Explaining the Price Gap between Voting Shares and Non-Voting Shares

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Abstract

Publicly traded companies sometimes issue different classes of shares. The main benefit of dual class voting structures for shareholders and a company's management is to focus on long-term goals and a company's strategic direction while maintaining the freedom, rather than contending with the threat of a hostile takeover. The key difference between voting shares and non-voting shares in dual class structure is the voting right. If control is valuable, the voting shares would trade at a higher price than the non-voting shares. When perusing historical data for past few years in companies that trade both voting and non-voting shares in the Colombo Stock Exchange(CSE), it was observed that the voting premium varies from company to company and within the company itself over the time. The objective of this paper is to quantify the voting premium for CSE shares in order to create symmetric information that would be helpful for investors to know whether the shares are underpriced or overpriced relative to its aggregate performance. After conducting a systematic review of literature, factors affecting voting premium that is described using different models, frames and processes were identified and expert opinion sought to aid verification. Through an initial analysis of historical data using a multiple regression model, a mathematical formula to quantify the voting premium is introduced. The regression show that the N/X ratio, foreign holdings ratio, public float and exchange rate influence the value of voting premium negatively whereas inflation has a positive influence. The formula was verified and the actual voting premiums are between lower and upper bounds of predicted voting premiums.

Keywords
Capital Market, Voting Premium

1. Introduction

Ownership and control are two different functions of large corporations. Most of the shareholder typically hold relatively small number of shares which leads lack of significant voting power. Further majority of them do not participate in the corporation's general meetings while resulting a limitation in shareholders' interest in the management of the firm. Thus the investment and financial decisions of the firm are made by a small group (the management) which effectively controls the firm. The possible conflict of interest between these two groups, and other various aspects of the separation of control and ownership are the subject of several studies. [Levy, 1982]

The stock price of a publicly traded company is an indicator of overall strength and the health of the company and it reflects investor's perception of the companies' ability to earn and grow its profit in the future while having the optimism about the companies' prospects. When there are different types of shares, a rational investor may select the best investment portfolio analyzing the cost and benefits. So the price differences in different types of shares play a major role in the capital market and a proper method to quantify the price differences is a researchable area which many researches have been conducted in different countries. To examine that the total value of a firm may be reduced by having multiple classes of equity and to obtain results from additional countries regarding the voting premium and compare them with the published researches are some of the gaps identified when reviewing the published literature.

Further, since the lack of voting right is the only difference in non-voting shares compared to voting shares, the variation of voting premium in an unpredictable manner due to different factors in Sri Lankan stock market is the main focus in this research.

In order for high-vote shares (i.e. stock that receives multiple votes per share and/or the ability to elect the majority of the board of directors) to trade at a higher price than low-vote shares (i.e. stock typically receives one vote per

share and/or the ability to elect a minority of the board of directors), finance theory indicates that the high-vote shares must carry the expectation of benefits that low-vote shares do not. Thus, evidence that common stock with superior voting rights trades at a higher price than otherwise identical stock, implies at least the possibility of differential cash or non-cash payoffs to the two classes. The source of these potential differential payoffs remains an unsettled issue [Cox and Roden, 1999].

In the capital market, asymmetric information occurs when either the buyer or seller has more information on the past, present or future performance of the shares than other stakeholders. If one party has more information he/ she may know whether the share is underpriced or overpriced relative to its aggregate performance. Asymmetric information provides either the buyer or seller a better (arbitrage) opportunity to make a profit. Capital market should ideally have a level playing field, for each and every person and the information should be transparent, accurately estimated and be disseminated efficiently and be absorbed quickly by all stakeholders. Further, the speed of information flow add value to the stock market activities.

If a voting ownership in a company is unilateral where the voting shares of 51% or above is owned by a one person, a rational investor may consider the ideal investment according to his/her preference. In this situation it is worthwhile to own a non-voting share paying less, rather than owning a voting share which is more costly. But if the investor is concerned about other benefits, such as prestige created by owning a voting stock, the voting premium would be considered when making decisions.

Although many studies have been done to identify the factors affecting the price gap between voting shares and non-voting shares, there are only few significant studies focusing on the applicability in developing markets. In the Sri Lankan context, only a few preliminary studies have been done, with limited attempt to consider all possible influencing factors affect for the voting premium. Since share prices are highly demand volatile, many aspects should be considered when estimating the voting premium.

When publicly held companies issue different classes of common stock with different voting right a question may appear how much an investor is willing to pay for the voting right. When overviewing the historical data for past few years in companies that trade both voting and non-voting shares in CSE, identifying the value of voting right was very complex since the voting premium varies from company to company and within the company, varies over time. In Sri Lanka total of only 17 companies have issued both voting and non-voting shares out of 298 companies in CSE. While the population is limited, this is a typical scenario in a developing stock market and therefore, warrants assessing the factors affecting the voting premium of voting over nonvoting stocks.

