

# The Impact of Governance Quality in Stock Selection of Professional Investors

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## **Abstract**

### **The Impact of Governance Quality in Stock Selection of Professional Investors**

Sain Godil

We study the impact of governance quality as a criterion in the stock selection process of actual portfolio managers. We assess the extent to which portfolio managers' current holdings are consistent with their governance policy guidelines. We also examine the extent to which governance quality guidelines impact manager performance relative to country specific benchmarks as well as the MSCI World Index. Companies which get a higher grade based on our new index of governance quality outperform the benchmarks, and are low risk, when compared to a basket of randomly selected companies. Key components of the new governance index include factors reflecting board structure and voting, skills and experience, stock ownership and conflicts of interest and compensation. The two criteria which are statistically significant out of the eleven criteria are director independence and metrics used in rewarding compensation. Respondents do take into account the governance variables they consider essential in their investment decisions, and such variables serve to enhance performance.

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## Table of Contents

List of Tables .....	vi
List of Figures .....	vii
I. Introduction.....	1
II. Literature Review.....	3
III. Approach and Methodology .....	6
Analysis of the responses .....	7
Measuring corporate performance .....	11
Regression .....	14
IV. Results.....	19
V. Conclusion .....	24
VI. Limitations and Future Research .....	25
Sample Questionnaire .....	27
Bibliography .....	29

## List of Tables

Table 1 Median score and average responses .....	9
Table 2 Correlation between our index and CSBI.....	11
Table 3 Descriptive Statistics of the top holdings.....	16
Table 4 Chi-Squared Contingency Table of Top Holdings vs. Random Sample Grades .	18
Table 5 Full model regression results using EVA and TQ as dependent variable.....	20
Table 6 Full model regression for grades < 11 for top holdings and > 9 for random.....	22
Table 7 Governance Criteria's that matter.....	23

## List of Figures

Figure 1 Respondent's investment exposure by region.....	10
Figure 2 Grade dispersion of respondents top holdings.....	16
Figure 3 Grade dispersion for basket of randomly selected companies.....	17

## **I. Introduction**

The importance of corporate governance in company performance has been the topic of considerable debate amongst academics and practitioners. A number of studies have focused on individual governance factors (e.g. Fama (1980), Fama and Jensen (1983), Gillette, Noe, and Rebello (2003), and Duchin, Matsusaka, and Ozbas (2010)), and board size (e.g. Eisenberg, Sundgren, and Wells (1998); Coles, Daniel and Naveen (2008)). Some have examined social ties among board members (Huang and Kim (2009); Stuart and Yim (2010)). An alternative approach has considered governance indices as they impact on performance. Several alternative indices of good governance/efficient boards for the US have emerged, including the GM/CalPERS index, studied in a pioneering work by MacAvoy and Millstein's (1998), the Spencer Stuart US Board Index, the Gompers et al (2003) GII-Index, the Bebchuk et al (2005) entrenchment index (see e.g. Brown and Caylor (2006) and Bhagat, Bolton and Romano (2007)), and the Rotman/Clarkson (CCBE<sup>2</sup>) Canadian Board Shareholder Confidence Index (see e.g. Switzer and Cao (2011)).

The primary purpose of this study is to investigate how portfolio managers actually use measures of governance quality in their stock selection process. To accomplish this objective, we conducted a survey of a significant group of North American portfolio managers to address the following questions: a) what governance criteria really matter to portfolio managers? b) do the current



holdings of portfolio managers reflect their stated principles and standards for governance? c) do companies with high governance scores outperform their benchmarks? In addition, we use the governance criteria that are identified in our survey to develop a new governance index, which we test against a basket of randomly selected securities. Since the index we create is based on a survey response of actual portfolio managers, it may be of interest to both academics and policymakers setting good governance standards. After normalizing the responses, we identified eleven criteria. The two criteria which are statistically significant are: a) director independence and b) transparency of the metrics used to reward/compensate the firms managers.

On the whole, we find a high governance score does add value in the form of improved performance measured by Economic Value Added (EVA) and Tobin's Q. Another finding is that portfolio managers take into account the variables they consider important. We also show that companies within a basket of randomly selected companies that show higher governance scores based on our new index display superior performance.

The remainder of this paper is organized as follows. Section II reviews the literature. Section III reviews approach and the methodology utilized. Section IV describes the results based on the methods. Section V concludes with a summary. Section VI discusses the limitations of the paper together with some suggestions for possible extensions of the analyses.

