharpe Ratio*, J. PORTFOLIO MGMT, 49, 50 (Fall 1994). "The Sharpe ratio is designed to measure the expected return per unit for a *zero-investment strategy*. The difference between the returns on two investment assets represents the results of such a strategy." *Id.* at 57.

inertia; one year's decision is tributary to last year's decision.⁹¹ The information contained in the management proxy and information circular related to D&O insurance appears to have value for the market; a profitable trading strategy can be devised by purchasing the common stock of large Canadian corporations that face a low unit price of insurance⁹² and shorting the common stock of large Canadian corporations that face a high unit price. This strategy, over the arguably very short time period under study, yields a profit of 10% on average per year. D&O insurance coverage has a negative impact on the accounting performance of a piece of financial Canadian, Income trust, but that the market return does not seem to be affected. This suggests that managers are faced with moral hazard problems because D&O insurance coverage reduces their ability to increase cash flows in the firm. The fact that market returns do not seem to follow the same pattern is problematic and is left open for further research.

What can be taken away from 'these three insights? The most important conclusion is that studying D&O insurance should be of the utmost importance for anyone interested in corporate governance. There are three reasons for this. First, D&O insurance remains a largely unexplored territory of academic research, not to mention professional research; few papers have been devoted to this aspect of corporate governance.⁹³ Some

91. See *supra* Part I.A.

92. That is to say they have a low premium-to-coverage ratio.

93. While there have been few articles written on D&O insurance, in the past seven years there have been articles written on D&O insurance's role in corporate governance monitoring, as a measure of ex ante litigation risk, and the insurer's role as written reporting results of empirical research on the monitoring role of directors' and officers' liability insurance, and how liability insurer intermediary to s transmit and transform the content of corporate and securities law., as well as articles on how D & O premiums can be used as a measure of ex ante litigation risk, and the connection between corporate governance and D&O insurance. See, e.g., Tom Baker & Sean J. Griffith, *The Missing Monitor in Corporate Governance: The Directors' and Officers' Liability Insurer*, 95 GEO. L.J. 1795 (2007) (discussing how corporate managers buy D&O coverage for self-serving reasons, and that because the coverage itself, "does not control moral hazard, it "reduces the extent to which shareholder litigation aligns managers' and shareholders' incentives."); Tom Baker & Sean J. Griffith, *Predicting Corporate Governance Risk: Evidence from the Directors' and Officers' Liability Insurance Market*, 74 U. CHI. L. REV. 487 (2007) (reporting the empirical study results of an empirical study ofon the underwriting process of D&O insurance which found that insurers seek to price D&O policies according to the risk posed by each prospective insured and in assessing risk, underwriters focus on corporate governance); John E. Core, *The Directors' and Officers' Insurance Prelim: An outside Assessment of the quality of Corporate Governance*, 16 J.L. ECON. & ORG. 449 (2000) (reporting and discussing confirmatory evidence that D&O premiums reflect the quality of the firm's corporate governance); Sean J. Griffith, *Uncovering a Gatekeeper: Why the SEC Should*

governance questions are still left unanswered: Is D&O insurance part of the compensation package? Is it a tool to align the manager's incentives with those of the shareholders? Is it truly designed to protect corporate directors or other stakeholders like the shareholders and the debtholders? Second, there is evidence that D&O insurance conveys information to the market about the future performance of the companies, whether the stock market performance or the accounting performance.⁹⁴ The reason D&O insurance conveys information is that insurers, contrary to most firm stakeholders, have a lot to lose by insuring a company at the wrong price.⁹⁵ As a result we should expect insurers to invest resources in auditing the corporate governance behaviour of the companies that seek protection through a D&O insurance policy. This auditing is even more informative because of the claims made and reported nature of D&O insurance; it reflects as much past behaviour as current risk of litigation.

The most important conclusion is that shareholders should value D&O insurance information. As a result, the information should be made public in the United States."⁹⁶ A company's D&O insurance premium could thus signal important information concerning the firm's governance quality to investors and other capital market participants."⁹⁷ This is supported by hypothesis 2. D&O insurance information is a better signal than the CEO's age, and could be construed as part of the compensation package of the directors and officers of the corporation. Given that so much is revealed regarding the compensation of top executives and the structure of the board, it appears to me paradoxical that information as easy to present as D&O insurance policy limit, deductible and premium, and so informative as to the governance health of a firm does not find its way to the annual reports.