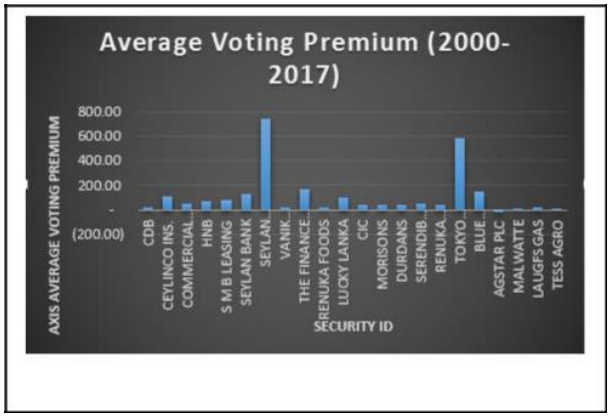

Figure 1. Voting Premium

2. Methodology

A comprehensive literature review was conducted with the aim of finding factors affecting voting premium and revealing the research gap in the selected area. This review based on the articles which has been published on the fields of share classification and capital structure, factors affecting voting premium and share pricing methods. In order to finalize the factors affecting the voting premium in CSE interviews (face to face, phone) were conducted. During the formal discussions expert opinions has been sought to validate the findings.

Through the effective categorization and integrative analysis of above findings this paper introduces an innovative conceptual model to present the driving factors of voting premium.

Multiple regression was selected to analyze the data and determine the overall fit of the model and the relative contribution of each of the predictors to the total variance and a mathematical equation is introduced.

3. Literature Review

The review focused on assessing the reasons which affect the price gap of different types of shares mainly the price gap between voting and non-voting shares in order to identify a formula or framework according to the results obtained from their countries. For efficient capital markets, information dissemination and absorption is crucial for investors in order to make timely decisions.

An investigation was done for 41 pairs of voting and nonvoting shares of 29 Swiss corporations where the shareholder protection is relatively poor which leads to high private benefits for the controlling shareholder of the company and high value for voting right. Liquidity, transferability, ownership structure, and voting rights are the factors they have identified which affect the relative prices and in their sample, the pure stock voting right carries a premium of 18%. The more the distribution of voting rights deviates from the one-share, one-vote principle, the higher the value of the voting right. This can lead capital markets to expect significant value added through changes in the control of these firms. They have found that fewer restrictions on transferability and higher liquidity lead to a higher relative price. Another significant factor they have identified is the pattern of share ownership: Further, companies in which the majority of votes are held by a single entity have lower voting rights premium, because remaining shares have less voting power [Angel et al., 1996].

A study was conducted to analyze the value of the voting rights of shares of publicly owned firms in Switzerland and to investigate the relation between the voting-rights-premium and the inequality in voting power. The have concluded that voting rights have a positive value, that the voting right premium depends on the degree of inequality in voting power between the shares and that majority shareholders hold the high-voting-rights stock.

The results confirms the role of the value of voting power and corporate control in determining the relative prices of the various classes of stock a firm has outstanding. Consequently, the results have implications for the equity capital structure of the firm. The allocation of voting power is one of the factors determining the relative prices of the various classes of equity and therefore also influences the structure of equity capital, which is optimal to finance and control the firm. The results also confirm the importance of a market for corporate control [Horner, 1988].

An interview was conducted to find at what extent variations in firms' fundamentals, changes in investor preferences toward non-voting shares and to explain the relative price of voting and nonvoting shares (i.e., the voting premium) using a unique hand-collected dataset in UK. They have shown that negative news coverage of dual class firms is associated to an increase in the voting premium even if no new material information has been revealed. Furthermore, a higher voting premium and negative news for dual class firms are followed by lower returns for voting shares than for non-voting shares suggesting a reversion to fundamentals [Giannetti, 2012].

Another study was conducted on the Israeli Stock Exchange and out of the 104 firms listed in early 1981, 25 firms had two classes of common stock identical in all respects except for voting power. Voting right premium of the two classes of stock was measured and the main results of this paper were that a significant positive relationship was found between the voting inequality index and the voting rights premium, a lower and upper bound on the price difference was established for stocks that are identical in all respects except for voting rights, and the efficiency of the stock market was analyzed using the price difference range.

In firms with more than one class of stock, the various classes generally differ not only in voting power but also in other economic rights, e.g., dividend rights, liquidation preferences, etc. Thus, it is very difficult to evaluate the economic value of voting rights with the particular market data [Levy, 1982].

A paper examines the relative pricing of the high and low-vote shares of 98 firms with two classes of common stock trading in the U.S. during the period from 1984 to 1999 by using ratios of the market prices of high to low-vote stock measuring the value of the vote. They have investigated the relationship between the observed premiums on high-vote shares and firm specific variables is to determine the source of the value of corporate control [Cox and Roden, 1999].

