

# The Masters' Control: How Ownership Structure Influences the Communication of Financial Ratios

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## ABSTRACT

This study analyses the effect of the attributes of ownership structure and corporate governance on financial ratios disclosure in Malaysian listed firms' annual reports over two key periods, 2001 and 2006. Overall, the extent of financial ratios disclosure has significantly increased from 12.2 per cent to 15.0 per cent. The highest level of financial ratios disclosure is for the sub-categories of Profitability, Cash Flow and Share Market Measures, whereas there is less information reported for Capital Structure and Liquidity ratios. Further, the analysis shows that the institutional ownership negatively influences the financial ratios disclosure for 2001; and foreign ownership is positively associated with financial ratios disclosure in 2006. Interestingly, family ownership appears to have no significant influence on the disclosure in either period. Ownership concentration, on the other hand has a positive association with financial ratios disclosure in 2001; this is the opposite direction than hypothesised. In addition, the corporate governance attributes have also influenced the financial ratios disclosure in 2001. As for control variables, firm size and profitability are found to have a positive relationship with financial ratios disclosure for both years. These findings provide evidence that the attributes of ownership structure and the implementation of sound corporate governance reduce the information asymmetry between management and stakeholders and therefore, further enhance transparency.

**Keywords:** Corporate Governance, Financial Ratios Disclosure, Malaysia

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## 1. Introduction

Financial ratio is a widely used tool of financial analysis. The use of financial ratios to interpret financial statements provides a quick indication of a firm's performance and financial position. This information could be useful in decision making, especially for non-sophisticated users. Despite the benefits of utilising financial ratios, the disclosure of this analysis tool in the annual reports is not reasonably adequate. This might be due to the voluntary nature of disclosure of financial ratios (except for *earnings per share*). Voluntary disclosure is the discretionary release of financial and non-financial information in excess of mandatory requirements. Firms may voluntarily disclose certain items of information in their corporate annual reports. Prior studies in Malaysia focus on voluntary disclosure practices (Ghazali, 2010; Ghazali & Weetman, 2006; Haniffa & Cooke, 2002; Hossain, Tan, & Adams, 1994) but none of these studies examines the financial ratios disclosure. Accordingly, this study aims to examine the financial ratios disclosure behaviour of listed firms in Malaysia.

Ownership structure is a related aspect of corporate governance and arguably has its own influencing effect upon financial ratios disclosure. Jensen and Meckling (1976) postulate that ownership structure has the potential of reducing information asymmetries and thereby, alleviating agency conflict between shareholders and managers. Corporate ownership in Malaysia is characterised by a high concentration in equity shareholdings. Malaysia's unique socio-cultural environment influences the nature and type of ownership structure. One of the distinctive types of Malaysian corporate ownership structure is the large holdings by family members (Claessens, Djenbow, & Lang, 2000). The World Bank (2005) notes about 67.2 per cent of Malaysian firms are managed by controlling family members. In addition, foreign and institutional ownerships have considerable stakes in Malaysian listed firms (Abdul Samad, 2004). Though previous studies have examined the effect on ownership structure on voluntary disclosure in Malaysia, little research exists on the impact of ownership structure on financial ratios disclosure.

This study also examines the effect of the strength of corporate governance structure on financial ratios disclosure. The introduction of the Malaysian Code of Corporate Governance (MCCG) in 2000, and the Bursa Malaysia Revamped Listing Requirements (2001) highlight the importance of corporate governance and disclosure requirements. The corporate governance mechanisms are aimed at strengthening

the capital market, boosting investors' confidence and improving the credibility and accountability of financial information produced by listed firms. As such, the focus of this study is to acquire an understanding of whether the strength of corporate governance can increase firms' communication of financial ratios in annual reports.

Accordingly, in light of the change in this environment, this study examines whether ownership structure and corporate governance structure are associated with financial ratios disclosure of listed firms in Malaysia. Ownership structure is characterised by concentrated ownership, family ownership, foreign ownership and institutional ownership. The strength of corporate governance structure is measured by the composite measure of 13 corporate governance attributes. Financial ratios disclosure is proxied by an aggregated disclosure score of 43 items of financial ratios. The sample consists of 80 firm-year observations over two key periods of 2001 and 2006. These two key periods are essential; the former captures the post Asian financial crisis and post introduction of the MCCG in 2000, whereas the latter is the period of post Enron collapse and pre global financial crisis. It is also before the revision of the MCCG in 2007. Data from the two periods were gathered from the annual reports of selected firms.

The data on ownership structure and corporate governance attributes were regressed on the financial ratios disclosure scores after controlling for firm size, profitability and audit firm size. The results indicate an improvement in financial ratios disclosure between 2001 and 2006. However, the level of disclosure is still relatively low. Further, the results reveal that different ownership structures have different impacts on disclosure practices. In addition, corporate governance attributes (such as number of directors and independent directors on the board) of the firms appear to have a positive influence on the level of financial ratios disclosure. Consistent with Aripin, Tower, and Taylor (2011), the results reveal that larger and profitable firms disclose more financial ratios information than the smaller and less profitable firms. Interestingly, the presence of a BigN auditor seems to have no significant influence on the extent of financial ratios disclosure in a firm's the annual report. These results contradict the findings of Al Farooque, Zijl, Dunstan, and Karim (2008), Barako (2004), and Hossain, Tan, and Adams (1994).