## **II. Literature Review**

The effect of governance on firm value and performance has been the topic of considerable debate since the pioneering study of MacAvoy and Millstein (1998). Several studies examine individual board attributes, including the ratio of inside (executive) directors to outside (non-executive) directors (Fama (1980), Fama and Jensen (1983), Gillette, Noe, and Rebello (2003), and Duchin, Matsusaka, and Ozbas (2010)), and board size (e.g. Eisenberg, Sundgren, and Wells(1998); Coles, Daniel and Naveen (2008)), and social ties among board members ((Huang and Kim (2009); Stuart and Yim (2010)). Other studies focus on executive compensation as well as insider ownership ((Baysinger and Butler (1985); Bhagat and Black (1998); Core, Holthausen, and Larcker (1999); Hermalin and Weisbach (1991); Morck, Shleifer, and Vishny (1988); Yermack (1996))

Various indices that combine governance attributes have been created to measure corporate governance proxies that measure the balance of power between managers and shareholders. A debate concerning their usefulness is ongoing (Brown and Caylor (2006); Bhagat et al., (2008)). Some of the respected and followed indices are the GMI, E-index, Gov-Score, Spencer Stuart US Board Index and Rotman/Clarkson index.

The GMI index is a broad-based governance index constructed by Gompers, Ishii and Metrick (2003). They classify governance into firm-level charter and by-law

provisions and state-level anti-takeover laws that restrict shareholder rights by allowing limitations on voting power, restrictions on board replacement, or shareholder activism. They combine 24 provisions into their governance index, which is also known as the G-index. A high G-index value represents weak shareholder power.

A competing index to GMI is the Entrenchment index or E-Index created by Bebchuk et al (2009). The index is based on six provisions out of the twenty-four followed by the Investor Responsibility Research Center (IRRC) and GMI index. Bebchuk et al (2009) select six which were highly correlated and had a statistical and economically meaningful relationship between value of a firm and a staggered board. They conclude that their index was superior to the GMI as the performance of the GMI index was driven by the six criteria's identified by them. However, one drawback of the E-index is that it centers on components important during takeovers.

Gov-7 index is a refinement of the Gov-Score index. Both are developed by Lawrence Brown and Marcus Caylor (2006). The original index (Gov-Score) consisted of fifty-one factors. They later refined it to include only seven of the original components. They use firm-level governance information obtained from ISS. The drawback of this index is it is constructed with only one year of data.

The Spencer Stuart Board Index was created in 1996, by the Spencer Stuart executive search and consulting firm. It collects data on the characteristics of

boards of directors of publicly traded companies in several OECD countries. It ranks companies based on board size and composition, board fees such as meeting attendance, board retainer and compensation practices for the board members.

The Board Shareholder Confidence Index was created by the Clarkson Centre for Business Ethics and Board Effectiveness at Rotman School of Business. This index captures factors deemed relevant to shareholders of Canadian firms. They rank the board of directors based on its potential to act in an effective way as looking at individual member attributes, group attributes, and director past practices.

Switzer and Cao (2011) look at how comprehensive measures of board alignment with shareholders interest relates to company performance. They examine the relationship between the board and shareholder interest using the Rotman/Clarkson index. They found that high shareholder confidence index values are generally associated with higher EVA; however, the relationship is not monotonic for higher graded boards, which means that there could be diminishing returns for high grade boards. This result suggests that Rotman/Clarkson index fails to capture the full range of governance factors that are most relevant to portfolio managers, insofar as they not only reflect good governance but in a way that has tangible economic value.

Our paper should be of interest to academics and investors as we look at what factors deemed most relevant for a significant sample of portfolio managers, for whom one might expect that good governance factors should also be consistent with good performance.

### **III. Approach and Methodology**

A large body of research has focuses on how good corporate governance reflects on firm performance. However to the best of our knowledge no research involved professional money managers. For this study, we conducted a survey of portfolio managers to assess directly what board governance characteristics they deem to be of paramount importance for making their investment decisions.

As our goal is to create a tractable index based on the impact of governance quality in stock selection of professional investors we decided to create a survey (in the appendix) that covered some of the critical points and send it to the portfolio managers. Our survey consisted of 20 questions which fall broadly under the following categories; Structure and Voting, Skills and Experience, Stock Ownership and Conflicts of Interest, and Compensation. One could argue that we did not have sufficient questions, however we wanted the Portfolio managers to spend as little time possible on the survey and yet capture the criteria's that matter the most. During the survey construction process, we had continuous input from three portfolio managers.

We used an interval scale survey where respondents ranked each question in terms of importance (1 for least important, 2 for important and 3 for most important). Our limitation of three choices does not impact the results and is supported by various studies done on response patterns and information retrieval. Schutz and Rucker (1975) found that "the number of available response categories does not materially affect the cognitive structure derived from the results", suggesting response categories would not make a major change.

Surveys were sent to 60 firms. There were 17 responses to the survey. Given the elite status of our target participants, our 28% response rate is respectable. Participants represented a wide range of professional money managers and can be categorized as Hedge Funds, Small Investment Boutiques and Pension plans. In total our survey firms' Assets under Management are \$350B. Our sample size covered various investment styles such as Growth (13%), Growth at Reasonable Price (69%) and Value investors (18%), highlighting that we managed to capture various investment styles despite a 28% response rate.