A study was conducted to show that the relative price of twin stocks is highly correlated with the relative stock-market indexes of the countries where the twins' stocks are traded most actively. They have examined several explanations of this phenomenon including the discretionary use of dividend income by parent companies, differences in parent expenditures, voting rights, currency fluctuations, ex-dividend date timing issues, and tax-induced investor heterogeneity. Only the last hypothesis was explained some, but not all, using the empirical facts. Location of trade therefore appears to matter for pricing [Froot and Dabora, 1999].

A study has conducted using Swedish stock market data shows how the value of the voting right depends on the initial ownership distribution, the share structure, and the ability of the incumbent manager versus a rival for control. The study has analyzed the price difference between shares that differ only in their voting rights. The analysis has been focused on the link between the voting premium and the ownership structure. They have found that the voting premium is larger in firms where the two largest block holders are of equal size than in firms where the largest block

holder is much larger than the second largest. Similarly voting premium reach high levels during periods of frequent takeover activity as occurred [Rydqvist, 1996].

A research was conducted with the purpose of measuring the value of corporate voting rights, specifically of the control block of votes, using a sample of 661 dual-class firms in 18 countries, in 1997. A consistent measure across countries is proposed. The measure is adjusted for takeover probability, block-holding costs, and dividend and liquidity differences between the share classes. They have found that the value of control block votes varies widely across countries. It is close to half of firm market value in South Korea, and close to zero in Finland. The value of control-block votes is interpreted as a lower bound for actual private benefits of the controlling shareholder. The legal environment, law enforcement, investor protection, takeover regulations, and power-concentrating corporate charter provisions explain 68% of the cross-country variation in the value of control-block votes [Nenova, 2003].

A case study was conducted of the valuation of voting rights in France and Italy. New regulations, France's "Florange Law" as well as Italian Legislative Decree 91/2014, have created additional voting rights attached to the existing shares of long-term shareholders. To tests whether stock price evolution is consistent with the valuation of voting rights as per existing research this case study was conducted. The have found that stock prices of the float do not factor in the dilution created by loyalty voting rights. The chapter argues that the dilutive effect of the new regulations has a negative impact on stock valuation, but that this is more than offset by taking into account real options. These results address the concern that the new policies would depress stock valuation in France and Italy [Michael, 2018].

A study has been undertaken to identify the factors influencing stock prices in different stock markets. They have examined the effects of book value, earning per share, dividend per share, dividend yield, dividend cover and price earnings ratio on the share price of firms using 100 companies of National Stock Exchange (NSE). A sample of 95 companies is selected for the period 2007-12 and using linear regression model the results indicate that firms' book value, earning per share and price-earnings ratio are having a significant positive association with firm's stock price while dividend yield is having a significant inverse association with the market price of the firm's stock [Tandon, 2013].

All the factors that have identified from the systematic review of literature is modeled in Figure 2.

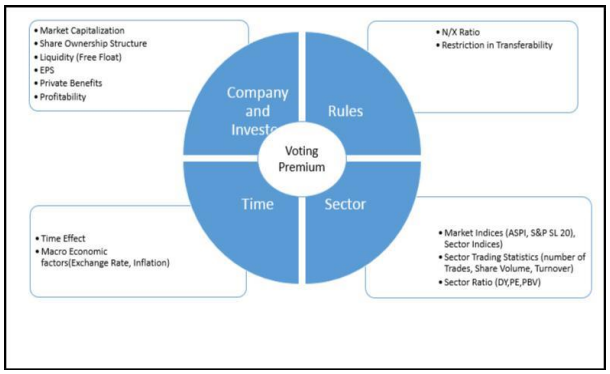

Figure 2. Model Summary

4. Analysis

In order to quantify the voting premium multiple regression model is used. So as to fit a multiple regression model, six assumptions should be met. They are a); independence of errors (residuals), b); a linear relationship between the predictor variables (and composite) and the dependent variable, c); homoscedasticity of residuals (equal error variances), d); no multi-collinearity, e); no significant outliers, high leverage points or highly influential points and f); errors (residuals) should be approximately normally distributed.

All companies that issue both voting shares and non-voting shares in CSE were selected and assessed and how they are checked is described using the output of SPSS tool. After running the multiple regression procedure, five variables were created in the variable view and the data view as follows.

1) the values for the unstandardized predicted values (PRE_1),
2) Studentized residuals (SRE_1),
3) Studentized deleted residuals (SDR_1),
4) Cook's Distance values (COO_1) and
5) Leverage values (LEV_1).

These five variables are repeatedly referred for the 6 assumptions that were made.

In this process following are the assumption testing results.

(1) There should be independence of errors (residuals);

Table 1. Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.370[a]	.137	.086	55.2172575	.666

a. Predictors: (Constant), Exchange Rate, Ptofitability, Public Float, Foreign Holdings, Inflation, N/X Ratio

b. Dependent Variable: Voting Premium

The Durbin-Watson statistic for this analysis is 0.666. The Durbin-Watson statistic can range from 0 to 4, but a value of approximately 2 is needed to indicate that there is no correlation between residuals. Since this value is in inconclusive range, it was considered that there is no evidence of autocorrelation and moved on to the next section: Testing for linearity.

