

# **An Empirical Examination of the Relationship between Corporate Social Responsibility Disclosure and Financial Performance in an Emerging Market**

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## **ABSTRACT**

This study, using longitudinal data analysis, attempts to address the question of whether CSR is linked to financial performance for PLCs in Malaysia. Despite CSR disclosure being at a nascent stage in Malaysia, the findings of this study solidly support the outcome of the majority of results in developed markets. It was found to be positively related to financial performance. This suggests that local firms can achieve advanced levels of financial performance if they engage in social activities. The findings also confirm that there is limited evidence of a significant effect of CSR on financial performance in a long-term relationship.

**Keywords** – Corporate Social Responsibility (CSR), Corporate Financial Performance (CFP), Fixed Effects (FE) model, Random Effects (RE) model, Bursa Malaysia<sup>1</sup>.

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<sup>1</sup>Formerly known as Kuala Lumpur Stock Exchange (KLSE)

## 1. Introduction

Numerous studies have been conducted to measure the statistical association between perceived corporate social responsibility (CSR) and corporate financial performance (CFP), to aid the understanding of the relationship between CSR and CFP. Pava and Krausz (1996) identified and reviewed 21 empirical studies in this area, while Margolis and Walsh (2003) reported that 122 published studies empirically examined the relationship between CSR and CFP during the period 1971 – 2001. Furthermore, Orlitzky, Schmidt, and Rynes (2003) conducted a meta-analysis of 52 studies, which revealed that most results of prior studies found that CSR had a positive impact on financial performance.

CSR studies have been conducted frequently in the local Malaysian context (e.g. Abdul Hamid, 2004; Amran and Devi, 2007; Haniffa and Cooke, 2002; Nik Ahmad, Sulaiman, and Siswanto, 2003; Perry and Sheng, 1999; Thompson and Zakaria, 2004; Williams and Ho, 1999). Previous studies concluded that the awareness level of managers towards CSR is high, but it is not followed by reporting (Nik Ahmad and Abdul Rahim, 2003; Williams and Ho, 1999). Even though the number of CSR studies is high, there is to date, no empirical study of the impact of CSR on financial performance in a Malaysian context. In contrast these issues have been extensively explored in developed markets. The results of these more widely known studies show that the positive impact of CSR on financial performance may encourage managers to pursue social performance as part of their strategy for attaining high financial performance (Orlitzky *et al.*, 2003).

The trend in developed markets such as North America and Europe show there have been widespread empirical tests of the relationship between CSR and CFP. There are, however, no published studies, in the Malaysian context, that have explored the impact of CSR on the financial performance of local companies engaging in CSR. The lack of information from academic literature concerning whether CSR has any substantiated impact on financial performance in local companies may be one of the possible reasons why company's disclose little of their CSR activities. Gelb and Strawser (2001) state that firms have incentives to engage in stakeholder management by undertaking socially responsible activities and that providing extensive and informative disclosures is one such practice. Therefore this study endeavours to fill the gaps in the empirical study of the impact of CSR on financial performance.

The preceding discussions suggest that it is the right time to pursue this study for two reasons. First, one of the informational signals upon which stakeholders base their assessments of company reputation under conditions of incomplete information is a firm's high CSR disclosures (Fombrun and Shanley 1990). Second, Malaysian PLCs face challenges ahead in incorporating their CSR activities in their annual reports as required by Bursa Malaysia under *Chapter 9 continuing Disclosure* (Tan, 2007).

This study reports for the first time on the empirical research of the relationship between CSR and financial performance of PLCs in Malaysia. This study also helps create comparative findings in emerging capital markets. There are two major objectives of this study – first, to explore whether there is evidence of any impact between CSR and financial performance for companies listed in Bursa Malaysia; and second, to explore whether any impact exists between dimensions of CSR and financial performance for companies listed in Bursa Malaysia. This study also attempts to control the effects of the firm-specific variables such as a firm's size, financial leverage, asset turn over, earning per share and risk level of the company.