### **Analysis of the responses**

We recorded the responses from the respondents. Our goal was to be able to recognize which governance criteria are most important to Portfolio managers. This is crucial as we will use these criteria to create an index and test it on randomly selected companies.

We normalized the responses for each of the respondents; this was done as there is considerable literature revealing that preferences are affected by the response mode (Slovic and Lichtenstein (1983); Hershey, Kunreuther and Schoemaker (1982)). Normalization was achieved by dividing each response by the average score of all questions answered by that PM. The median of the normalization scores for each question was used. After the medians were calculated a score of higher than one is taken as a cut-off, indicating a score higher than one is most important and less than one is least important.

After following the above steps we found eleven criteria's with a median score of larger than one (Table 1). Board structure and voting; board skills and experience, stock ownership and conflicts of interest and compensation are perceived as most important by more than 75% of the respondents. Insider trading accusation is a major red flag with 100% of respondents perceiving as important.

Our next process involved analyzing the top holdings for the 11 criteria based on the responses collected. We identified the top 10 positions of each respondent, equating to a total of 170 companies. Multiple sources such as Bloomberg, fund fact sheet, and fund filings were utilized to confirm the top 10 holdings. Taking into account commonalities in holdings amongst the managers, the number of independent companies in the final sample is 131.

Table 1. Median score and average responses

	Median	3	2	1
<b>Structure and Voting</b>				
✓ Complicated corporate structures	1.1*	52.94%	47.06%	0.00%
✓ Vote for each director and not a slate	0.9	17.65%	58.82%	23.53%
✓ Environment and Social Governance Issues considered	0.8	17.65%	47.06%	35.29%
✓ Staggered board	0.8	5.88%	52.94%	41.18%
✓ Super voting shares to Board Members	1.0	41.18%	41.18%	17.65%
✓ Separation between Chairman of Board and CEO	1.0	41.18%	47.06%	11.76%
<b>Skills and Experience</b>				
✓ Board skills and history	1.2*	76.47%*	17.65%	5.88%
✓ Board members from varied Industries	0.8	29.41%	35.29%	35.29%
<b>Stock Ownership and Conflicts of Interest</b>				
✓ Director independence	1.2*	76.47%*	17.65%	5.88%
✓ Director meeting attendance	0.9	29.41%	64.71%	5.88%
✓ Interlocking directorships	0.5	5.88%	29.41%	52.94%
✓ Multiple directorship	0.5	5.88%	35.29%	58.82%
✓ Family members on the board	1.2*	58.82%	29.41%	11.76%
✓ insider trading accusations by the board members	1.3*	100.00%*	0.00%	0.00%
✓ Director stock ownership	1.3*	82.35%*	11.76%	5.88%
<b>Compensation</b>				
✓ Conflicts of interest between management & BOD	1.2*	64.71%	29.41%	5.88%
✓ Compensation model that				
• Rewards stock price appreciation	1.1*	52.94%	29.41%	17.65%
• Rewards EPS growth	1.0	47.06%	29.41%	23.53%
• Reflects good capital allocation decisions	1.2*	76.47%*	11.76%	11.76%
✓ Metrics used in rewarding compensation	1.2*	58.82%	35.29%	5.88%
✓ Clear objectives for management in fillings	1.2*	70.59%	17.65%	11.76%
✓ No option to board members	0.8	29.41%	23.53%	47.06%

Table 1 shows the responses to each question and its importance as a percentage. The median of the normalization scores is also shown. After the medians were calculated a score of higher than one is taken as a cut off, indicating a score higher than one is most important and less than one is least important.

Once the top holdings were identified, we searched the annual reports, management proxy's and Def 4A filings on Sedar and Edgar of each of the companies, covering a period of 5 years. A score of one was denoted if the company is in compliance with a given criterion. For example if the company had

