

CHAPTER 4: DISCUSSION AND RESULTS

4.1 Introduction

This chapter is divided into two parts. The first part covers all descriptive statistics. The second part of this chapter reveals findings as to whether there is an association between the total disclosure score and three major corporate governance attributes.

4.2 Summary Statistics of Sample

As mentioned in Chapter 3, a sample of 30 companies was selected from the top (ranked by sales/turnover) 500 public listed companies as at September 2002. Random sampling technique was adopted whereby every 30th company was selected, after excluding 33 companies from the financial and trusts sectors. A total of 30 companies representing the industries as shown below were selected.

Table 4-1: Number of companies classified by Industry

Types of Industry	Number of companies	Percentage
Trading/Services	7	23%
Consumer products	6	20%
Plantation	2	7%
Technology	2	7%
Industrial products	5	17%
Properties	8	27%
TOTAL	30	100%

This study relies on secondary data available from annual reports. A total of 60 annual reports for the years 1998 and 2002 were read thoroughly from cover to cover to extract the information required in the disclosure checklist. Meanwhile, information such as: -

- i. Percentage of Non-Independent Executive Directors over the total number of directors
 - ii. Existence of any Chairman who also holds the position of the Managing Director and
 - iii. Existence of any directors with family relationship to any other directors or major shareholders of the company,
- were also extracted.

It was noted in this process that all 30 companies had clearly specified information (i) and (ii) for financial year 2002 but this was not the case for financial year 1998. Most companies did not disclose information (i) and (ii), as there were no requirements to do so. In order to obtain the information, a simple questionnaire with merely five questions (please refer to Appendix 3) were faxed to the Company Secretarial Department of each company and were given a dateline on 30th April to furnish with the necessary details. However of the 30 companies, only 14 companies responded. Thus the study comprise of two parts:

- a longitudinal study is done for the first part whereby a comparison of the disclosure trend was done for 1998 and 2002.
- a cross-sectional study is done to test the association of the three corporate governance attributes and the extent of voluntary disclosure for 2002.

4.3 Descriptive Statistics

This part contains the statistics, which are used to describe or summarize information about the 30 companies. The first research question is to examine whether there is any significant change in the level of voluntary disclosure in corporate annual reports by companies listed on the KLSE before and after corporate governance requirements were made mandatory in 2000. For this purpose, in the first part statistics are used for the comparison of overall disclosure score between 1998 and 2002. Here the level of disclosure is

disclosure score between 1998 and 2002. Here the level of disclosure is identified with the aid of a disclosure checklist. In the second part an analysis of disclosure score based on classification was carried out. The percentage of disclosure and non-disclosure is first identified by item, and then by classification in the checklist. The items are classified based on Strategic Information, Key Non-Financial Information and Financial Information.

4.3.1 Comparison of Overall Disclosure Score between 1998 & 2002

As explained in Chapter 3, the total disclosure level (TSCORE) is based on the ratio of the actual scores awarded to a company to the scores the company is expected to earn. An analysis of these scores for both years 1998 and 2002 produced the following results in Table 4-2: -

Table 4-2: Frequencies

		TOTAL DISCLOSURE SCORE 98	TOTAL DISCLOSURE SCORE 02	Board Composition For 2002	Family Members On Board 2002
N	Valid	30	30	30	30
	Missing	0	0	0	0
Mean		24.55	37.68	38.41	11.47
Median		22.97	41.03	33.17	0
Std. Deviation		12.913	10.632	10.387	19.762
Skewness		0.289	-0.694	0.906	1.56
Kurtosis		-0.24	-0.555	0.993	1.241

Amongst the statistics shown are the Mean, Median, Standard Deviation, Skewness and Kurtosis. The Mean shows the average of the items disclosed². In this case the average of the items disclosed appears to have increased from 24.5% in 1998 to 37.7% in 2002 with a reduction in the range from 49% in 1998 to 38% in 2002. The median, which is a measure of central tendency that is the

² William G. Zikmund, Business Research Methods, 6th edition, The Dryden Press.

mid-point, has shifted from 23% in 1998 to 41% in 2002. The Standard Deviation, which shows the quantitative index of a distribution's spread or variability¹ has thus reduced from 12.9% to 10.6%.