## 2. Literature Review

### 2.1. Prior CSR Research in Malaysia

CSR appears to be at a nascent stage in Malaysia with some Malaysian firms recognized as being pro-active in this field. These include firms which have voluntarily adopted the Global Reporting Initiatives (GRI) reporting framework (e.g. BAT Malaysia Berhad and Shell Refining Co). Furthermore, the attitudes of Malaysian managers and executives towards social responsibility suggest that most of them agreed that their companies were involved in socially responsible activities (Nik Ahmad and Abdul Rahim, 2003; Rashid and Ibrahim, 2002). Hence, a proactive approach to CSR may help a firm to get access to pools of capital it might not otherwise be able to tap into. Likewise, being well-known for adopting socially responsible policies may also help a firm capture export business supplying firms at the top end of the global supply chain where CSR is taken seriously (Investor Digest, 2003).

The degree of CSR among business communities has been increased in recent years. However, CSR study is still in its infancy period (Nik Ahmad and Abdul Rahim, 2003; Williams and Ho, 1999). Prior studies in this area have taken two broad approaches. While some studies examined the extent of CSR (e.g. Abdul Hamid, 2004; Che Zuriana, Kasumalinda, and Rapih, 2002; Kin, 1990; Nik Ahmad *et al.*, 2003; Thompson and Zakaria, 2004), others have examined the identify driver or other factors (Amran and Devi, 2007; Rashid and Ibrahim, 2002; and Teoh and Thong, 1984).

The studies on CSR development in Malaysia by Abdul Hamid (2004), Che Zuriana *et al.*, (2002); Nik Ahmad and Abdul Rahim, 2003; Thompson and Zakaria (2004) stated that the level of awareness appears to be growing. Amran and Devi (2007) in an exploratory study found that Malaysian firms engage in CSR because of the influence of the government. The dependency on a foreign business partner is also seen as one of the contributory factors for CSR in Malaysia. However, this does not appear to translate into higher levels of social reporting (Nik Ahmad and Abdul Rahim, 2003; Williams and Ho, 1999). Consequently, further study is needed to determine what other factors cause this 'gap'. There are a few possible reasons as to why CSR in Malaysia is still in its infancy stage. As highlighted by Thompson and Zakaria (2004) the major reasons posited for non disclosure include the lack of a recognized reporting framework, the cost of reporting, and dread of how investors will react. Also few firms may seriously become involved in CSR to reduce pressure from stakeholders. Furthermore, Teoh and Thong (1984) stated that the lack of legislation on CSR and the firms' perception that the investors or community will not benefit much from such reports may also contribute to non disclosure.

In conclusion prior CSR studies of the local context merely explored the content of CSR activities in annual reports and the motivation of why managers engaged in it. Even though there is some pressure from stakeholders towards companies that more actively engage in CSR activities, the number of companies involved in CSR disclosures is still low (Nik Ahmad and Abdul Rahim, 2003; Williams and Ho, 1999). Prior studies found that CSR activities are only as in common reporting and tend to be self-laudatory (Nik Ahmad *et al.*, 2003). There is a gap in the studies concerning any impact of companies disclosing CSR activities towards their financial performance. This issue is important because managers need to know whether their firms will have an economic advantage and receive a positive response from their long-term investors. Nik Ahmad *et al.*, (2003) state that a possible avenue of research is to examine if CSR disclosure is related to a firm's financial performance. This study therefore addresses the gap in the existing literature of the

relationship between CSR and financial performance. In short, it is hoped that this study will stimulate more studies in this direction.

## **2.2. Prior Studies of the Relationship between CSR and CFP.**

The empirical study of CSR and CFP started over three decades ago in western countries. There are basically two types of empirical study of the relationship between CSR and financial performance. One set uses the event study methodology to gauge the *short-run* financial impact (abnormal returns) when firms engage in socially responsible or irresponsible acts (e.g Hannon and Milkovich, 1996; McWilliams and Siegel, 2000; Posnikoff, 1997; Wright and Ferris, 1997). The results of these studies have been mixed. For example, Wright and Ferris found a negative relationship; Posnikoff reported a positive relationship; and McWilliams and Siegel found no relationship between CSR and financial performance. Other studies are similarly inconsistent concerning the relationship between CSR and short-run financial returns (McWilliams and Siegel, 2001).