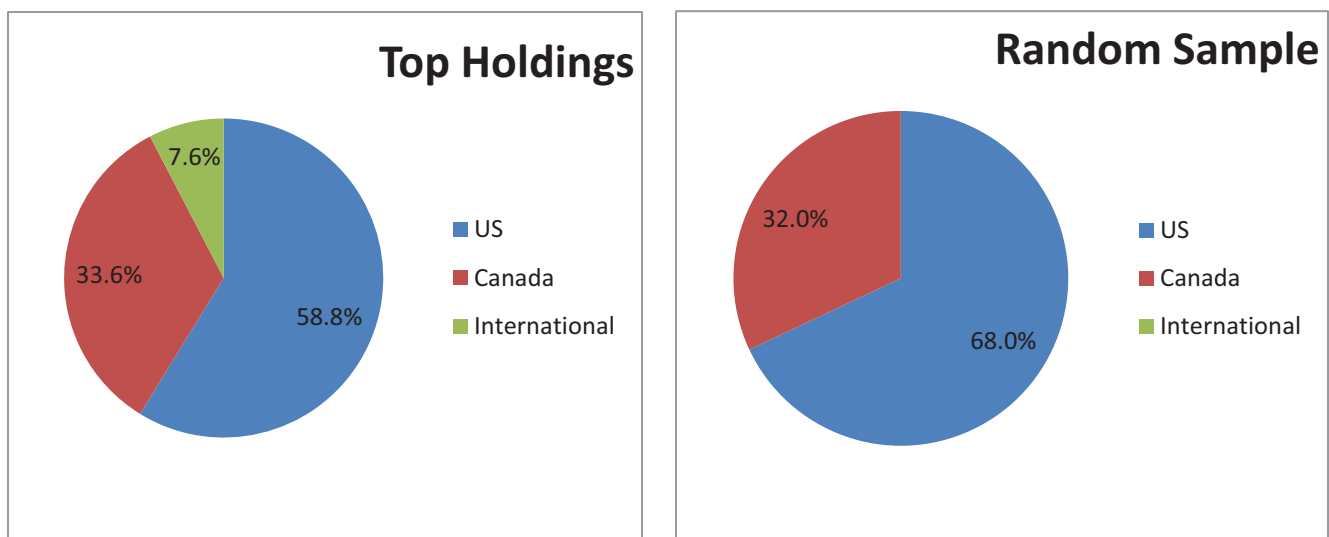


clear objectives for management in the compensation in their Def 4A filing we gave it a score of one, and zero if not. The scores were then added, with the logic that a higher score reflected that most of the criteria were observed, in turn highlighting good governance based on the criteria evaluated. The highest score a company could achieve would be eleven.

One drawback in picking the top holdings is the portfolio manager's bias. That is the top 10 holdings are frequently listed in fund facts and various marketing material, hence a possibility of the top holdings meeting all the criteria.

We then generated a random sample of 50 companies. We concentrated on all North American Equities as they represented 92% of our respondent's holdings.

Figure 1 Respondent's investment exposure by region



The figure above shows investment exposure as a percentage for the respondents and the random sample.

As mentioned previously, in Canada the Clarkson-Rotman "Board Shareholder Confidence Index," (CSBI) is well regarded. It is a measure of shareholder's

perceptions of the board's efficiency as it relates to company performance. It was designed to capture factors affecting shareholders' confidence in the board and their performance on the Toronto Stock Exchange. The index concentrates on three perspectives of governance. These are individual board members; potential of the board as a group and past practices of the board. Companies are assigned various scores based on how they rank on the three perspectives.

We wanted to ensure that our criteria are not correlated to CSBI. As the CSBI considers only Canadian listed companies we separated the Canadian companies from our sample and compared their scores to the grade system implemented by CSBI. A total of 64% of the Canadian companies had a CSBI score. We confirm with a spearman rank test of correlation between the scores that our index significantly differs from the CSBI, as is shown in Table 2.

Table 2 Correlation between our index and CSBI

Spearman Correlation Coefficients, N = 32		
Prob >  r  under H0: Rho=0		
	Score	Grade
Score	1.0000	0.1810
		0.3214
Grade	0.1810	1.0000
	0.3214	

Table 2 shows correlation between our index and the Clarkson-Rotman "Board Shareholder Confidence Index," (CSBI). As shown there is no correlation between the two.

### **Measuring corporate performance**

We use two standard benchmarks to measure corporate performance Economic Value Added (EVA) and Tobin's Q.

EVA attempts to capture the true economic profit of a company. Stern Stewart & Co. is credited with devising this trademarked concept. EVA like NPV measures whether a firm earns in excess of its cost of capital. There are three ways a company can increase EVA. One is to grow the business through new investments opportunities, while ensuring projects earn a return higher than the cost of capital. The second is improving current efficiencies, by using six sigma for example. The third is divesting assets that do not add any value.

EVA has also earned attention from the academic world as a new form of performance measurement. Wallace (1997) provided evidence confirming managers compensated on the basis of EVA (instead of earnings) take actions consistent with EVA based incentives. Tully (1993), showed that companies, using EVA to create values gain a competitive advantage over their competitors. Jeffrey, John, Todd and Anjan (1997) concluded that EVA does quite well in terms of its correlation with shareholder value creation.

The overriding principle of EVA is simple; wealth is created when the company creates returns at a rate above their cost of capital hence the concept goes beyond measuring net income. Accounting measures such as earnings per shares (EPS), return on investment (ROI) and return on equity (ROE) are easy to manipulate and have been criticized as inconsistent with the goal of wealth maximization. EVA encourage managers to act more like owners by making them work towards improving operating, financing and investment decisions.