The findings of this study provide insights to policy makers and regulators regarding the need to consider ownership structure and corporate governance attributes in any regulatory process, in order to

improve transparency. It is believed that such focus will strengthen the effectiveness of corporate governance mechanisms and eventually improve the level of voluntary financial ratios disclosure in the annual reports, and hence will minimise the information asymmetry issues. Undeniably, financial ratios information is also available elsewhere, such as from financial analysts, however additional costs are normally incurred to obtain them.

The remainder of this paper is organised as follows. Section 2 reviews prior literature related to the voluntary disclosure and develops the hypotheses. Section 3 outlines the research approach undertaken in this study. Section 4 presents the analysis and results. Finally, conclusions are drawn.

## **2. Literature Review**

This section discusses the benefits of financial ratios disclosure, reviews the past literature, and develops the hypotheses of this study.

### ***2.1. The Significance of Financial Ratio Analysis***

As noted by Subramanyam and Wild (2009), ratio analysis is among the most popular and widely used tools of financial analysis. The analysis is significant for several reasons, i.e. (1) providing evidence of the firm's financial condition (Subramanyam & Wild, 2009); (2) a signalling tool (Mitchell, 2006); (3) assessing and comparing the firm's performance (Watson, Shrivess, & Marston, 2002); and (4) avoiding misleading influence of the absolute dollar figures (Altman, 1968; Beaver, 1966; Neophytou & Molinero, 2004).

The disclosure of financial ratios in the annual reports may be driven by several motives such as providing a quick and simple tool signalling the firms' performance, communicating new information that is not comprehensively presented elsewhere, and reducing the time and cost of obtaining and processing information from other sources (Watson et al., 2002; Graham, Harvey, & Rajgopal, 2005). Thus, it is believed that by disclosing this information in the annual reports, it can assist the users' understanding of the firms' financial performance. The Securities Commission (SC), which is the body that governs investors' protection, rights and responsibility, suggests firms should disclose information that affects the decision making of investors in annual reports. The SC also recommends that intermediaries such as stockbroking firms, financial analysts and fund management companies

use and analyse the accounting information, before producing their own reports (SIDC, 2014). However, the reports produced by these parties are sometimes confusing as compared to the original annual reports of the firms. Thus, important information such as financial ratios should be comprehensively reported by the firms in their annual reports.

## ***2.2. Theoretical Background and Hypotheses***

This sub-section outlines the theoretical background covering Malaysian ownership structure, corporate governance and the control variables utilised in this study.

### *2.2.1 Malaysian Corporate Ownership Structures*

Malaysia's unique socio-cultural environment influences the types of corporate ownership structures. An insider-dominated mould with high level of ownership concentration, cross-holdings and significant participation of owners in management, typifies the Malaysian corporate sector. A number of surveys and studies report that on average, 55 per cent of shareholdings in listed firms in Malaysia are held by the top five (5) largest shareholders (World Bank, 2005; Abdul Samad, 2004; Mohd Sehat & Abdul Rahman, 2005). Moreover, evolving from traditional family owned enterprises, the ownership of many Malaysian listed firms is characterised as family ownership. Claessens et al. (2000) documented that on average, 58.7 per cent of listed firms in Malaysia are owned and managed by family members. The roles of the chief executive officer and chairman of the board are usually held by members of the controlling family. Further, World Bank (2005) reported that about 67.2 per cent of Malaysian listed firms are managed by the controlling family members.

Within the corporate governance context, it is posited that ownership concentration and composition are two key aspects of ownership structure that influence the level of monitoring. When ownership is dispersed, firms are owned by outside shareholders but controlled by their managers. This fundamental conflict of interest between the management and its minority shareholders is referred to as a Type One agency problem (Jaggi, Leung, & Gul, 2009). The problem arises when small shareholders do not actively participate in corporate governance matters, partly due to the 'free-rider' mindset of an individual shareholder. On the other hand, when concentrated ownership exists, the majority of ownership is controlled by a small number of large, dominant shareholders who are likely to play an

important role in monitoring management. Thus, there is potentially a reduced agency problem in highly concentrated firms because of the greater alignment between owners and managers (Florackis, 2008; Jensen & Meckling, 1976). However, the large shareholders may have access to insider information and use the information to their own advantage, exploit access expenditure according to their own preference, and influence managers' decisions (Claessens et al., 2000). There may be conflict of interests between insiders<sup>4</sup> and minority shareholders, and this is referred to as a Type Two agency problem (Jaggi et al., 2009).

Previous studies have reported various issues on voluntary disclosure (Barako, Hancock, & Izan, 2006; Botosan & Harris, 2000; Cheng & Courtenay, 2006; Guthrie, Petty, & Ricceri, 2006; Ho, Tower, & Barako, 2008). Studies on the incentive of this particular financial ratios disclosure incentive are, however, limited (Aripin, Tower, & Taylor, 2008; Mitchell, 2006; Watson et al., 2002; Courtis, 1996).