(2) There should be a linear relationship between the predictor variables (and composite) and the dependent variable;

a) Establishing if a linear relationship exists between the dependent and independent variables "collectively" using a scatterplot

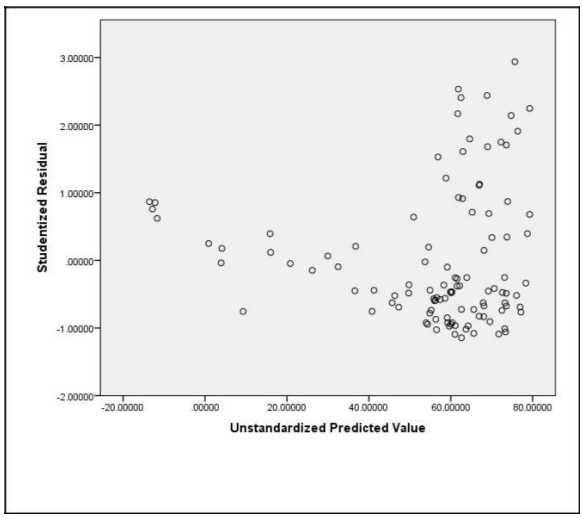

Figure 3. SRE_1 vs. PRE_1

As the residuals form a horizontal band, as shown in the scatterplot above, the relationship between the dependent variable and independent variables is likely to be linear.

b) Establishing if a linear relationship exists between the dependent variable and "each" of your independent variables using "partial regression plots"