EVA has been adopted by various multinational companies as a performance measurement and/or incentive compensation. The list of companies includes AT&T, Coca Cola, Eli Lilly, Georgia Pacific, Monsanto, Polaroid, Quaker Oats, Sprint, Siemens, Sony, Teledyne and Tenneco to name a few. This proves that EVA is not just a concept but has a practical application attached to it.

EVA is calculated using the formula.

$$EVA = Capital\ stock \times (ROIC - WACC)$$

Capital stock represents the size of the equity position of a firm. This is measured as the sum of the book value of equity and debt. Return on invested capital (ROIC) is used to access how efficiently a company allocated its capital.

$$ROIC = NETOPAT / Average\ Invested\ Capital$$

Where; NETOPAT is the Net Operating Profit Less Adjusted Taxes.

WACC is a calculation of a firms cost of capital in which each category of capital is proportionately weighted. It calculated as follows

$$WACC = \left[ KD \times \left( \frac{TD}{V} \right) \right] + \left[ KP \times \left( \frac{P}{V} \right) \right] + \left[ KE \times \left( \frac{E}{V} \right) \right]$$

Where

KD = Cost of Debt, TD =Total Debt, V= Total Capital

KP = Cost of Preferred, P = Preferred Equity, KE = Cost of Equity, E = Equity Capital

$$Total\ Capital = Total\ Debt + Preferred\ Equity + Equity\ Capital$$

Another performance measure we utilize is Tobin's Q introduced by Tobin (1969). Lindenberg and Ross (1981) showed that stock market data is captured by Tobin's Q. It also helps avoid the criticism in the use of accounting measures of performance as rates of return can be distorted by tax laws and various accounting conventions. Tobin's Q is defined as follows

$$\text{Tobin's Q} = \frac{\text{Book value of total debts} + \text{Market value of equity}}{\text{Book value of total assets}}$$

### Regression

We performed two OLS regressions, as shown below

$$\begin{aligned} EVA_{i,t} = & \alpha + \beta_1 Grade_{i,t} + \beta_2 Total\ Asset_{i,t} + \beta_3 SmallCap_{i,t} \\ & + \beta_4 Energy\ and\ Materials\ Sector_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (1)$$

$$\begin{aligned} Tobins\ Q_{i,t} = & \alpha + \beta_1 Grade_{i,t} + \beta_2 Total\ Asset_{i,t} + \beta_3 SmallCap_{i,t} \\ & + \beta_4 Energy\ and\ Materials\ Sector_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (2)$$

EVA and Tobin's Q, as mentioned, measure operating performance of the firm. Grade is assigned to each company following the index construction procedure. We use total assets and small cap as a control variable. We also include a dummy variable for firms in the Energy and Material, to capture possible effects of commodity price fluctuations that may affect returns, distinct from governance factors as such.

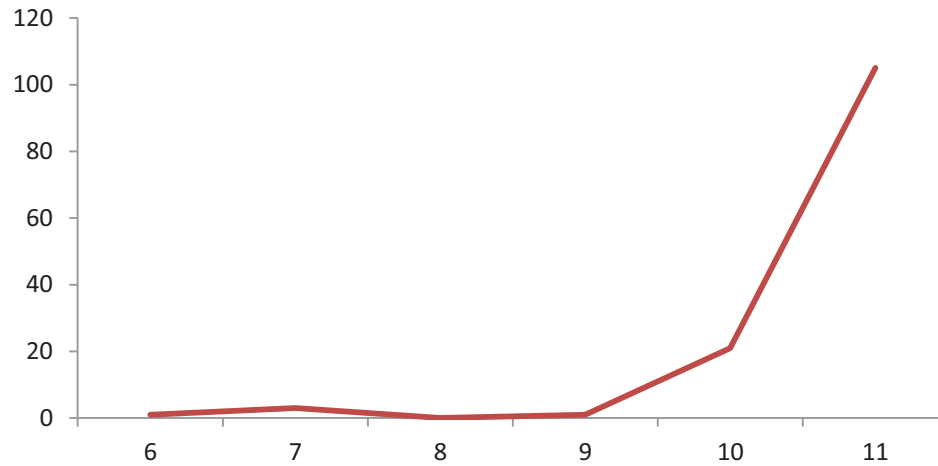
To assess the impact of corporate governance on the returns of securities we estimate regression 1 and 2. As our survey data is observed in a single time, we

use average monthly returns for the stocks in question. We elect to consider average returns both because this is reflective of investor interests and because it helps to reduce the mismatch in data frequency between the dependent variables and the regressors. As a robustness check we also consider monthly returns in estimating the regression and the results are not qualitatively different from each other regardless of specification.

The Grade variable represents the perceptions of the firm's governance quality based on portfolio managers' governance scores for the company in question. A higher grade indicates better board governance, which is hypothesized to add value to companies. We expect the grade to be positively related to firm performance. We also run separate regressions on the governance factors individually in order to identify the factors crucial in the valuation process.