The second set of studies examines the nature of the relationship between some measure of corporate social performance, CSP (a measure of CSR), and measures the *long term* firm performance, using accounting or financial measures of profitability (e.g Aupperle, Carroll, and Hatfield, 1985; Mahoney and Roberts, 2007; McGuire, Sundgren and Schneeweis, 1988; McWilliams and Siegel, 2000; Simpson and Kohrer, 2002; Waddock and Graves, 1997). The results from these studies have also been mixed. Aupperle *et al.* found no relationship between CSR and profitability, McGuire *et al.* found that prior performance was more closely related to CSR than subsequent performance, and Simpson and Kohrer; Waddock and Graves found a significant positive relationship.

According to Griffin and Mahon (1997) pioneering empiricists who explored the corporate social and financial performance link were often interested in a single dimension of social performance, such as environmental pollution. Further, Griffin and Mahon summarized the findings of the numerous articles they reviewed and concluded that no definitive consensus exists on the empirical corporate social and financial performance link, and that while a substantial number of studies found a negative relationship some of the studies have been inconclusive because they found both positive and negative relationships. However, most of the investigations found a positive link.

McWilliams and Siegel (2001) tested the relationship between CSR and CFP with a regression model that used a dummy variable indicating the inclusion of a firm in the Domini 400 Social Index (DSI 400) as the measure of social performance. The DSI 400 is a portfolio of socially responsible companies developed by Kinder, Lydenberg, and Domini, Inc. Co. McWilliams and Siegel used an average of annual values for the period 1991-1996 for 524 large U.S corporations in a regression model that included a measure of financial performance as the dependent variable. Social performance, industry, and expenditure for research and development were independent variables. Their findings suggested that inclusion of the research and development variables in the model caused the CSR variable to be insignificant, leading them to the conclusion that there may not be a CSR-CFP link if the regression model is properly specified.

Simpson and Kohers (2002) focused on a single industry. Their investigation was an extension of earlier research on the relationship between corporate social and financial performance. The special contribution of their study was the empirical analysis of sample companies from the banking industry. They used the Community Reinvestment Act (CRA) ratings as a social performance measure. The results solidly supported the hypothesis that the

link between social and financial performance is positive. Furthermore, Moore and Robson (2002) also analyzed a single industry with a study of the social and financial performance of eight firms in the UK supermarket industry. These were based on the derivation of a 16-measure social performance index and a 4-measure financial performance index. Even though the number of firms was small there was only one statistically significant result.

The latest study of corporate social and financial performance was done by Mahoney and Roberts (2007). They performed empirical analyses on a large-sample of publicly held Canadian companies. Based on tests utilizing four years of panel data they found no significant relationship between a composite measure of companies' social and financial performance. However, they found significant relationships between individual measures of companies' social performance regarding environmental and international activities and financial performance.

All of the studies above were done in the U.S and U.K market settings, the empirical study of CSR and financial performance outside of these markets is very rare, but a study on emerging markets was conducted by Subroto (2002). He used an explanatory survey and multivariate correlations, using cross-sectioned data and critical part analyses, to analyse a correlation study on CSR and financial performance towards ethical business practices in Indonesia. Three hypotheses were tested. Testing results of the first hypothesis, all interests of stakeholders had a significant correlation. Results of the second hypothesis were still positive. Lastly, the third hypothesis indicated that the correlation between social responsibility and financial performance was quite low. This is the first research of its kind in Indonesia and may also be the first in an emerging market. This study will try to contribute in this area and may facilitate more intensive research on CSR and financial performance links outside of the U.S and European markets in the future, especially in emerging capital markets.

### **3. Methodology**

#### **3.1. Data and Sample Size**

The initial sample in this study consists of the 200 largest companies, which are taken out of 499 companies listed on the main board of Bursa Malaysia during the period 2000 to 2005. The selection is based on their highest market capitalisation ranking. This selection criterion is consistent with previous studies on CSR reporting (e.g. Guthrie and Parker, 1990; Hackston and Milne, 1990; Thompson and Zakaria, 2004). According to Tsang (1998) a higher proportion of large and medium-sized companies disclosed social information compared to small companies. Companies wishing to increase business have larger responsibilities and principles (Gardiner, Rubbens, and Bonfigliani, 2003).