The mean percentage of board composition for the year 2002 is 38.41% thus indicating that more than one third of the composition of board comprises of Independent Non-Executive Directors. On the other hand, the mean for the third independent variable, family members on board, indicates that 11.47% of the the board composition comprises of family members. The test of the normality (i.e., skew ness and kurtosis) of the dependent and independent variables revealed that for all the variables with the exception of role duality, they are well within the range of -3 and +3 thus indicating that the data is normally distributed.³

For the independent variable i.e. role duality only 2 out of 30 companies had the Chairman holding the position of the Managing Director. Other statistics such as mean, median and standard deviation could not be calculated for this variable since the data for this variable is in categorical form.

4.3.2 Analysis Of Disclosure Based On Classification

This section shows the disclosure level based on the various classifications in the disclosure checklist. There are three classifications namely:

- A. Strategic Information
- B. Key Non-Financial Information
- C. Financial Information.

To identify this classification's disclosure level for the samples, the items in the disclosure checklist were grouped based on the classification above. Table 4-3 below shows in detail the number of items disclosed their percentage of disclosure and number of items not disclosed and their percentage.

³ William G. Zikmund, Business Research Methods, 6th edition, The Dryden Press.

Table 4-3: Disclosure Frequencies By Classification

	1998						2002					
	DISCLOSURE ITEMS		NON-DISCLOSURE ITEMS		NOT RELEVANT ITEMS		DISCLOSURE ITEMS		NON-DISCLOSURE ITEMS		NOT RELEVANT ITEMS	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
(S) Strategic Information												
S.1 General Corporate Information	77	32	163	68	0	0	110	46	130	54	0	0
S.2 Corporate Strategy	38	25	112	75	0	0	43	29	107	71	0	0
S.3 Research & Development	3	3	24	27	63	70	6	7	21	23	63	70
S.4 Future Prospects	0	0	159	88	21	12	2	1	157	87	21	12
(N) Key Non-Financial Information												
N.1 Information About Directors	16	13	104	87	0	0	120	100	0	0	0	0
N.2 Employee Information	2	3	26	43	32	53	5	8	25	42	30	50
(F) Financial Information												
F.1 Key Performance Indicators	104	69	46	31	0	0	105	70	45	30	0	0
F.2 Financial Ratios	54	23	186	78	0	0	57	24	183	76	0	0
F.3 Segmental Information	5	4	79	66	36	30	5	4	87	73	28	23

With reference to Table 4-3, it is also quite apparent that companies locally are still apprehensive about disclosing information pertaining to Corporate Strategy and Future Prospects as the improvement of disclosure of information in this area between 1998 and 2002 appears to be insignificant. The percentage of disclosure for information on Corporate Strategy has increased by 4% in 2002 from 25% in 1998. Meanwhile the percentage of disclosure for information on Future Prospects ranges from 0% to 1% over both years. It was quoted in a study by Tan, Kidam & Cheong(1990) that the reason for the over cautiousness in disclosing information in this area could be due to fear of implications to share prices should the forecasts figures not materialize.

Furthermore, information disclosed on Employee Information is also very scant. This classification covers information pertaining to commitment of companies to training for staff and it's nature. However the increase in the percentage of disclosure from 3% in 1998 to 8% in 2002 is a far cry from satisfactory. The 50% disclosure under non-relevance is skeptical as most companies should and would incur training as part of an expense in order to enhance performance of employees.

Similarly not many companies place emphasis in educating the users of the annual report on information pertaining to research and development. A marginal increase in the percentage of disclosure from 3% in 1998 to 7% in 2002 does not appear significant. Furthermore 70% of the samples selected did not indicate whether or not the company undertook research and development activities. It is also evident that companies locally are not in favor of disclosing financial ratios as reflected in the 23% disclosure in 1998 and 24% in 2002.