As is shown in Figure 2, it is apparent that the grades for the top holdings are skewed to the right. This result demonstrates the top holdings of portfolio managers do in fact reflect the governance criteria they deem important.

Figure 2 Grade dispersion of respondents top holdings



The chart above shows grades for the top holdings. As anticipated, most of the holdings scored a high governance score and hence the grades were skewed to the right

Table 3 Descriptive Statistics of the top holdings

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
EVA	131	2.509	18.362	328.686	-39.384	158.246
Grade	131	10.695	0.812	1401.000	6.000	11.000
Tobins Q	131	1.719	0.889	225.244	0.695	5.388
R&D	131	0.025	0.056	3.276	0.000	0.354
Total Asset	131	93661.000	273077.000	12269647.000	18.308	2129046.000

Table 3 shows simple statistics of the various variables

Given that the top holdings do have high governance scores, is it the case that high governance scores relate to superior performance? To examine this question, we compare the top holdings performance relative to two benchmarks: a) a country benchmark; and b) the MSCI world Index over a four year period. We chose a four year horizon, since this reflects the average turnover rate of the portfolio managers in our sample. The average holding period for the managers ranges from 20%-35% on an annual basis. Our major assumption is that their top

holdings would not be turned in the single year, unless the company has been acquired. Out of the 132 companies 57.6% (76) outperformed their individual Country index. In addition, 73.5% (97) of the companies outperformed the MSCI World Index.

As our final goal is to create an index we performed a similar exercise on our randomly selected sample. For this sample, the grade distribution was more dispersed as shown below.

Figure 3 Grade dispersion for basket of randomly selected companies

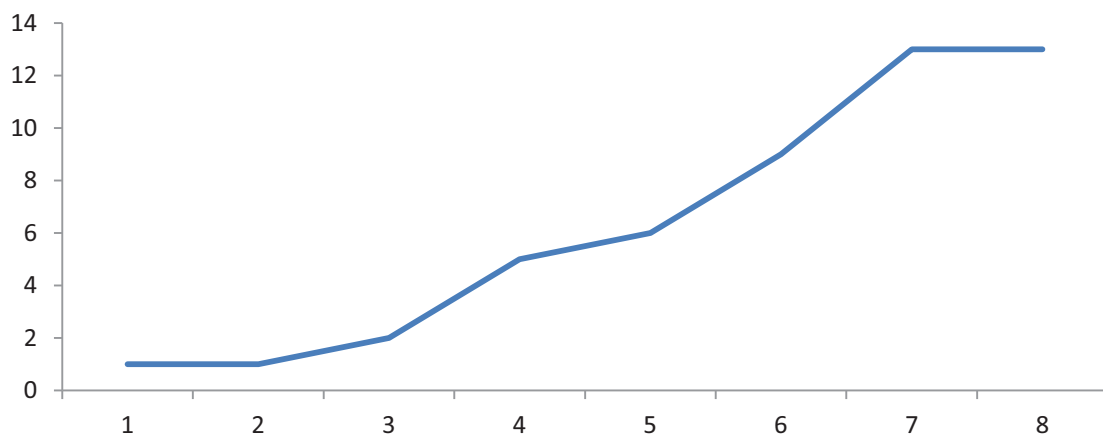


Figure 3 shows the grades of companies randomly selected. The grade distribution is more spread out.

We then tested the performance on a relative basis by comparing the random sample to their country benchmark as well as the MSCI world Index. We elected the same four year period to keep the results consistent. Out of the 50 companies 42.0% (21) of the companies had superior performance relative to their individual country index; 60.0% (30) outperformed the MSCI World Index.



We also compared the risk adjusted performance as we wanted to determine if the top holdings outperformance was a result of excess risk or intelligent investment decisions. 72% (94) of the top holdings had a Sharpe ratio greater than the index indicating that the risk adjusted performance is superior. For the randomly selected stocks only 63% (31) of the companies had a higher Sharpe ratio than the index. The vast majority (30 out of 31) which showed higher Sharpe ratios than the index also scored higher governance grades, based on our index.

We also ran a Chi square contingency table comparing the top holdings grades to the random sample. The results are shown in table 4. As noticed when  $\alpha=0.05$ , the criteria is equal to 14.06. So we reject the null hypothesis, basically sample type and grade levels are dependent.

Table 4 Chi-Squared Contingency Table of Top Holdings vs. Random Sample Grades

Grades	Top Holdings	Random Sample	Total	Random expected	Top Holding Expected	Chi-Square Test	P-value
4	0	1	1	0.72	0.28		
5	0	1	1	0.72	0.28		
6	1	2	3	2.17	0.83		
7	3	5	8	5.79	2.21		
8	0	6	6	4.34	1.66	65.77	0.00
9	1	9	10	7.24	2.76		
10	21	13	34	24.61	9.39		
11	105	13	118	85.40	32.60		
<b>Total</b>	<b>131</b>	<b>50</b>	<b>181</b>				

Table 4 shows the Chi square contingency table where we compared the top holdings grades to the random sample. When  $\alpha=0.05$ , the criteria is equal to 14.06. Indicating the attributes are not independent and the grades are related.