In Malaysia, Abdullah (2006) investigated the association between board structure and ownership structure on financially distressed firms. Due to a highly concentrated ownership structure of Malaysian firms, the study hypothesises that management shareholding is negatively associated with financial distress. The results support the hypothesis. From a different perspective, Haniffa and Cooke (2002) who also studied the disclosure practices of Malaysian listed firms found a positive association between diffused ownership and the extent of voluntary disclosure. Later, Ghazali (2010) examined the association between corporate governance and voluntary disclosure of Malaysian listed firms using the annual reports of 2001 and 2006. The results are consistent with the introduction of the Malaysian Code of Corporate Governance (MCCG)<sup>5</sup> in year 2000, where the disclosure increased between these two periods. However, there is no significant association between corporate governance mechanisms and voluntary disclosure. Further, Mohamad and Sulong (2010) investigated the influence of corporate governance mechanisms and the extent of corporate governance disclosure by Malaysian firms in their annual reports. In that study, the authors

<sup>4</sup> These insiders may be members of the firms' founding families or managers or the government or a small group of shareholders (Solomon & Solomon, 2004). For example, the government plays an important role in France and China; South Korea with its Chaebol family groups representing the interests of dominant shareholders; and Germany with banks playing a key role in funding a company. This influence permits the insiders to exercise control via the board structure; while founding families are often the dominant shareholders in Malaysia.

<sup>5</sup> MCCG prescribes principles and best practices for good governance, makes recommendations to strengthen the overall regulatory framework for public listed firms and introduces self-regulatory mechanisms for good corporate governance (High Level Finance Committee on Corporate Governance, 2000)

conclude that a higher percentage of family members on the board is associated with a lower level of corporate governance disclosure.

Haniffa and Cooke (2002) and Ghazali (2010) focus on the overall voluntary disclosures of Malaysian firms. To-date, there is no research done to investigate the specific financial ratios disclosure in the Malaysian annual reports and its link with ownership structure and corporate governance. Given the increase in corporate governance reforms in Malaysia, this study advances the unique research proposition that the extent of financial ratios disclosure by Malaysian listed firms for 2006 is greater than 2001. Both periods are before the financial crisis 2007-2008. Essentially, year 2001 is selected to capture the insights of the post Asian financial crisis, where MCCG was newly introduced in 2000, while year 2006 is the post Enron collapse and before the revision of the MCCG in 2007. These two periods are milestones in the corporate governance landscape in Malaysia.

### *2.2.2 Hypotheses*

Ownership structure is a related aspect of corporate governance and arguably has its own influencing effect upon voluntary disclosure. Jensen and Meckling (1976) postulate that ownership structure has the potential of reducing information asymmetries and thereby, alleviating agency conflict between shareholders and managers. High dispersion of ownership (low ownership concentration) occurs when the majority of shareholding is held by a large number of individual shareholders. Agency theory argues that firms will disclose more information to reduce agency costs and information asymmetry in a diffused ownership environment (Jensen & Meckling, 1976). Thus, discretionary disclosure in annual reports is likely to be greater in widely held firms so that individual shareholders can effectively monitor to ensure their economic interests are optimised and managers can signal that they act in the best interests of the owners. Greater disclosure in firms with diffused ownership is empirically documented in Haniffa and Cooke (2002) and Chau and Gray (2002).

### **Ownership concentration**

When ownership is concentrated, the dominant shareholders play a monitoring role and are expected to put more pressure on the management to disclose additional information. On the other hand, if ownership concentration is largely in the hands of insiders, entrenched

management can themselves engage in expropriation. On the other hand, if ownership concentration is largely in the hands of insiders, entrenched management can themselves engage in expropriation. A fundamental problem is how to protect minority outside shareholders from the controlling insider shareholders who may act in their own interests at the expense of the former. In the absence of large outside share ownership, a firm with a higher insider ownership concentration may be associated with a lower extent of voluntary disclosure, as evidenced in Hossain et al. (1994)'s study among Malaysian listed firms. On the contrary, Birt, Bilson, Smith, and Whaley (2006) reported that Australian firms having high levels of shares owned by top 20 shareholders are more likely to disclose voluntary segment information. The rationale for such findings is that the ownership concentration when in the hands of large shareholders has the ability to mitigate agency problems inherent in a firm, by influencing voluntary disclosures made by that firm. Inconsistent with the above studies, Ghazali and Weetman (2006) found no significant association between ownership concentration (measured using top ten shareholders) and the extent of voluntary disclosure of Malaysian listed firms.

In relation to voluntary disclosure of financial ratios, Aripin et al. (2008) and Mitchell (2006) used Australian firms to examine its association with ownership concentration. Their results suggest that the more concentrated the ownership structure, the less the financial ratios information is disclosed to the shareholders. Mitchell (2006) posits that firms with concentrated ownership are more likely to have less agency cost, thus provide less information.

The aforementioned literature on the influence of the degree of ownership structure on the extent of voluntary disclosure indicates inconclusive findings. This could be the result of the variations in firms' ownership structure. Similarly, prior studies of Malaysian firms also produced inconsistent results with regard to ownership concentration (Haniffa & Cooke, 2002; Ghazali & Weetman, 2006; Hossain et al., 1994). These mixed findings across various studies clearly demonstrate the importance of considering the effect of ownership structure as a governance mechanism in influencing a firm's corporate disclosure practices.