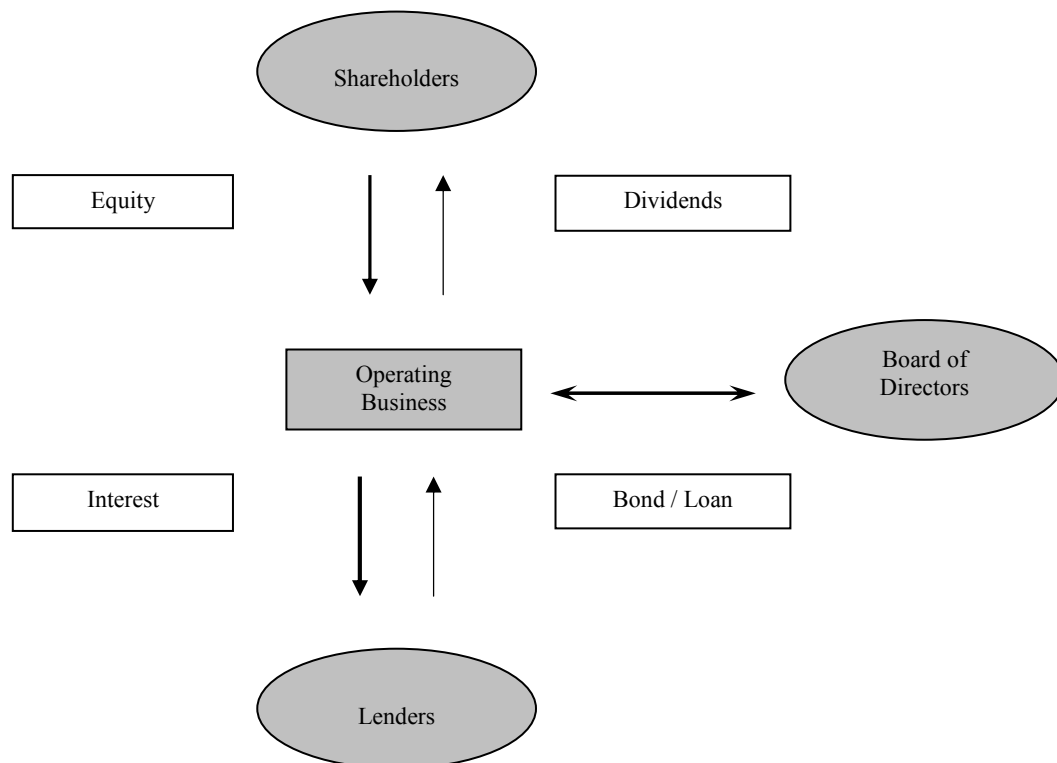
Mandate Disclosure of Details Concerning Directors' and Officers' Liability Insurance Policies, 154 U. PA. L. REV. 1147 (2006) (advocating for a change in U.S. securities regulation to make mandatory disclosure of D&O policy details).

94. See Chalmers et al., *supra* note 8, at 625, 629 (discussing relationship between D&O insurance premiums and future stock value).

95. Ronald E. Mallen & David W. Evans, *Surviving the Directors' and Officers' Liability Crisis: Insurance and the Alternatives*, 12 DEL. J. CORP. L. 439, 442-43 (1987).

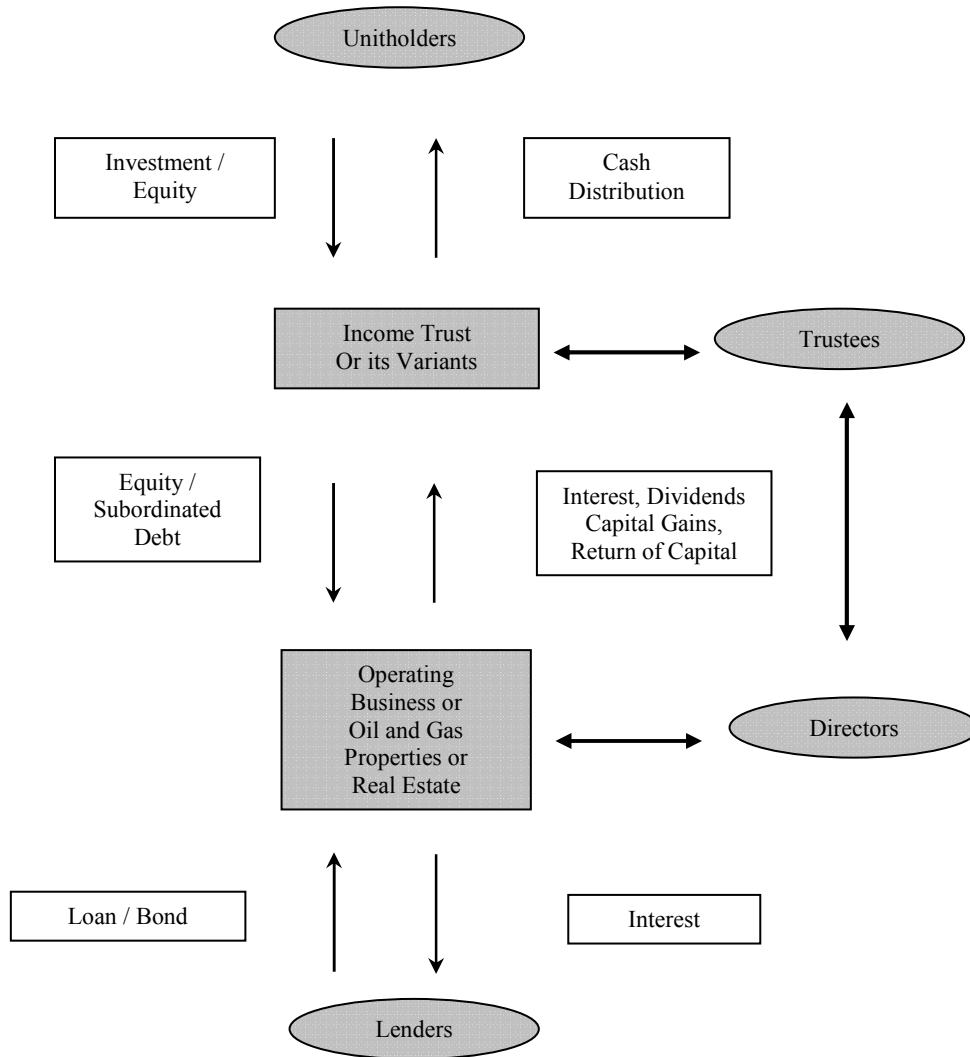
96. See Griffith, *supra* note 43, at 1203-07 (discussing importance of D&O insurance disclosure to investors).

97. *Id.* at 1208.

Appendix: Corporate structures**Figure 1:** Stock company corporate structure

Source: Demystifying Income Trusts – CGA Canada – March, 2006

Figure 2: Income trust corporate structure



Source: Demystifying Income Trusts – CGA Canada – March, 2006