Information from Table 4-3 has been condensed into Table 4-4 below, which shows the top three items disclosed in 1998 and 2002. From this table it can be seen that the top two items of information disclosed in 1998 are the "Key

Performance Indicators" and the "General Corporate Information" at 69% and 32% respectively.

Table 4-4: Top Three Items Disclosed in 1998 & 2002

1998		2002	
INFORMATION ITEMS	% DISCLOSURE	INFORMATION ITEMS	% DISCLOSURE
Key Performance Indicators	69	Information About Directors	100
General Corporate Information	32	Key Performance Indicators	70
Corporate Strategy	25	General Corporate Information	46

However in 2002, the top two items of information disclosed are the "Information About Directors" and "Key Performance Indicators" at 100% and 70% respectively. The adoption of the Code of Best Practices and ever increasing demand by the investing community and analysts for greater transparency and disclosure has probably led to the evident shift in the "Information About Directors" from a mere 13% in 1998.

From the above information on the descriptive statistics, it is apparent on the whole that the level of voluntary disclosure is still low at the rate of 37.7% for 2002. This finding also seems consistent with the findings of Haniffa & Cooke(2000) given the fact that there was not much of pressure to disclose information voluntarily 14 years ago. The results of the mean aggregate voluntary disclosure score (A.V.D.S) of three other studies have been summarized in Table 4-5 below with the results of the current study: -

Table 4-5: Comparison of Aggregate Voluntary Disclosure Scores

Researchers(Year)	Country	A.V.D.S Mean
Haniffa & Cooke(2000)	Malaysia	31.30%
Eng & Mak(2002)	Singapore	21.75%
Ho & Wong (2001)	Hong Kong	29.00%
Current study (2004)	Malaysia	37.70%

4.4 Association Testing between Total Disclosure Score and Corporate Governance Attributes

As we may recall in the first chapter, the second part of the research refers to the following research questions: -

5. Will companies with higher proportion of *independent non-executive directors* be more likely to have a higher extent of voluntary disclosure?
6. Will companies with *chairpersons who are also CEOs* be less likely to have a higher extent of voluntary disclosure?
7. Will companies with *family members on board* be less likely to have a higher extent of voluntary disclosure?

Two statistical tests i.e. Pearson's Correlation Analysis and Multiple Regression Analysis are used to answer the questions above.

Pearson's Correlation Analysis is a statistical tool to describe the degree to which one variable is related to another. A correlation coefficient merely explains the magnitude and direction of the relationship but it does not go beyond that. Therefore it is normally used in conjunction with the regression analysis to measure how well the regression line explains the variation of the dependent variable.

4.4.1 Board Composition and Extent of Voluntary Disclosure

The first hypothesis states that companies with a higher ratio of independent non-executive directors to total directors on board will more likely have a greater extent of voluntary disclosure. In this study it seems that this hypothesis could not be supported, as the Pearson's Correlation coefficient is -0.14 for BCOMP variable (refer to Table 4-6). The magnitude of the relationship is also far too weak. This finding is contrast to the findings in past studies such as G.Mani (2002) and Chen & Jaggi (2000).

Table 4-6: Pearson's Correlation Analysis

		% Disclosure 02	Board Composition	Role Duality	Family Members On Board
% Disclosure 02	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	30			
Board Composition	Pearson Correlation	-0.14	1.00		
	Sig. (2-tailed)	0.45			
	N	30	30		
Role Duality	Pearson Correlation	-0.09	0.16	1.00	
	Sig. (2-tailed)	0.64	0.40		
	N	30	30	30	
Family Members On Board	Pearson Correlation	-0.53 **	0.11	0.00	1.00
	Sig. (2-tailed)	0.00	0.55	1.00	
	N	30	30	30	30

**

Correlation is significant at the 0.01 level (2-tailed).

Haniffa & Cooke (1990) too obtained a similar finding i.e. an insignificant negative association. Having obtained similar results but which is significant, Eng & Mak (2001) concluded that in situation such as this, external directors or Independent Non-Executive Directors from a Singapore sample play a substitute monitoring role as opposed to a complementary role to disclosures from a Hong Kong sample based on the findings by Chen & Jaggi (2000). Perhaps the cultural similarity between Malaysia and Singapore to a great extent contributes to the finding above.