Given the high insider ownership concentration that characterises the Malaysian firms and the proposition advanced in the agency theory, it is hypothesised as follows:



H<sub>1</sub>: The extent of financial ratios disclosure is negatively associated with concentrated ownership structure.

### **Family ownership**

One of the distinct types of Malaysian corporate ownership structure is large shareholdings by family members (Claessens et al., 2000). The World Bank (2005) reported that about 67.2 per cent of Malaysian firms are managed by family members. Due to the dominant position of family members in family-owned firms, the firms have little motivation to disclose information in excess of mandatory requirements. It can be argued that the insider shareholders of these firms can readily obtain the information and thus, the demand for external reported corporate information is small (Chau & Gray, 2002; Ho & Wong, 2001). Therefore, the following hypothesis is proposed:

H<sub>2</sub>: There is a negative association between family ownership and financial ratios disclosure.

### **Foreign ownership**

Agency theory posits that as the number of outsider shareholders increases and ownership becomes more dispersed, monitoring costs becomes greater, and hence, demands for additional information increase. Prior studies documented that when a high proportion of shares is held by foreigners, the demand for disclosure is greater. It is argued that there is a greater need for disclosure as a means to monitor the action of management, by foreign owners (Barako et al., 2006). After the liberalisation of capital flows in the early 1990s, foreign funds started to increase to enhance the local bourse liquidity (Suto, 2003). In fact, Tun Mahathir Mohamed, the then Prime Minister and Finance Minister, stated in the Parliament when tabling the Budget 2003 that "Malaysian economic growth has been overly reliant on external sector development, foreign direct investment and international trade" (Mohamed, 2002, p17). The influx of foreign investment leads to the significant growth of the Malaysian stock market (Economy Report, 2000). In this regard, higher disclosure may be expected because substantial funds in the Malaysian capital market come from foreign investors who demand greater information. It is thus hypothesised as follows:

H<sub>3</sub>: Firms with higher foreign ownership are associated with higher extent of financial ratios disclosure.

### **Institutional ownership**

Substantial shareholdings by institutional investors provide strong incentives to monitor and encourage corporate disclosure practices. As shareholdings of institutional investors increase, the institutional investors will have higher incentives to play an active role in the corporate governance of the firms to protect their stakes and reputation. Managers may voluntarily disclose more information to meet the expectations of this arguably more expert group of shareholders. Consequently, it is hypothesised as follows:

H<sub>4</sub>: There is a positive association between institutional ownership and the extent of financial ratios disclosure by Malaysian listed firms.

### **Corporate governance**

The implementation of effective corporate governance mechanisms offers a solution to monitor and reduce managers' opportunistic behaviour. According to the agency theory tenets, corporate governance structure is needed to monitor and control the actions of executive directors (Jensen & Meckling, 1976) and to ensure that managers are working in the best interest of the shareholders (Fama & Jensen, 1983). The adoption of corporate governance structure is an important determinant in influencing management to make greater disclosure of information voluntarily. For this study, 13 selected attributes are used to capture the corporate governance element. These 13 most studied items are independent chairman, duality, independent board, directors appointment, board code of conduct, share-based remuneration, directors' remuneration, financial expertise on audit committee, risk management policy, CEO statement on internal control, audit committee charter, continuous disclosure policy and independent audit committee (Taylor, 2008; Aripin et al., 2008). An effective corporate governance structure serves as a linchpin in the system of monitoring to effectively align the behaviour of managers and the board of directors with the desires of shareholders through greater voluntary disclosure (Ho et al., 2008). It is reasonable to expect that a stronger governance structure will be associated with a greater extent of voluntary disclosures. Thus, it is hypothesised as follows:

H<sub>5</sub>: The extent of financial ratios disclosure for Malaysian listed firms is positively associated with stronger firms' corporate governance structure.

### 2.2.3 Control Variables

In order to test the above hypotheses, this study includes firm characteristics identified in prior research as determinants of firms' voluntary disclosure as control variables. The variables are firm size (Taylor, 2008; Morton & Harrison, 2009; Barako, 2004; Watson et al., 2002), profitability (Oliveira, Rodrigues, & Craiz, 2006), and audit firm size (Al Farooque et al., 2008; Barako et al., 2006; Oliveira et al., 2006). These firm-specific non-governance variables are included based on their relevancy to this study as suggested by previous researchers.

## 3. Research Approach

### 3.1. Sample Selection and Data Collection

This study focuses on firms listed on the Bursa Malaysia Stock Exchange in years 2001 and 2006. These two periods are considered critical in terms of regulatory reforms following environmental changes where 2001 represents post-1997 financial crisis and 2006 post-Enron debacle. Year 2001 is considered as disclosure-based regime, where the corporate governance framework was introduced in Malaysia, with a new reporting framework. For year 2006, this is the era after the Enron-Anderson debacle where higher corporate transparency is expected. This approach is consistent with Ghazali (2010) who analysed 2001 and 2006 annual reports, and Mohamed and Sulong (2010) who focused on the 2002 and 2006 periods. Forty (40) sample firms from both periods were selected based on the following criteria: (i) availability of annual reports of firms for both periods; (ii) listing availability in both periods under study; (iii) banks, unit trust, insurance and finance companies were excluded from the study due to different and stringent regulatory requirements; and (iv) newly listed firms in the first period (2001) were excluded, with the assumption disclosure practices can be assessed realistically if they had been in the stock exchange for more than a year (Ho, 2009). The firms were equally (eight firms) selected from five industrial sectors namely consumer product, industrial product, construction and property, trading and services, and plantation sectors. The minimum number of 30 firms as suggested by Sekaran (2003) is met. This approach is consistent with a number of previous accounting disclosure studies such as Mohamad and Sulong (2010). In that study, they selected 40 firms representing four main industries for both 2002 and 2006 periods.

