The Impact of Governance on Corporate Charter

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Abstract: A corporate charter is considered an extremely important document to any organization since it basically addresses the purpose, objective, structure and scope of the organization. Changing the charter is usually associated with business process re-engineering, change management, and more likely education and training. Those activities drive the organization to consume its precious resources. Hence, we examine the impact of governance factors on charter change. Findings indicate that there are four variables (limit ability to amend by laws, limit ability to act by written consent, vote % to amend by laws and vote % for written consent) that could affect corporate charter. Results and implications are discussed.

Keywords: Governance and corporate charter.

I. Introduction

A corporate charter is considered an extremely important document to any organization since it basically addresses the purpose, objective, structure and scope of the organization at high level. Hence, any change made on the charter is usually associated with business process re-engineering, change management, and more likely education and training. Consequently, these activities drive the organization to consume its precious resources: time, effort and money. However, changing the corporate charter may produce enormous benefits in some cases but this paper is based on the first perspective. This study examines the effect of governance on corporate charter in a business environment.

Conceptual Framework

This section provides a brief background of governance, a hypothesis development and a conceptual model to address our research question.

I. Theoretical Background

Governance is simply defined as a path taken by a company to control and direct its group of process, practices and regulations. Good governance is critical to accomplish objectives, goals and scope for any company (Investopedia, 2014). There are many indicators developed to measure governance; a well-established measure is worldwide governance indicators (WGI) which consist of six dimensions; these dimensions were defined as follows: "voice and accountability (VA)- measuring perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association and a free media". Other dimensions are political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption (Thomas, 2010).

On the other hand, a corporate charter is a very important step when establishing an organization. Mayers & Smith Jr. (2005) defined it as "The charter is privately adopted by each organization and serves as the primary source of authority for the company. At a minimum, it establishes the firm's name, organizational form, capitalization, scope of business, and process for its amendment". Also, the charter highlights the main components of any organization including structure, planned operation, purpose and objectives. It is usually the first document issued by the organization (Investopedia, 2014).

II. Hypothesis Development

It seems that there is a high cost associated with changing a corporate charter due to subsequent and costly changes resulting from this alteration. Therefore, it is necessary to study the factors may affect the organization charter. More robust governance should lead to less percentage of votes required to adjust the charter. This guides us to the following hypothesis:

"Good governance is negatively related to a corporate charter."

The following model is to provide a conceptual framework which addresses the research question.

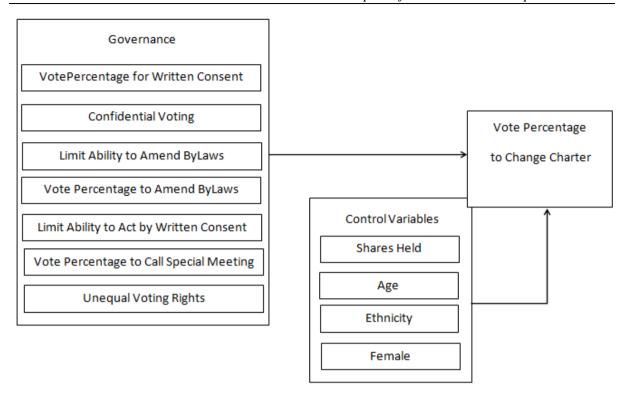


Figure 1: Research Model

III. Construct Measurement

Governance has well-established indicators in prior research (Kaufmann, Kraay, & Mastruzzi, 2005). Those indicators are adapted from WGI but compared and matched with the available dataset to measure governance. In general, this dataset does not capture the six mentioned indicators of governance; it reflects the first indicator (voice and accountability) to a certain degree. As well, we are interested to investigate other factors related to governance, which is not captured in WGI. However, we added other variables extracted from "Director" dataset to control for their impact on the corporate charter such as age, gender, shares held and ethnicity.

Data

This section consists of three subsections: data description, data outline and data analysis. These subsections basically describe the data at high level, summarize the adopted data in terms of observations, variables and its related properties and handle some issues of the data via Stata.

Data Description

Risk Metrics is classified as a leading provider of corporate governance data. This data was first provided by IRRS but when ISS acquired IRRS, the method for collecting data was changed in 2007 in order to follow ISS specifications. Therefore, there are two datasets existed in Risk Metrics; one with beginning of 2007 and the other before 2007 (legacy version). Risk Metrics has four groups of the datasets: director, governance, voting results and shareholder proposals.