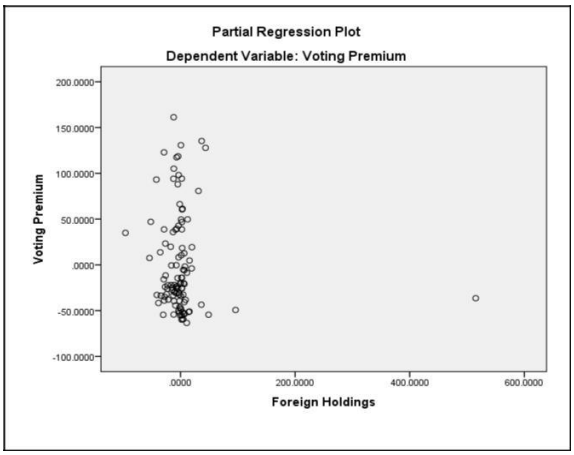

Figure 4. Foreign Holdings

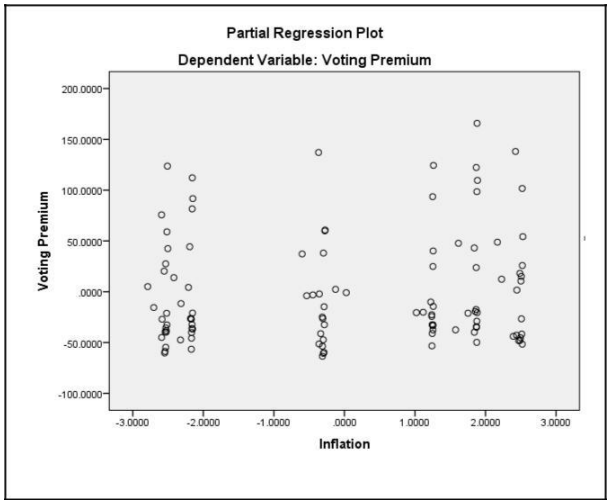

Figure 5. Inflation

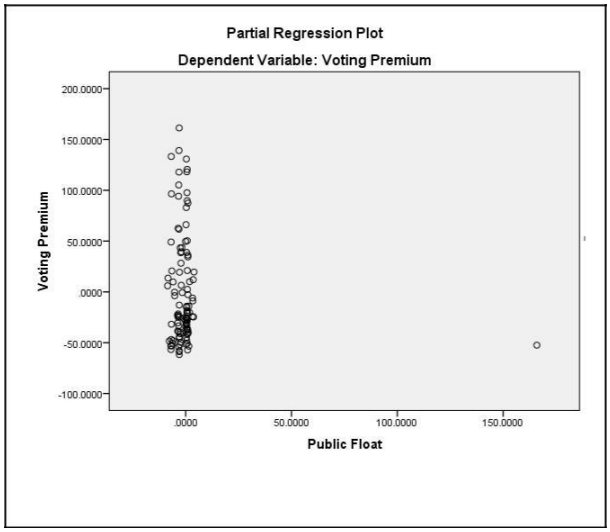

Figure 6. Public Float

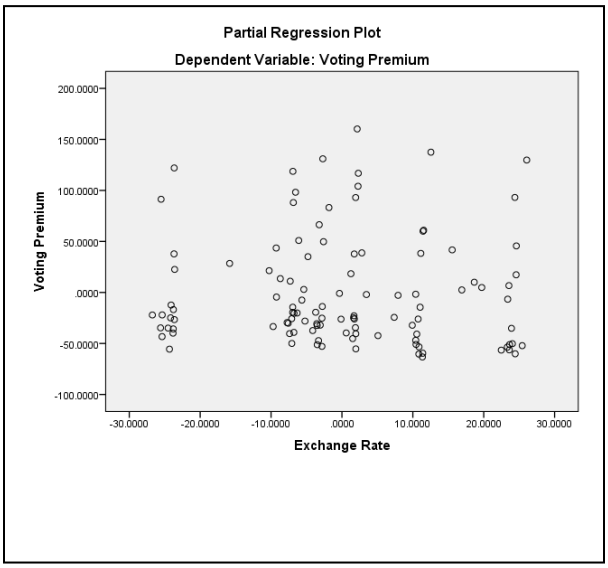

Figure 7. Exchange Rate

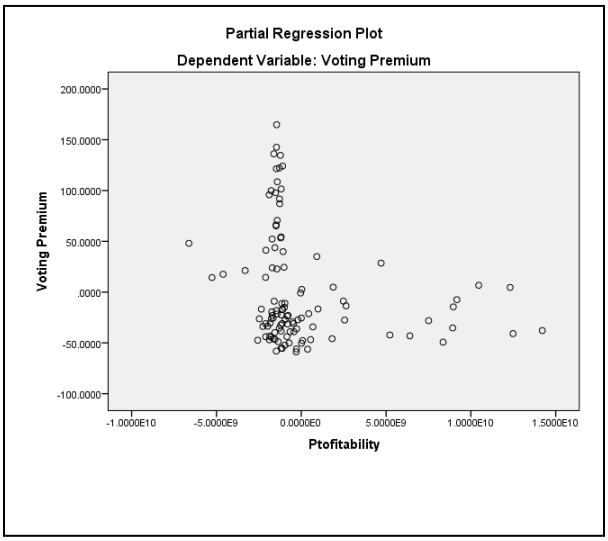

Figure 8. Profitability

The above partial regression plots are shown a linear relationship.

(3) There should be homoscedasticity of residuals (equal error variances);

The points of the plot in Figure 3 exhibit no pattern and are approximately constantly spread. Therefore it is reported that there was homoscedasticity, as assessed by visual inspection of the plot of studentized residuals versus unstandardized predicted values.

(4) There should be no multi-collinearity**;**

a) Inspection of correlation coefficients

Table 2. Correlations

Correlations

		Voting Premium	N/X Ratio	Foreign Holdings	Public Float	Ptofitability	Inflation	Exchange Rate
Pearson Correlation	Voting Premium	1.000	-.287	-.111	-.080	-.247	.096	-.092
	N/X Ratio	-.287	1.000	.251	.028	.249	-.012	.124
	Foreign Holdings	-.111	.251	1.000	.004	-.021	.116	-.152
	Public Float	-.080	.028	.004	1.000	-.049	.073	.118
	Ptofitability	-.247	.249	-.021	-.049	1.000	-.004	.085
	Inflation	.096	-.012	.116	.073	-.004	1.000	-.336
	Exchange Rate	-.092	.124	-.152	.118	.085	-.336	1.000
Sig. (1-tailed)	Voting Premium	.	.001	.125	.205	.005	.160	.172
	N/X Ratio	.001	.	.004	.385	.005	.450	.100
	Foreign Holdings	.125	.004	.	.486	.412	.114	.058
	Public Float	.205	.385	.486	.	.307	.226	.112
	Ptofitability	.005	.005	.412	.307	.	.485	.190
	Inflation	.160	.450	.114	.226	.485	.	.000
	Exchange Rate	.172	.100	.058	.112	.190	.000	.
N	Voting Premium	109	109	109	109	109	109	109
	N/X Ratio	109	109	109	109	109	109	109
	Foreign Holdings	109	109	109	109	109	109	109
	Public Float	109	109	109	109	109	109	109
	Ptofitability	109	109	109	109	109	109	109
	Inflation	109	109	109	109	109	109	109
	Exchange Rate	109	109	109	109	109	109	109

None of the independent variables have correlations greater than 0.7. It is shown in the Correlations table that there are no correlations larger than 0.7.

b) Inspection of Tolerance/VIF values,

All the Tolerance values are greater than 0.1 (the lowest is 0.829), so it is fairly confident that there isn't any problem with collinearity in this particular data set.