### 3.2. *Dependent Variable: Extent of Financial Ratios Disclosure (EFRD)*

The Extent of Financial Ratios Disclosure (EFRD) index is the proxy to measure the extent of financial ratios disclosure. EFRD for a firm for a particular year was computed based on a checklist comprising 43 financial ratios commonly noted by seminal authors (Subramanyam & Wild, 2009; Horngren, Harrison, Bamber, Best, Frase, & Willet, 2006; Hoggett, Edwards, & Medlin, 2006; Mitchell, 2006; Stickney, Brown, & Wahlen, 2004; Watson et al., 2002; Peirson & Ramsay, 2000; Maxwell, Onus, & Fox, 1998; Hoskin, 1994). These ratios were classified into five major categories: *Profitability* [nine items]; *Cash Flow* [nine items]; *Share Market Measures* [11 items], *Capital Structure* [seven items]; and *Liquidity* [seven items]. The details of the financial ratios are shown in Appendix 1. Each voluntary financial ratio was noted as one (1) if disclosed in the annual report for each firm and zero (0) if otherwise. The EFRD score was then computed by summing up all items disclosed divided by the maximum possible score.

### 3.3. *Independent and Control Variables*

The data for all independent and control variables were extracted from the sample firms' annual reports. Table 1 summarises the operationalisation of these variables.

Table 1: Definition and Measurement of Explanatory Variables

Variable Acronym	Definition	Measurement
OCON	Ownership concentration	Proportion of shares held by top five shareholders
FAM	Family ownership	Proportion of shares held by family members
INST	Institutional ownership	Proportion of shares held by institutional investors
FOR	Foreign ownership	Proportion of shares held by foreign investors
CGS	Corporate governance structure	CGS being the composite measure of 13 corporate governance attributes. A firm receives a CGS score ranging from 0 to 13 depending on the number of conditions satisfied.
FSIZE	Firm size	Natural log of total assets
ROA	Profitability	Ratio of net profit before tax to total assets
AUDIT	Size of audit firm	1 if the firm is audited by Big N firm and 0 if otherwise

## 4. Results

### 4.1. Descriptive Statistics

Table 2 displays the descriptive results for mean EFRD over the observed periods. The EFRD increases from a mean of 12.20 per cent in 2001 to 14.99 per cent in 2006, representing a rise by 22.86 per cent. Notwithstanding the increase, the overall EFRD is still relatively low. These data show great diversity of disclosures of EFRD which range from 0 to 20.93 per cent in 2001 and from 0 to 30.23 per cent in 2006. The EFRD is approximately normally distributed as indicated in Table 2.

Table 2: Descriptive Statistics of Dependent Variable

EFRD	Mean	Median	Min.	Max.	Std. Dev	Skewness	Kurtosis
2001	12.20	12.79	0.00	20.93	4.55	-0.28	0.23
2006	14.99	13.95	0.00	30.23	6.29	0.73	0.20

Table 3 tabulates the sub-categories of financial ratios, which are disclosed by the sample firms. The results reveal that *Profitability* ratios have the highest percentage of disclosure with 19.16 per cent (2001) and 24.44 per cent (2006). These *Profitability* ratios include pre-tax profit margin, sales turnover, return on equity, net profit margin and gross profit margin. The second highest group of ratios communicated in 2006 are the *Share Market* ratios (18.40 per cent). Such findings are consistent with Watson et al. (2002) and Mitchell (2006). Sample firms tend to disclose few financial ratios related to *Liquidity* and *Capital Structure* over the two periods. Further, descriptive statistics as provided in Table 3 indicate that the mean Ownership Concentration (OCON), Family Ownership (FAM) and Institutional Ownership (INST) for all sample firms in 2001 is 57.53, 26.25 and 18.94 per cent, respectively. The mean of these ownership structure for all sample firms in 2006 is relatively consistent with a mean of 58.47, 27.14 and 17.25 per cent, respectively. The average foreign ownership shows an increase from 17.77 per cent in 2001 to 22.69 per cent in 2006. Sample firms generally exhibit a stronger corporate governance structure, based on the Corporate Governance Score (CGS), with an increase in mean of 46.35 per cent in 2001 to 67.50 per cent in 2006.