The dataset of director has a time range of 1996 to 2012 while governance is a bit longer ranging from 1990 to 2012. In director data, variables give information about individual board directors such name, age, committee memberships, primary employer and title, number of other public company boards serving on and shares held. In governance data, the variables give information about corporate governance provisions for key US firms such as classified board, confidential voting, advanced notice and written consent. Both datasets are updated on a yearly basis. Also, firms of S&P 1500 index are included in both datasets.

Data Outline

This subsection mainly identifies characteristics of the data and defines the variables of interest:

- Time period: 2007
- Number of observations: 10,437
- Number of variables: 18
- Variables of Interest:

- ❖ Dependent variable: Vote % required to amend charter
- Type: Continuous.
- Unit of measurement: percentage.
- Independent variables:
- Confidential Voting: shareholders are able to vote in proxy card with unaware management side and inspectors are in charge of checking individual votes.
- Type: Continuous.
- Unit of measurement: binary (0 = no & 1 = yes).
- Limit Ability to Amend By Laws
- Type: Categorical.
- Unit of measurement: binary (0 = no & 1 = yes).
- Vote % Required to Amend By Laws
- Type: Continuous.
- Unit of measurement: percentage.
- Limit Ability to Act by Written Consent
- Type: Categorical.
- Unit of measurement: binary (0 = no & 1 = yes).
- o Vote % Required to Call Special Meeting
- Type: Continuous.
- Unit of measurement: percentage.
- Unequal Voting Rights
- Type: Categorical.
- Unit of measurement: binary (0 = no & 1 = yes).
- Vote % required for Written Consent: written consent occurs when shareholders are able to take actions without having a meeting.
- Type: Continuous.
- Unit of measurement: percentage.
- Identifying variables:
- Company Name
- o Year
- o State
- o Director last name
- o Ticker
- o Cusip
- Control Variables:
- O Shares held: how many shares are owned by director.
- Type: Continuous.
- Unit of measurement: number.
- o Age:
- Type: Continuous.
- Unit of measurement: number.
- o Ethnicity:
- Type: Categorical.
- Unit of measurement: AFRICAN-AMERICAN =1, ASIAN = 2, CAUCASIAN= 3, HISPANIC = 4, NATIVE AMERICAN/ALASKAN NATIVE = 5 and UNKNOWN =6
- o Female?:
- Type: Categorical.
- Unit of measurement: binary (0 = no & 1 = yes).

We encoded the categorical variables and converted them to numerical values so that we can run the regression model.

Data Analysis

Two datasets were merged (director and governance) into one dataset that has a primary key identifying uniquely each observation. A range of potential independent variables were selected, however, the variables that have a very large number of missing values are dropped from the dataset. The variables considered irrelevant to our research topic are dropped also.

There are three major issues needed to be handled in every dataset before going into further investigation: normality, outliers and missing values. Normality is addressed in assumption part below. The

outliers need to be addressed because multiple linear regression is sensitive to the effects of the outliers (Lani, 2014). Therefore, we generated graphs for all independent variables; these graphs (Figure 2)¹ show that all the independent variables don't have sever outliers. For the missing values, the following rule is implemented (Abubader, 2011):

- Excluding cases (observations) with missing values: If only 5% or less of cases have missing values at random.
- o Replacing missing values: If the number of cases with missing values is large (> 5%) or if they are not randomly missing.

This rule can ensure that our results will not be affected (not biased) when removing the cases or observation with missing values if they are 5% or smaller (Abu-bader, 2011). The identifying variables of state, company name and director last name were not given a significant attention for their missing values since they are supplementary information.

Assumptions Verified and Method

This section examines the assumptions that need to be satisfied in order to implement multiple linear regression and describes the estimation method and model.