## IV. Results

In Table 5 below we show the results of the regressions (1) and (2) for the top holdings portfolio as well as for the random sample. As is shown therein, for the random sample we found that total assets were negatively associated with performance using both EVA and Tobin's Q. Holdings in the energy and materials sector (EMA) also had a significantly negative impact on performance, measured by EVA. Size, measured by total assets also had a negative impact on EVA for the top holdings regression, although it was not significant. On the other hand size did seem to matter for the Tobin's Q measure for the top holdings, suggesting that the managers expect large holdings are concentrated in areas with higher perceived growth opportunities. The aggregated grades do not significantly impact performance.<sup>1</sup> This may be due to the nature of the sample. As discussed previously, the grades for top holdings are skewed to the right.

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<sup>1</sup> These conclusions also hold if we include both R&D as sales as additional regressors. The results are available on request.

Table 5. Full model regression results using EVA and TQ as dependent variable

	EVA ON MAIN			EVA ON MAIN			TQ ON MAIN			TQ ON MAIN	
	Top Holdings			Random Sample			Top Holdings			Random Sample	
Variable	Coefficient	Pr >  t		Coefficient	Pr >  t		Coefficient	Pr >  t		Coefficient	Pr >  t
Intercept	-251610	0.1380		-2275	0.2515		1.9737	0.0560		2.7171	0.0338
Grade	24012	0.1295		157	0.4299		-0.0038	0.9687		-0.0050	0.9688
Total Assets	-0.1058	0.1031		-0.7142	0.0216*		0.0000	0.0073*		-0.0003	0.0383*
Small Cap	22239	0.4163		329	0.7677		-0.1559	0.3460		-0.4845	0.4380
EMA	-24360	0.5139		-1852	0.0429*		-0.2823	0.2137		-0.2749	0.5734
R-Square	0.0472			0.2147			0.0681			0.1114	
F Value	1.5400			2.8000			2.3000			1.3500	
Pr > F		0.1957			0.0381			0.0623			0.2680

In addition, in the random sample there are a few companies that do have high governance scores. To account for the skewness in the data, we also performed the regressions using a breakpoint of grades less than the average (in this case eleven) to be indicative of substandard governance for the top holdings regressions.

For the random sample we used the breakpoint of a grade of less than the average for the group, in this case, a grade of nine. The results of the analysis using these alternative governance breakpoints as dummy variables are shown in Table 6. These results do show a positive impact of the governance index measure on performance; on the other hand, it is only mildly significant for the EVA of the top holdings. Size continues to have a negative effect on both EVA and Tobin's Q, after accounting for this alternative measure of good governance.

Table 6 Full model regression for grades < 11 for top holdings and > 9 for random sample

	EVA ON MAIN			EVA ON MAIN			TQ ON MAIN			TQ ON MAIN	
	Top Holdings			Random Sample			Top Holdings			Random Sample	
Variable	Coefficient	Pr >  t		Coefficient	Pr >  t		Coefficient	Pr >  t		Coefficient	Pr >  t
Intercept	-76438	0.1391		-20690	0.2505		0.7050	0.7352		4.9591	0.1366
Grade	9678	0.0642*		1749	0.3179		0.1376	0.5093		0.0350	0.9022
Total Assets	-1.8154	<.0001*		-1.5060	0.1235		0.0000	0.6048		-0.0007	0.0011*
Small Cap	-14389	0.2063		3079	0.4975		-0.2713	0.5588		-3.0428	0.0025*
EMA	32288	0.0479*		6258	0.0630*		0.4769	0.4616		-0.3141	0.5467
R-Square	0.9164			0.2868			0.0692			0.3486	
F Value	57.5100			2.9200			0.3900			3.8800	
Pr > F	<.0001			0.0384			0.8134			0.0121	

Table 6 shows regression results on (1) and (2) with using grades greater than equal to 11 for top holdings and less than equal to 9 as dummy variables that reflect good governance breakpoints.

To further isolate the components of the governance index that matter most, we also regressed both EVA and Tobin's Q on each of the twelve governance criteria as separate regressors. We conduct the regression for the random sample alone, given the high correlation amongst the governance criteria of the top holdings sample. In the regression using EVA as the dependent variable with all eleven criteria included, only two are found to be significant, director independence and metrics used in rewarding compensation. The effects of these variables are shown in Table 7 below. On the whole these results show that if the metrics used in rewarding managers are clearly reflecting in the company's filings, the firm's performance improves. On the other hand, director independence per se has an adverse effect in the sample, suggesting that there may be significant "skin in the game" effects, which counter the potential risk that the directors will act in the interests of executives at the expense of shareholders.