Table 3: Descriptive Statistics

Variables	Mean	Median	Min.	Max.	Std. Dev.
2001					
PROF	19.16	22.22	0.00	44.44	13.31
CF	16.94	22.22	0.00	22.22	7.11
SMM	16.58	18.18	0.00	27.27	5.40
CS	1.42	0.00	0.00	28.57	5.41
LIQ	1.07	0.00	0.00	14.29	3.81
OCON	57.53	58.33	0.18	0.91	18.70
FAM	26.25	26.85	0.00	0.70	25.94
INST	18.94	18.75	35.39	94.62	21.96
FOR	17.77	6.45	0.00	67.20	22.64
CGS	46.35	46.15	7.69	76.92	18.89
2006					
PROF	24.44	22.22	0.00	77.78	17.46
CF	16.66	22.22	0.00	22.22	7.11
SMM	18.40	18.18	9.09	45.45	7.56
CS	2.50	0.00	0.00	42.86	8.49
LIQ	7.61	0.00	0.00	33.33	11.90
OCON	58.47	58.12	25.78	83.74	15.14
FAM	27.14	24.79	0.00	75.46	27.15
INST	17.25	17.01	0.00	89.85	25.27
FOR	22.69	12.54	0.00	76.57	24.11
CGS	67.50	69.23	38.46	92.31	15.13

Notes: Table 3 displays descriptive statistics of continuous independent variables. EFRD = overall extent of financial ratios disclosure score; PROF = profitability; CF = cash flow; SMM = share market measures; CS = capital structure; and LIQ = liquidity. The independent variables include OCON = top 5 shareholdings; FAM = family ownership; INST = institutional ownership; FOR = foreign ownership; and CGS = corporate governance structure.

Paired t-tests are performed to examine the statistical significance of differences between the means of the financial ratios disclosure scores over the study periods, as shown in Table 4. These are performed by comparing 2001 and 2006, showing the percentage change in mean between the two years. The correlations between paired samples are significant at the 1 per cent level. For each category of financial ratio, the hypothesised mean difference = 0;  $df = 39$ ; and  $t$  critical one-tailed = 1.684. The one-tailed significance is reported because of the directional nature of the overarching research proposition.

Table 4: Paired T-Test of Financial Ratios Disclosure Scores Between 2001 and 2006

	EFRD	PROF	CF	SMM	CS	LIQ
Mean of paired differences (%)	2.790	5.28	0.28	1.82	-1.07	-6.55
% change	22.68	27.49	-1.59	10.97	74.82	621.49
Correlation	0.710*	0.602*	0.532*	0.528*	0.717*	0.315*
Hypothesised mean difference	0	0	0	0	0	0
Df	39	39	39	39	39	39
t-Stat	-3.981	-2.346	0.255	-1.749	-1.138	-3.667
P(T<=t) one-tail	0.000*	0.012**	0.400	0.044***	0.131	0.000*
t Critical one-tail	1.684	1.684	1.684	1.684	1.684	1.684

Notes: Table 4 shows the paired sample t-test results for mean financial ratios disclosure scores of the overall score (EFRD) and the five key sub-categories namely, (i) PROF = profitability; (ii) CF = cash flow; (iii) SMM = share market measures; (iv) CS = capital structure; and (v) LIQ = liquidity. \*, \*\* and \*\*\* are statistically significant at the 1%, 5% and 10% levels respectively.

The analysis shows that there is a statistically significant increase in the mean EFRD (1 per cent level), for *Profitability* (5 per cent level), *Share Market Measures* (10 per cent level) and *Liquidity* (1 per cent level) for sample firms between 2001 and 2006. The increases in *Cash Flow* and *Capital Structure* ratios are not statistically significant between the two periods. The overarching research proposition that overall EFRD for 2006 is greater than 2001 is thus supported, and a similar pattern is found for the *Profitability*, *Share Market Measures* and *Liquidity* sub-categories ratios. Overall, the results suggest that Malaysian firms are disclosing more financial ratios information over time.

Table 5 provides the Pearson Product-moment correlation coefficients for the continuous explanatory variables in each period. Corporate Governance Score (CGS) is positively and significantly correlated with Ownership Concentration (OCON) ( $p < 0.01$ ), Institutional Ownership (INST) ( $p < 0.05$ ) and Foreign Ownership (FOR) ( $p < 0.05$ ) in 2001. The significant correlations continue to exist between Corporate Governance Score (CGS), and Institutional Ownership (INST) and Foreign Ownership (FOR) in 2006. Significant negative ( $p < 0.05$ ) correlations are found between Corporate Governance Score (CGS) and Family Ownership (FAM) for both periods. The maximum correlation coefficients are reported between Family Ownership (FAM) and Institutional Ownership (INST) of 0.472 and 0.506 in 2001

and 2006 respectively. None of the correlation coefficients between explanatory variables exceed 0.8 (Judge, Griffith, Hill, & Lee, 1980). Thus, multicollinearity is considered non-problematic in this study. In addition, the non-presence of multicollinearity has been confirmed using variance inflation factor (VIF).