Table 3. Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	64.198	54.653		1.175	.243	-44.207	172.602					
	N/X Ratio	-1.929	.900	-.214	-2.142	.035	-3.715	-.143	-.287	-.207	-.197	.852	1.174
	Foreign Holdings	-.076	.098	-.076	-.779	.437	-.270	.118	-.111	-.077	-.072	.894	1.119
	Public Float	-.310	.326	-.089	-.951	.344	-.956	.336	-.080	-.094	-.088	.967	1.034
	Ptofitability	-3.080E-9	.000	-.198	-2.068	.041	.000	.000	-.247	-.201	-.190	.924	1.082
	Inflation	2.873	2.747	.103	1.046	.298	-2.575	8.322	.096	.103	.096	.869	1.150
	Exchange Rate	-.053	.366	-.015	-.145	.885	-.780	.674	-.092	-.014	-.013	.829	1.206

a. Dependent Variable: Voting Premium

(5) There should be no significant outliers, high leverage points or highly influential points;

(a) Detect outliers using casewise diagnostics and studentized deleted residuals (SDR_1),

Table 4. Casewise Diagnostics

Casewise Diagnostics[a]

Case Number	Std. Residual	Voting Premium	Predicted Value	Residual
12	2.904	236.0100	75.645390	160.3646103
57	2.142	180.0000	61.699256	118.3007435
92	2.370	193.3300	62.492188	130.8378117
95	2.187	200.0000	79.262109	120.7378910
196	2.375	200.0000	68.850212	131.1497878
197	2.502	200.0000	61.857798	138.1422024
200	2.118	191.6700	74.740762	116.9292375

a. Dependent Variable: Voting Premium

A value of greater than ±3 is a common cut-off criteria used to define whether a particular residual might be representative of an outlier or not. In this table the all the cases have standardized residuals less than ±3.

(b) Check for leverage points (LEV_1) using SPSS Statistics

All the LEV_1 values are less than 0.2 that is safe, except 0.99028, 0.91390 and 0.34177which are trading sector company named Tess Agro in 2017, plantation sector company named Malwatte in 2012 and beverage sector company named Renuka Foods in 2015 respectively. It was decided that not to remove outliers at this stage and to consider all the measures together and the test was moved to the next section: Checking for influential points.

(c) Check for influential points (COO_1) in SPSS Statistics using a measure of influence known as Cook's Distance,

All the COO_1 values are less than 1 except 148.83129 which is a trading sector company named Tess Agro in 2017. It was decided that not to remove the record since it is the actual data. So the test was moved to the next section: Checking for normality.

(6) The errors (residuals) should be approximately normally distributed.

(a) A histogram with superimposed normal curve and a P-P Plot; or

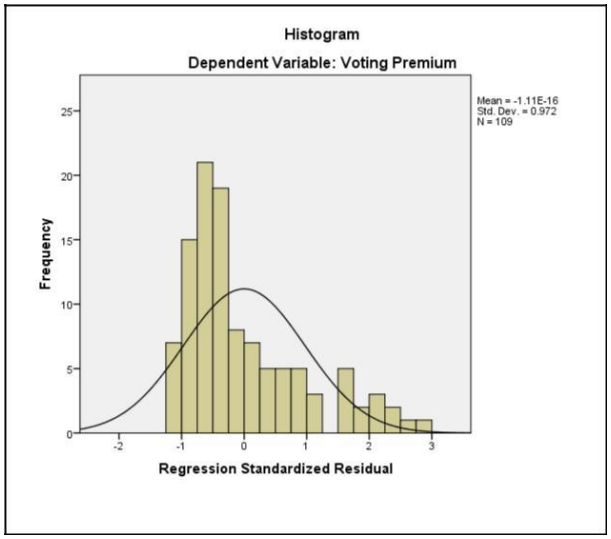

Figure 9. Histogram

The histogram Figure 9 shows that the standardized residuals appear to be approximately normally distributed.

The Figure 10 P-P Plot shows that although the points are not aligned perfectly along the diagonal line (the distribution is somewhat peaked), they are close enough to indicate that the residuals are close enough to normal for the analysis to proceed. Moreover, it is only needed the residuals to be approximately normally distributed because regression analysis is fairly robust to deviations from normality.

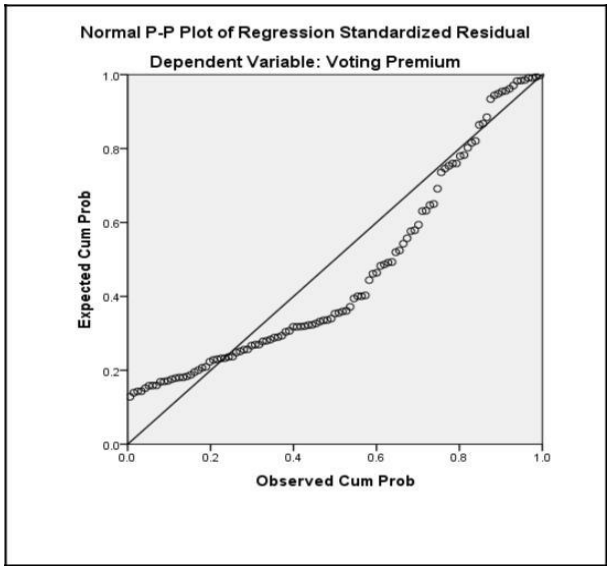

Figure 10. P-P Plot

(b) A Normal Q-Q Plot of the studentized residuals (SRE_1).