Assumptions of Multiple Linear Regression (MLR): the following assumptions should be fulfilled to apply the multiple linear regression (Bruin, 2006) &(Abu-bader, 2011):

- Sample size: the sample is a very good representation of the population since it has a tremendous size (10,437 observations).
- Linearity: we evaluated this assumption by looking at scatter plot for dependent variable and each independent variable (11 scatter plots). We found that there is nearly a linear relationship between the dependent variable and each factor (Figure 3)¹.
- Multicollinearity: we evaluated this assumption by using two methods: Pearson correlation matrix and variance inflation factor (VIF); these methods showed that all correlations between independent variables are less than 0.80 and all VIFs are less than 5 which indicate no multicollinearity exists (Figure 4)¹.
- Homoscedasticity: we need to check the relationship between residual and fitted value to evaluate this assumption. Figure 5¹shows that there is an indication of heteroscedasticity. As well, the test of Breusch-Pagan / Cook-Weisberg for heteroscedasticity shows that p-value is very small indicating no homogeneity exists. Therefore, this assumption is not completely fulfilled.
- Normality of criterion: the criterion (depend variable) is negatively skewed (Figure 6)¹. Also, this conclusion is supported by Shapiro-Wilk test for normal data and (P-P) plot. We transformed this data using a natural logarithm to have a normal distribution.
- Normality of residual: we evaluated this assumption by looking at histogram of the residual (Figure 7)¹; it shows that the residual is approximately normally distributed.
- Zero conditional mean: we assume that the expected value of error term (U) given any value of all independent variables is zero in this analysis.

According to the mentioned assumptions, ordinary least square (OLS) is suitable to be implemented here as estimation method (Wooldridge, 2013). Population linear regression model can be expressed as follows:

Vote % to amend charter = $\mathbf{B_0}$ + $\mathbf{B_1}$ Shares held + $\mathbf{B_2}$ Vote % to Amend By Laws + $\mathbf{B_3}$ Vote % to Call Special Meeting + $\mathbf{B_4}$ Vote % for Written Consent + $\mathbf{B_5}$ Confidential Voting + $\mathbf{B_6}$ Limit Ability to Amend By Laws + $\mathbf{B_7}$ Limit Ability to Act by Written Consent + $\mathbf{B_8}$ Unequal Voting Rights+ $\mathbf{B_9}$ Female + $\mathbf{B_{10}}$ Dire_Age + $\mathbf{B_{11}}$ ASIAN + $\mathbf{B_{12}}$ CAUCASIAN + $\mathbf{B_{13}}$ HISPANIC + $\mathbf{B_{14}}$ NATIVE AMERICAN/ALASKAN NATIVE + $\mathbf{B_{15}}$ UNKNOWN + U

Base group of for dummy variable of ethnicity is AFRICAN-AMERICAN. Descriptive statistics (Figure 8)¹ shows that we included only one year 2007 in our analysis in order to avoid great recession effects, which started Dec 2007 to June 2009.

¹ All figures in the appendix.

IV. Results

Results of multiple regression analysis are expressed in the below table:

Table 1: OLS Results. Dependent Variables: Vote % to amend charter						
Independent Variables	Coefficient	Stand. Error	t-statistic			
Shares held	- 5.21	3.13	-1.58			
Vote % to Amend By Laws	.002***	.000	31.25			
Vote % to Call Special Meeting	.000	.000	1.05			
Vote % for Written Consent	.000***	.000	2.89			
Confidential Voting	.009*	.004	1.91			
Limit Ability to Amend By Laws	.037***	.002	12.62			
Limit Ability to Act by Written Consent	054***	.004	-12.02			
Unequal Voting Rights	.022	.028	0.83			
Female	.005	.004	.004			
Dire_Age	.000	.000	1.31			
ASIAN	032**	.014	-2,29			
CAUCASIAN	012	.008	-1.54			
HISPANIC	011	.015	-0.76			
NATIVE AMERICAN/ALASKAN NATIVE	.056	.068	0.82			
UNKNOWN	010	.008	-1.33			

*P < 0.10 **P < 0.05 ***P < 0.01

Variance Explained of Corporate Charter: 0.1458

The above table shows only four variables (limit ability to amend by laws, limit ability to act by written consent, vote % to amend by laws and vote % for written consent) are highly significant. In addition, Asian directors are considered to be significant. In the same vein, confidential voting is marginally significant while other variables are not significant. This model can explain 14.58% variability in the vote percentage to change the corporate charter (Figure 9) 1 .

It is evident that five indicators of governance out of seven are affecting the vote percentage to change charter and they are interpreted as follows:

- > Having the ability to change by laws increases the vote percentage to change the corporate charter by 0.037.
- Having the ability to act by written consent decreases the vote percentage to change the corporate charter by 0.054.
- ➤ The vote percentage to change the corporate charter increases by 0.002 when having one additional percent of votes to modify by law.
- The vote percentage to change the corporate charter almost stays the same when having one more percent of votes for written consent.
- The vote percentage to change the corporate charter increases by 0.009 when having confidential voting. Although the factor of Asian directors shows to be significant in this model, it was not given a lot of attention as this variable is not in our interest domain.