In contrast Ho & Wong (2001), from a sample based on Hong Kong too, having arrived at the similar conclusion as the current study raised questions as to the so-called independence of the independent non-executive directors and their effectiveness as a monitoring device.

4.4.2 Role Duality and Extent Of Voluntary Disclosure

The second hypothesis, on the other hand could not be rejected since the Pearson's Correlation coefficient is -0.09(refer to Table 4-6). There is a negative

association between RDUAL and the level of voluntary disclosure but this association may be rather weak. This finding seems consistent with the findings of Ho & Wong (2001) where this particular attribute resulted in an insignificant negative finding. This is in contrast with Haniffa & Cooke who discovered an insignificant positive association.

4.4.3 Family Members On Board and Extent of Voluntary Disclosure

A coefficient of -0.53 (refer to Table 4-6) for the third hypothesis seems to indicate that there is a much stronger negative association between FMEMB and the extent of voluntary disclosure. This finding is similar with the findings in the study by Haniffa & Cooke (1990).

Furthermore, the Pearson's Correlation coefficient is significant at the 0.01 level (2 tailed) for this variable. This simply means that there is a significant but inverse correlation between the total disclosure score for 2002 and the existence of family members on board. Now apart from Haniffa & Cooke(2000), this result seems consistent with the findings in Chau & Gray(2002), Ho & Wong (2001) and Ahmed & Nicholls(1994) where companies with higher percentage of family members on board disclosed the least amount of voluntary information. The perception by Chau & Gray in their study was that the motivation for a family controlled firm to disclose is less due to the weaker demand for public disclosure thus resulting in a lower transparency and information disclosure level.

4.5 Regression Model and Assumptions Testing

Multiple regression was used to test the three hypothesis developed in this study. The full specification of the regression model is as follows:-

$$TSCORE = \beta_0 + \beta_1IND + \beta_2RDUA + \beta_3FMEM + \varepsilon$$

TSCORE = Total disclosure score

IND = Proportion of independent non-executive directors

RDU = Chairpersons who are also CEOs

FMEM = Proportion of family members on board

ε = Error term

β_0 = intercept term and

β_1 , β_2 and β_3 are the coefficients of the independent variables.

The dependent variable in this model is the total disclosure score determined for 2002 whereas the three independent variables are the three corporate governance attributes. A possible existence of multi-collinearity was tested in this study by analyzing the coefficients in the correlation matrix and this suggested that the problem was minimal. Another effective method is by computing the Variance Inflation Factor (VIF) and this was also carried out. The VIF factor for the full model and all other independent variables is around 1. Thus, both the findings appear to support the lack of presence of multi-collinearity in the research model. Meanwhile to test the normality assumption of the regression model a histogram of the residuals were plotted. The distribution approximated a normal curve.

With reference to Table 4-7 below, Model 1 consists of a constant, total disclosure score 2002 and all three independent variables. In this model the three independent variables explain 28.9% (please refer to R square column) of the total disclosure for 2002. Model 2 proceeds by deleting role duality thus reducing the percentage by a mere 0.6%. Finally Model 3 eliminates two variables i.e role duality and board composition thus resulting in R square of 0.276. This simply means that the variable Family Members on Board explains 27.6% of the total disclosure score 2002. Considering the fact that this model only takes into account three independent variables unlike most other past studies the R square that was obtained seemed comparable with other studies such as Chow Wong & Boren(15%), Eng & Mak(26.3%), Raffournier (42%), Haniffa & Cooke(46.3%), and Mani(47%).