This test was not conducted because it is optional.

4.1. Interpreting Results

There are three main objectives that was achieve with the output from the multiple regression:

(1) Determine the proportion of the variation in the dependent variable explained by the independent variables;

(2) Predict dependent variable values based on new values of the independent variables; and

(3) Determine how much the dependent variable changes for a one unit change in the independent variables. All of these objectives will be answered in the following sections.

When interpreting and reporting the results, it was worked through three stages:

(A) Determine whether the multiple regression model is a good fit for the data;

There are a number of statistics that can be used to determine whether the multiple regression model is a good fit for the data.

These are:

(a) the multiple correlation coefficient,

The results are indicated in Table 1 The multiple correlation coefficient, *R*, is simply the Pearson correlation coefficient between the scores predicted by the regression model (i.e., the predicted scores, PRE_1) and the actual values of the dependent variable (i.e., the Voting Premium). As such, *R* is a measure of the strength of the linear association between these two variables and can give an indication as to the goodness of the model fit with a value that can range from 0 to 1, with higher values indicating a stronger linear association.

A value of 0.370, in this data set, indicates a low to moderate level of association. However, that the multiple correlation coefficient, *R*, is not a common measure used to assess goodness of fit. A much more popular method of assessing model fit is presented next.

(b) the percentage (or proportion) of variance explained(R2 and adjusted R2);

The coefficient of determination *R*2 – is a measure of the proportion of variance in the dependent variable that is explained by the independent variable. More specifically (and accurately), it is the proportion of variance in the dependent variable that is explained by the independent variables in addition to the mean model.

Given a desire to predict a dependent variable with multiple independent variables the simplest model we could choose is one without any independent variables at all. This is called the mean model and it is simply the mean of the dependent variable (Voting Premium in this example). In this situation, our best prediction of the dependent variable is its mean value.

Then, the multiple regression is run with all the independent variables added and measure the variability of this model. This is often expressed as a proportion or percentage and is what is referred to as *R*2. It assesses overall model fit.

You can see that *R*2 is equal to 0.137 in this test. This means that the addition of all our independent variables into a regression model explained 13.7% (i.e., 0.137 x 100 = 13.7%) of the variability of our dependent variable, voting premium.

However, *R*2 is based on the sample and is considered a positively-biased estimate of the proportion of the variance of the dependent variable accounted for by the regression model (i.e., it is larger than it should be when generalizing to a larger population).

There is another measure called adjusted *R2* which corrects for this positive bias in order to provide a value that would be expected in the population. The adjusted *R2* value is found in the "Adjusted R Square" column of the Model Summary table. The adjusted *R*2 is 0.086 in this test. Adjusted *R*2 will always be smaller than *R*2, but it is preferable that using this value to report the proportion of variance explained (i.e., report 8.6% rather than 13.7%), although ideally it is able to report both.

(c) the statistical significance of the overall model;

Table 5. Anova

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	49341.582	6	8223.597	2.697	.018[b]
	Residual	310992.444	102	3048.946		
	Total	360334.026	108			

a. Dependent Variable: Voting Premium

b. Predictors: (Constant), Exchange Rate, Ptofitability, Public Float, Foreign Holdings, Inflation, N/X Ratio

As p value (0.018) satisfies $p < .05$, there is a statistically significant result. This means that the addition of all the independent variables (i.e., our overall model) leads to a model that: (a) is statistically significantly better at predicting the dependent variable than the mean model; and (b) is a statistically significantly better fit to the data than the mean model.

(d) the precision of the predictions from the regression model.

The result is: F (6, 102) = 2.697, $p < .05$

Inflation, Public Float, Foreign Holdings Percentage, N/X Ratio, Exchange Rate and Profitability statistically significantly predicted Voting premium, F (6, 102) = 2.697, $p < .05$.

(B) Understand the coefficients of the regression model

It is interpreted the overall model fit and now the coefficients of the regression model is interpreted and reported. These coefficients are useful in order to understand whether there is a linear relationship between the dependent variable and the independent variables.

The intercept is not usually of much interest. It is the value of the dependent variable when all the independent variables are zero. The intercept usually has no "real world" meaning,

It is shown that the coefficient for Inflation is 2.873. The slope coefficient represents the change in the dependent variable for a one unit change in the independent variable. As such, an increase in Inflation of one unit is associated with an increase in Voting Premium of 2.873. There is an increase in Voting Premium because the slope coefficient is positive

It is also possible to define a range of "plausible" values for the slope coefficient. The 95% confidence intervals are reported in the “Inflation” row in the "Lower Bound" and "Upper Bound" columns found under the "95% Confidence Interval for B" column in below table. Further it is shown that the 95% confidence intervals (CI) are between -2.575and 8.322. That is, the results are 95% confident that the true value of the slope coefficient is between these lower and upper bounds.