V. Limitations and Conclusion

There is a number of limitations found in this paper. First, not all control variable, such as employment category, committee member of different groups, financial expertise and length of service, are included in the analysis. Second, the items I used address only one indicator of governance, which is voice and accountability; this calls for more investigation on how other five indicators may affect corporate charter. However, most organizations usually try not to be driven into the process of changing their charter since this process may be associated with high costs. Hence, it is so important to identify the factors impacting the vote percentage to change the charter. We concluded that the organization should pay more attention to the ability to change by laws, vote percentage to modify by law and confidential voting since they may increase the likelihood of changing the charter.

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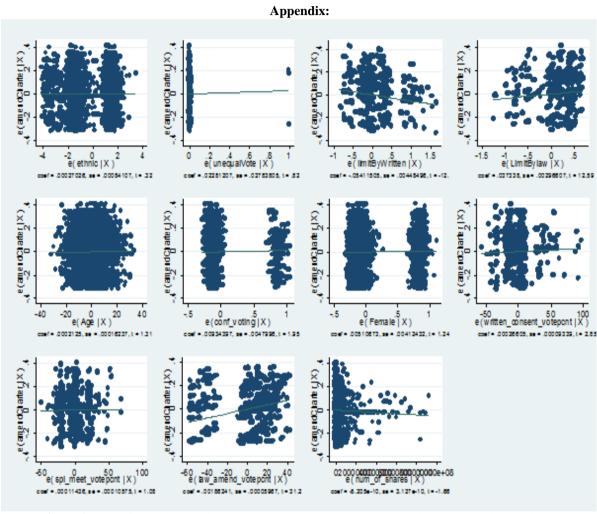


Figure 2: Test of checking outliers shows each independent variable with the dependent variable.

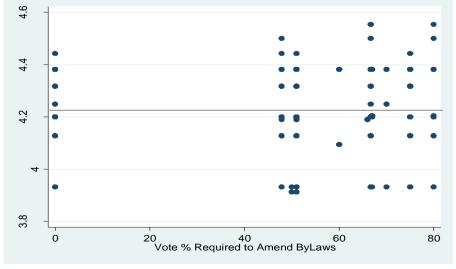
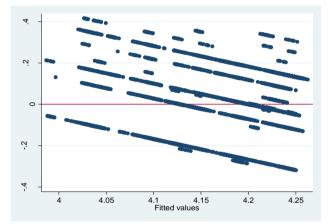


Figure 3: Scatter Plot Example to Check Linearity.

	num_of~s	law_am~t	spl_me~t	writte~t	Female	conf_v~g	Age	LimitB~w	limitB~n ı	unequa~e	ethnic
num_of_sha~s	1.0000										
law_amend_~t	-0.0018	1.0000									
spl_meet_v~t	0.0024	-0.0076	1.0000								
written_co~t	-0.0323	0.1522	0.1979	1.0000							
Female	-0.0338	0.0007	-0.0083	0.0038	1.0000						
conf_voting	-0.0037	-0.0847	-0.0413	-0.0658	0.0431	1.0000					
Age	-0.0074	-0.0051	0.0156	0.0222	-0.1711	0.0241	1.0000				
LimitBylaw	-0.0133	0.0709	-0.0038	-0.2630	-0.0093	0.1684	0.0080	1.0000			
limitByWri~n	0.0227	-0.2112	0.0006	-0.6286	-0.0316	0.0703	-0.0063	0.2931	1.0000		
unequalVote	-0.0061	-0.0227	-0.0197	-0.0520	-0.0059	-0.0150	-0.0057	0.0372	0.0063	1.0000	
ethnic	-0.0376	0.0439	-0.0043	-0.0534	-0.0754	-0.1080	-0.0678	0.0362	0.0653	0.0056	1.0000

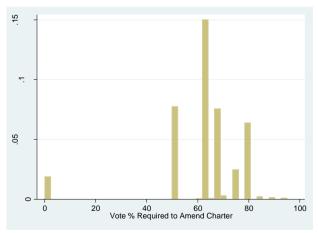
Variable	VIF	1/VIF
limitByWri~n	1.81	0.553487
written_co~t	1.80	0.555147
LimitBylaw	1.17	0.857097
law_amend_~t	1.08	0.922682
spl_meet_v~t	1.07	0.932304
conf_voting	1.06	0.945928
Female	1.04	0.958960
Age	1.04	0.962715
ethnic	1.03	0.966818
unequalVote	1.01	0.993821
num_of_sha~s	1.00	0.995034
Mean VIF	1.19	

Figure 4: Tests for Multicollinearity.



Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of amend
Charter
chi2(1) = 60.69
Prob > chi2 = 0.0000

Figure 5: Tests for Homoscedasticity.



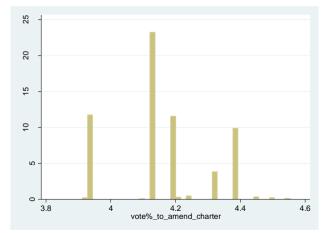


Figure 6: Histogramsbefore and after transformation using log for dependent variable.

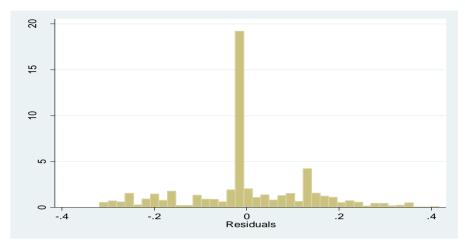


Figure 7: Histogram of Residual.

Variable	Obs	Mean	Std. Dev.	Min	Max
year	10437	2007	0	2007	2007
ticker	0				
cusip	0				
name	0				
last_name	0				
num_of_sha~s	10437	797130.1	4262324	0	9.27e+07
state	0				
law_amend_~t	10437	49.23168	23.19286	0	80
spl_meet_v~t	10437	30.79528	13.0184	0	100
written_co~t	10437	38.05552	19.10447	0	100
_merge	10437	2.418224	. 9083876	1	3
Female	10437	.1235987	.329139	0	1 1
conf_voting	10437	.0890103	. 2847722	0	1
Age	10437	34.23417	8.343971	2	68
LimitBylaw	10437	.6251796	. 4840997	0	1
limitByWri~n	10437	.1978538	. 3984004	0	1
unequalVote	10437	.0022995	. 047 900 3	0	1
ethnic	10437	4.563955	1.607421	1	6
amendCharter	10437	4.161183	. 1468078	3.912023	4.553877
res	10437	1.66e-12	. 1357191	3183564	. 4160025
yhat	10437	4.161183	.055972	3.986837	4.262625

Figure 8: Descriptive Statistics

Source	SS	df	MS		Number of obs	
					F(15, 10421)	
Model	32.7911259		3607 506		Prob > F	= 0.0000
Residual	192.131216	10421 .018	3436927		R-squared	= 0.1458
_					Adj R-squared	
Total	224.922342	10436 .023	L552543		Root MSE	= .13578
amendCharter	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
£ .L	4 04- 10	2 12- 10	1 50	0.114	1 11- 00	1 10- 10
num_of_sha~s	-4.94e-10	3.13e-10	-1.58	0.114	-1.11e-09	1.19e-10
law_amend_~t	.0018652	.0000597	31.25	0.000	.0017482	.0019822
spl_meet_v~t	.0001108	.0001058	1.05	0.295	0000965	.0003181
written_co~t	.0002696	.0000934	2.89	0.004	.0000865	.0004527
Female	.0049071	.0041253	1.19	0.234	0031792	.0129934
conf_voting	.0091659	.0048026	1.91	0.056	0002482	.01858
Age	.0002126	.0001629	1.31	0.192	0001067	.0005319
LimitBylaw	.0374279	.002966	12.62	0.000	. 031614	.0432417
limitByWri~n	0539363	.0044867	-12.02	0.000	0627311	0451415
unequalVote	. 022982	.027836	0.83	0.409	031582	. 077 546
ethnic						
2	0324268	.0141618	-2.29	0.022	0601868	0046669
3	0120936	.0078536	-1.54	0.124	0274882	.0033011
4	0113103	.0148924	-0.76	0.448	0405023	.0178817
5	.0562939	.0683339	0.82	0.410	0776537	.1902415
6	0103394	.0078029	-1.33	0.185	0256346	.0049558
_cons	4.045581	.010933	370.03	0.000	4.02415	4.067011

Figure 9: Regression Table.