Table 5: Pearson Correlation Matrix for the Continuous Explanatory Variables

2001	CGS	OCON	FAM	INST	FOR	FSIZE	PROF
CGS	1						
OCON	0.421*	1					
FAM	-0.364**	-0.215	1				
INST	0.310**	0.455*	-0.472*	1			
FOR	0.302**	0.360**	-0.334**	-0.135	1		
FSIZE	-0.104	-0.032	0.003	0.312**	-0.182	1	
PROF	0.103	0.170	-0.231	0.159	0.263	0.179	1
2006	CGS	OCON	FAM	INST	FOR	FSIZE	PROF
CGS	1						
OCON	0.160	1					
FAM	-0.361**	-0.093	1				
INST	0.322**	0.373*	-0.506*	1			
FOR	0.280**	0.109	-0.323**	-0.073	1		
FSIZE	-0.052	-0.033	0.093	0.283**	-0.063	1	
PROF	0.215	0.151	0.133	0.149	0.155	0.435*	1

Notes: Pearson correlation matrix shows the correlation coefficients for all the continuous explanatory variables. CGS = corporate governance structure, OCON = ownership concentration, FAM = family ownership, INST = institutional ownership, FOR = foreign ownership, FSIZE = firm size, and PROF = profitability. All the correlation coefficients are below 0.8; hence, multicollinearity is not a concern in this study. \* and \*\* = correlations are significant at the 1% and 5% levels respectively.

#### 4.2. Regression Analysis

The multiple regression results of the overall EFRD of each period are summarised in Table 6. The model has the values of adjusted R-squared of 44.2 per cent in 2001 and 26.5 per cent in 2006. The overall regression model in each period are significant ( $p < 0.01$  and  $p < 0.1$  respectively), thus, explaining a substantial percentage of the variation in the overall



EFRD. Table 6 reports the maximum VIF of 3.164 which is kept well below ten, indicating no multicollinearity problems (Belsely, 1991). Hence, the results of the regression analysis can be interpreted with a greater degree of confidence.

Interestingly, ownership structure has a different impact on the disclosure of financial ratios over the two periods. As revealed in Table 6, the ownership concentration is positively and significantly associated ( $p < 0.1$ ) with the extent of financial ratios disclosure in 2001. The findings do not support  $H_1$  of this study but are consistent with Ho, Tower, and Taylor (2013) for Malaysian firms and Birt et al. (2006) for Australian firms' voluntary disclosure practices. However, this significant association is not found in the latter years.

Family ownership shows no statistically significant association with firms' financial ratios disclosure in 2001 and 2006, thus,  $H_2$  is not supported. The proportion of shares held by foreign shareholders indicates a significant ( $p < 0.1$ ) positive association with financial ratios disclosure in 2006.  $H_3$  is only supported in that year but not in 2001. Institutional ownership is significantly negatively associated ( $p < 0.01$ ) with financial ratios disclosure in 2001, contrary to what is hypothesised in  $H_4$ . This implies that institutional shareholders do not play an active role in monitoring management to provide greater financial ratios disclosure.

The strength of the corporate governance structure determines the EFRD. Table 6 reveals that firms' governance structure is positively and significantly associated ( $p < 0.01$ ) with the overall EFRD in 2001, consistent to  $H_5$ . However, no such significant association is found in 2006.

Profitability as measured by return on assets has recently been raised and included as a control factor (Morris & Tronnes, 2008). It is considered as an important corporate attribute associated with voluntary disclosure in the annual reports (Alsaed, 2005; Kent & Ung, 2003). The results reported in Table 6 show that return on assets is positively and significantly associated with the overall EFRD in both periods in a consistent manner. A similar trend is also found corresponding to firm size. For both years, larger firms appear to provide more financial ratios in their annual reports, as compared to the smaller firms. In terms of audit firm size, the results show lack of statistical significance in both periods, suggesting that the size of audit firm has no bearing on the overall EFRD.

Table 6: Multiple Regression Analysis of Determinants of Extent of Financial Ratios Disclosure

	2001			2006			
Adjusted R <sup>2</sup>	0.442			0.265			
Durbin-Watson	2.198			1.843			
F statistic	5.411*			2.757***			
	Predicted sign	Coefficients	t Stat	VIF	Coefficients	t Stat	VIF
Intercept		-0.422	-3.813*		-0.117	-0.654	
OCON	-	0.071	1.688***	1.928	0.017	0.273	1.323
FAM	-	-0.024	-0.768	2.387	-0.023	-0.499	2.067
INST	+	-0.114	-2.574*	3.164	-0.006	-0.108	2.384
FOR	+	-0.039	-1.143	2.201	0.075	1.733***	1.458
CGS	+	0.122	3.544*	1.558	-0.001	-1.253	1.407
FSIZE	+	0.021	4.361*	1.408	0.015	2.060**	1.646
ROA	+	0.322	3.185*	1.448	0.089	1.748***	1.753
AUDIT	+	0.004	0.247	1.343	-0.020	-0.816	1.348

Notes: Table 6 shows the results of regression of the overall extent of financial ratios disclosure (EFRD) in 2001 and 2006 against the independent variables and control variables. The EFRD for a firm for a particular year is computed based on a checklist of 43 financial ratios. OCON = ownership concentration; FAM = family ownership; INST = institutional ownership; FOR = foreign ownership; CGS = corporate governance structure; FSIZE = firm size; ROA = return on assets; and AUDIT = audit firm size. One-tailed probabilities are used for the tests except the AUDIT variable. Associations \*, \*\* and \*\*\* are statistically significant at the 1%, 5% and 10% levels respectively.