Table 7: Governance Criteria's that matter

<b>Variable</b>	<b>Random Sample</b>	
	<b>Coefficient</b>	<b>Pr &gt;  t </b>
<b>Intercept</b>	-170.1243	0.8996
<b>Director independence</b>	-3.8860	0.0225*
<b>Metrics used in rewarding compensation</b>	2.8315	0.0082*
<b>R-Square</b>	0.1694	
<b>F Value</b>	4.3800	
<b>Pr &gt; F</b>		0.0185

Table 7 shows the regression results when EVA regressed on the individual "good governance" criteria.

This result is consistent with Cremers et al. (2008) who also find that funds in which directors have low ownership stakes," significantly underperform." We also performed the regression using Tobin's Q as a dependent variable, although the results are not significant.

## V. Conclusion

Understanding how boards add value to the corporations they govern is an important topic for governance researchers, practitioners and policy makers. To date, academic research has largely assumed the composition of a board role set or relied on theoretical conceptualizations of the role set. This paper represents a first step in understanding the perceptions by portfolio managers of Board members within a corporation, what factors they consider when evaluating an investment decision in a firm, and how their current holdings represent their views and most importantly, the impact on stock performance. We find that portfolio managers do in fact look for the identified “good governance” criteria, as shown by the high grades scored by majority of the top holdings by various funds.

We further took a random sample and ran similar regressions to see if the governance factors evaluated by the portfolio managers matter and conclude they do. Based on our sample size we conclude that better governance does add value, and leads to better performance. EVA and Tobins Q are used to capture corporate performance. Firms within a basket of randomly selected companies demonstrate superior performance when they score a higher governance grade.

The governance criteria used by portfolio managers are highly correlated, when looking at their top holdings, making it difficult to isolate the impact of individual

good governance measures. Using the random basket of securities as a lens, two criteria stand out insofar as distinct. First, that management of the firm is clearly informed of the metrics utilized in their compensation, as reflected in the company filings. To the extent that these metrics form expectations for managers, it is apparent that they are effective. Second, director independence appears to matter. Our results suggest that the argument that directors may act contrary to the interest of shareholders if they are not independent is not sustained. This result is consistent with Cremers et al (2008), who show that funds in which directors have low ownership stakes," significantly underperform."

## **VI. Limitations and Future Research**

We believe that analyzing the entire portfolio of a few funds or increasing the sample size might strengthen this conclusion. Multiple managers might also be involved in managing a portfolio, and might be sector specialist, in our study we do not distinguish between it and there is a possibility that our respondent had either limited or no names in the top holdings. We should also try to increase the number of respondents by sending it out to a larger pool. We could run it at a country level where the survey is sent to all the funds in the country.

Another extension of this paper would be to increase the sample size in the randomly selected list of companies, to include all the publicly traded companies which might help remove the sampling error. If results are consistent it would



help in building an index which is superior and captures what portfolio managers are looking for in an investment.

## Sample Questionnaire

Hello;

My name is Sain Godil and I am currently pursuing my Msc. in finance at The John Molson School of Business (Concordia University). I am working on my thesis which aims at looking at perception by portfolio managers of Board Members within a corporation. Below is a short questionnaire that I would like to ask you to fill up which will help me in creating an index to measure the quality of Board from a portfolio manager's point of view. I thank you in advance for your help and assure you all information gathered by me will be confidential.

Thank you for your support.

Please rank the below based on the level of importance. E.g 3 if it is the most important thing you look at before making an investment decision in the company.

**Firms Name:** \_\_\_\_\_

	1	2	3
	Least Important	Important	Most Important
<b>Structure and Voting</b>			
✓ Complicated corporate structures	1	2	3
✓ Vote for each director and not a slate	1	2	3
✓ Environment and Social Governance Issues considered	1	2	3
✓ Staggered board	1	2	3
✓ Super voting shares to Board Members	1	2	3
✓ Separation between Chairman of Board and CEO	1	2	3
<b>Skills and Experience</b>			
✓ Board skills and history	1	2	3
✓ Board members from varied Industries	1	2	3
<b>Stock Ownership and Conflicts of Interest</b>			
✓ Director independence	1	2	3
✓ Director meeting attendance	1	2	3
✓ Interlocking directorships	1	2	3

✓ Multiple directorship	1	2	3
✓ Family members on the board	1	2	3
✓ insider trading accusations by the board members	1	2	3
✓ Director stock ownership	1	2	3

#### **Compensation**

✓ Conflicts of interest between management & BOD	1	2	3
✓ Compensation model that			
○ Rewards stock price appreciation	1	2	3
○ Rewards EPS growth	1	2	3
○ Reflects good capital allocation decisions	1	2	3
✓ Metrics used in rewarding compensation	1	2	3
✓ Clear objectives for management in fillings	1	2	3
✓ No option to board members	1	2	3

Other Considerations (please specify):

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