5. Conclusion

A mathematical formula to quantify the voting premium is introduced for CSE shares in order to create symmetric information that would be helpful for investors to know whether the shares are underpriced or overpriced relative to its aggregate performance. The values of the coefficients is converted into a regression equation, as shown below:

Predicted Voting Premium = 64.198 - (1.929 x N/X Ratio) - (0.076 x Foreign Holdings) - (0.310 x Public Float) - (3.080E-09 x Profitability) + (2.873 x Inflation) - (0.053 x Exchange Rate)

This regression equation can be used to calculate predicted values of Voting Premium for a given set of values for N/X Ratio, Foreign Holdings, Public Float, Profitability, Inflation and Exchange Rate. A prediction that was used to validate the formula is shown in Table 6.

Table 6. Formula Validation

Sector	Company	VP	Exchange Rate	Inflation	N/X ratio	Share ownership structure n/x	Public float n/x	Profitability	Predicted VP	Lower Bound	Upper Bound	Within the limit or not?
BANKS, FINANCE AND INSURANCE	CDB	11.89	152.4575	6.5	3.0226	0.772920407	1.00	1,401,188,000.00	64.244	-200.718	329.2059	Yes
	CEYLINCO INS	76.08	152.4575	6.5	3.0853	1.449113928	1.75	11,782,587.00	68.12055	-193.461	329.7019	Yes
	COMMERCIAL BANK	30.34	152.4575	6.5	17.6871	19.17116057	1.00	16,581,000,000.00	-12.2041	-351.77	327.3621	Yes
	HNB	21.94	152.4575	6.5	3.9535	2.541325976	0.62	16,467,000,000.00	16.02358	-295.208	327.2553	Yes
	S M B LEASING	166.67	152.4575	6.5	1.0362	1.717989924	0.84	37,249,000.00	72.25636	-185.205	329.7173	Yes
	SEYLAN BANK	53.78	152.4575	6.5	0.8541	0.296869553	0.97	4,430,000,000.00	59.14253	-210.783	329.0685	Yes
	THE FINANCE CO.	120.83	152.4575	6.5	0.3471	0.018849272	0.63	(1,793,956.00)	73.89751	-181.758	329.5533	Yes
BEVERAGE, FOOD AND TOBACCO	REMUKA FOODS	9.20	152.4575	6.5	4.6835	57.50146514	0.00	442,581,000.00	59.98366	-215.457	335.424	Yes
	LUCKY LANKA	92.31	152.4575	6.5	0.3549	0.681583401	1.00	(72,920,313.00)	73.9378	-181.886	329.7621	Yes
CHEMICALS AND PHARMACEUTICALS	CIC	34.04	152.4575	6.5	1.6708	0.345165862	0.52	1,114,033,000.00	67.91642	-193.392	329.2248	Yes
	MORISONS	1.19	152.4575	6.5	8.2004	17.44768835	1.00	257,430,310.00	56.51022	-217.55	330.5702	Yes
HEALTH CARE	DURDANS	33.33	152.4575	6.5	22.3749	0.684857433	0.24	487,873,000.00	29.96823	-266.354	326.2901	Yes
HOTELS TRAVELS	SERENDIB HOTELS	20.60	152.4575	6.5	2.2314	3.587493735	0.78	128,084,000.00	69.54533	-190.646	329.7367	Yes
INVESTMENT TRUST	REMUKA HOLDINGS	47.78	152.4575	6.5	17.7500	6.669075756	0.00	1,051,990,000.00	36.77059	-253.962	327.5033	Yes
MANUFACTURING	TOKYO CEMENT	8.63	152.4575	6.5	1.9159	1.108983668	0.31	2,329,000,000.00	63.70822	-201.64	329.0563	Yes
	BLUE DIAMONDS	200.00	152.4575	6.5	1.2072	43.7094367	0.82	(71,849,000.00)	69.07083	-196.457	334.6385	Yes
PLANTATIONS	MALWATTE	10.53	152.4575	6.5	5.2925	25.62337574	1.75	553,686,000.00	80.3522	-211.457	332.1619	Yes
POWER & ENERGY	LAUGFS GAS	12.90	152.4575	6.5	0.5088	0.201391756	0.39	622,760,680.00	71.72468	-185.94	329.3897	Yes
TRADING	TESS AGRO	8.33	152.4575	6.5	5.7907	7.972423638	173.82	-62,444,141	9.306292	-369.328	387.9405	Yes

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7. Biographies

Suren is a Senior Lecturer and the Head of department of the Department of Industrial Management, University of Kelaniya, Sri Lanka. His research interests are in behavior of capital markets, privatization and corporate restructuring, portfolio management and learning. He has over 25 years of teaching, research and consulting experience has served as a National Consultant on a number of projects for the United Nations (UNIDO and UNDP) and been involved in consulting with a number of international development organizations, government and local private sector companies. He also serves on the Board of Directors of a number of companies engaged in finance and leasing, microfinance, real estate development and health and fitness.

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