## 5. Discussions and Conclusion

This study examines the effect of ownership structure on the financial ratios disclosure practices in Malaysian firms. It extends previous financial ratios disclosure studies in two ways. First, it focuses on the two key time periods, i.e. 2001 and 2006 during which remarkable corporate governance reforms have taken place. Second, it examines the impact of ownership structure and corporate governance structure on the EFRD. This research is similar with Ghazali (2010) in term of period of study, however the focus is different, whereby the current research concentrates on voluntary financial ratios disclosure.

The findings suggest a rise in the EFRD between 2001 and 2006 ranging from 12.2 per cent to about 15 per cent. However, the overall EFRD is still relatively low. There are several possible reasons that may contribute to the low level of EFRD. A possible reason is the sceptical

perception of the management on the importance of the financial ratios disclosure in decision making. Similar assertion is forwarded by Mitchell (2006) who contends that many ratios are possibly important to only certain groups of users. Another possible reason is financial ratios can be calculated by anybody with some basic business knowledge, or they can be provided by professional financial analysts. However, it is important to note that the non-disclosure of financial ratio information can result in users having to spend time and incur cost, to obtain the information elsewhere (Watson et al., 2002).

The variables of ownership structure exhibit a pattern of selective impacts. The findings suggest that shareholders influence the EFRD in disparate ways. Concentrated ownership in Malaysian firms tends to play a positive role in monitoring management to provide financial ratios disclosure voluntarily. This is consistent with Ho (2009). However, the results contradict with the findings of several Malaysian studies such as Haniffa and Cooke (2002) and Hossain et al. (1994). The inconsistent results may be due to different measurement (percentage of shareholding of top 10 shareholders) being used in the various studies.

As evidenced from the findings, foreign ownership has greater monitoring influence on the management to provide greater financial ratios information in 2006. One possible explanation is that foreign owners are more likely to be actively involved in international share markets. Such exposure may motivate them to seek important and relevant information such as financial ratios in making informed decisions. Listed firms seeking foreign participation may voluntarily disclose this information.

The findings that there is a positive association between corporate governance structure and financial ratios disclosure, indicate a complementary monitoring role of the MCCG in financial ratios disclosure. However, such evidence is only present in 2001 but not in 2006. The findings further suggest that the corporate governance structure is not an important predictor in determining the provision of financial ratios in the 2006 annual reports. On the same note, Coulton, James, and Taylor (2001) conclude that corporate governance is neither ineffective nor influential on compensation disclosure. Similarly, Linden and Matolcsy (2004) argue that a best single practice may not be relevant for all firms. Further, the decision to disclose the financial ratios in the annual report may be discussed at a more internalised level of management such as the firm's accountant and secretary, instead of among the board of directors or audit committee.

The findings of the study have implications for disclosure policies and governance initiatives in relation to ownership structure and composition, especially in Malaysia where the environment is prone to secrecy rather than transparency. Over time, notwithstanding the governance initiatives, the heavily regulated Malaysian capital market (Gomez & Jomo, 1997) may not present ideal conditions for encouraging transparent disclosure. Financial report preparers, especially for smaller and less profitable firms with concentrated ownership and owned by family members must fully utilise the financial ratios disclosure properties. They will be at a disadvantage if they are not able to better explain the unfavourable performance to their stakeholders, as compared to their counterparts.

This study has some limitations. First, the main focus of this study is merely on the extent of financial ratios disclosure, and may not encompass or necessarily reflect the true state of affairs of firms. Second, this study does not attempt to evaluate the usefulness of financial ratios disclosed in the annual reports to the users. Due to its simplicity and speediness, it is assumed that this information may assist users in making informed decision making. It is suggested that future research incorporates the recent Malaysian Code of Corporate Governance launched in 2012, which takes into account current changes and recommendations in line with global and local corporate governance reforms, to assess the impact of financial ratios disclosure.

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APPENDIX 1: Extent of Financial Ratios Disclosure (EFRD) – List of Ratios

Five Key Sub-categories	Specific ratio
1. Profitability	1.Pre-tax profit margin
	2.Sales turnover
	3.Return on equities (ROE)
	4.Net profit margin
	5.Gross profit margin
	6.EBITDA/ Revenue
	7.Total expenses/revenue
	8.Return on assets (ROA)
	9.Return on sales
2.. Cash Flow	1.Dividend payment
	2.Repayment long term borrowings
	3.Reinvestment
	4.Operation index
	5.Cash flow adequacy
	6.Cash flow ratio
	7.Debt coverage
	8.Cash flow to revenue
	9.Cash flow return on assets
3. Share Market Measure	1.Price-to-earnings (P/E)
	2.Net tangible assets per share (NTAB)
	3.Net assets per share (NAB)
	4.Dividend yield
	5.Market capitalisation
	6.Total shareholder return (TSR)
	7. Dividend payout
	8.Earnings yield
	9.Price-to-book
	10.Book value per ordinary share
	11.Market-to-book ratio
4. Capital Structure	1.Total debt/equity
	2.Gearing
	3.Times interest earned
	4.Capitalisation ratio
	5.Equity ratio
	6.Liabilities/ Assets
	7.Long Term debt/equity
5. Liquidity	1.Current ratio
	2.Inventory turnover
	3.Quick ratio
	4.Days to sell inventory
	5.Accounts receivable turnover
	6.Collection period
	7.Payment period