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Est.	F Change	d.f.	Sig. F Change
1	0.537	0.289	0.206	9.471	3.515	3.515	0.029
2	0.532	0.283	0.229	9.333	5.316	2.000	0.011
3	0.525	0.276	0.250	9.208	10.658	1.000	0.003

1 Predictors: (Constant), Family Members On Board, Role Duality, Board Composition For 2002

2 Predictors: (Constant), Family Members On Board, Board Composition For 2002

3 Predictors: (Constant), Family Members On Board

Coefficients

Model	Unstandardized Coefficients		Std. Error	Standardized Coefficients		t	Sig.	Collinearity Statistics
	B			Beta				
1	(Constant)	43.861	6.760			6.488	0.000	
	Board Composition For 2002	-0.072	0.173	-0.071		-0.418	0.679	1.040
	Role Duality	-3.303	7.023	-0.079		-0.470	0.642	1.026
2	(Constant)	-0.278	0.090	-0.517		-3.104	0.005	1.014
	Family Members On Board	44.132	6.638			6.649	0.000	
	Board Composition For 2002	-0.085	0.168	-0.083		-0.508	0.616	1.013
3	(Constant)	-0.277	0.088	-0.516		-3.142	0.004	1.013
	Family Members On Board	40.916	1.952			20.959	0.000	
	Family Members On Board	-0.282	0.087	-0.525		-3.264	0.003	1

ENTER METHOD

STEPWISE METHOD

a. Dependent Variable: TOTAL DISCLOSURE SCORE 02

The equation above is now reconstructed as follows:-

$$Y = 43.86 - 0.072\text{IND} - 3.303\text{RDUA} - 0.278\text{FMEM}$$

Table 4-7 above also presents the R squared (coefficient of determination), beta coefficients and t-statistics for the model. It also summarizes the results of the extent of voluntary disclosure on main contributory variables, which is Family Member On Board. R squared of 0.276 ($p = 0.003$) which indicates that 27.6% of variation in the extent of disclosure is determined by this particular corporate governance attribute. In addition the result also signifies that this variable is statistically significant as $p = 0.003$ at 0.05 significance level. Furthermore the t value of -3.264 seems to indicate that this variable is a useful predictor since this value is well below the -2 range.

Consistent with the findings in Ho & Wong (2001), Ahmed & Nicholls(1994) and Haniffa & Cooke(2000) and Chau & Gray(2002), this results suggests that a higher proportion of family members on board is negatively associated with the extent of voluntary disclosures. Thus it lends support for Hypothesis 3, which states that having family members on board is negatively associated with voluntary disclosures.

4.6 Summary

The descriptive statistics used in this study helped identify an improvement in the extent of voluntary disclosure between years 1998 and 2002. In addition statistical tests such as correlation analysis paved way to measure the association between the extent of voluntary disclosure and the three corporate attributes. However, this test alone is not sufficient. Therefore a multiple regression analysis was done to determine the independent variable that most contributes to the extent of voluntary disclosure. The results of the study have been summarized along side with numerous other studies in Table 4-8 below.

Table 4-8:Results of previous studies and current study using multivariate analysis

Researchers(Year)	Country	Corporate Governance Attributes	Significance	Association
Haniffa & Cooke(2000)	Malaysia	Chairman Is NED Family members on Board Board Composition Role duality Chairman has cross-directorship Directors with cross-directorships Finance Director on board	Significant Significant Insignificant Insignificant Insignificant Insignificant Insignificant	Negative Negative Negative Positive Positive Positive Positive
Eng & Mak(2002)	Singapore	Board Composition(No of NED)	Significant	Negative
Chen & Jaggi (2000)	Hong Kong	Board Composition(No of NED) Family control	Significant Significant	Positive Negative
Ho & Wong (2001)	Hong Kong	Board Composition(No of NED) Voluntary Audit Committee Role duality Family members on board	Insignificant Significant Insignificant Significant	Negative Positive Negative Negative
Mani (2002)	India	Board Composition(No of NED) Blockholder ownership Foreign Institutional Investors holding Size of firm Leverage	Significant Insignificant Insignificant Insignificant Insignificant	Positive Negative
Chau & Gray (2002)	Hong Kong & Singapore	Outside ownership Family ownership Ownership structure	Significant Significant Significant	Positive Negative Positive
Current study (2004)	Malaysia	Board Composition(No of NED) Role duality Family members on board	Insignificant Insignificant Significant	Negative Negative Negative