Data for these companies was collected for the years 2000 – 2005. This time span is selected for two reasons: First, this period is the recovery period from the financial crisis that hit Asian countries and particularly the Malaysian capital market. Second, CSR disclosure is in its infancy period in the emerging capital markets (Thompson and Zakaria, 2004; Tsang, 1998). Data is collected from the companies' annual reports, downloaded through the Bursa Malaysia website, Hydra database, and the Central Bank of Malaysia. Companies' annual reports constitute the main data for this study and were chosen because the annual report is the primary source of corporate environmental reporting, and, in Malaysia, annual reports of listed companies are the most accessible source of information, either in hard copies or electronic formats (Christopher, Hutomo, Monroe, 1997; Wiseman, 1982).

### 3.2. Measurements of CSR

Comprehensive measures of CSR include – *The Fortune reputation survey* which is based on the opinions of senior managers that may be confounded by financial performance (Brown and Perry, 1994); *The KLD* index which investigates a range of sources and uses quantitative criteria to determine the rating developed by Kinder, Lydenberg, Domini and Co (Waddock and Graves, 1997); *Toxics Release Inventory (TRI)* focuses only on a few industries; and *Best Corporate Citizens*. The evaluation is based on equal weighting of seven criteria. The seven criteria include the three-year average shareholder return and average scores on six social measures reported by a reliable social investment research firm (Murphy, 2002).

Every measurement to determine the above CSR has advantages and disadvantages. To overcome the above mentioned limitations, the researchers must use CSR measures consistently based on their research objectives and local conditions. All these CSR measures are from U.S company perspectives. Nevertheless, for CSR measures from a Malaysian perspective this study uses the idea of item measurements adopted from the KLD index with some items being changed or ignored and adjustment of the objectives to suit the local context. As noted, many empirical studies of CSR tend to focus on only one or two areas of social performance while ignoring the rest (Waddock and Grave, 1997).

Measuring of CSR disclosure in this study adopts a similar disclosure-scoring methodology based on content analysis that incorporates disclosures of four key CSR indicators; (1) employee relation; (2) environment; (3) community involvement; and (4) product. Each indicator has sub-item disclosures that are adjusted based on whether the items are disclosed. Furthermore, Al-Tuwaijri, Christensen and Hughes (2004) propose that the process may be achieved using quantitative disclosure measures with denoted weights for different disclosure items based on the perceived importance of each item to various user categories which also marks the greatest weight (+3) to quantitative disclosures related to the four CSR indicators as described above. Marking the next highest weight (+2) to non-quantitative but specific information related to these indicators. Lastly, common qualitative disclosures receive the lowest weight (+1). Firms that do not disclose any information for the given indicators receive a zero score. This study adopts the above discussed procedures in measuring CSR disclosure.

### 3.3. Measurements of Financial Performance

Most previous studies used accounting data to measure financial performance. For example, Waddock and Graves (1997) used three accounting variables. These were return on assets (ROA), return on equity (ROE), and return on sales (ROS). Simpson and Kohres (2002) used return on assets (ROA) and loan losses, whereas Berman, Wicks, Kotha, and Jones (1999) only used return on assets (ROA). Prior studies by Cochran and Wood ((1984) also used accounting data to measure financial performance. Three accounting return measures were employed initially: the ratio of operating earnings to assets, the ratio of operating earnings to sales, and excess market valuation. Accounting variables were also used by Tsoutsoura (2004) to measure financial performance. These were return on assets (ROA), return on equity (ROE), and return on sales (ROS).

Alexander and Buchholz (1978) and Abbott and Mosen (1979) used forms of investors returns as proxies for financial performance. Abbott and Mosen, however, failed to account properly for risk. Alexander and Buchholz who did properly account for risk did not employ an event study. In a recent study, Han and Suk (1998) used stock returns as a

dependent variable to measure financial performance and their model adopted the asset pricing framework.

According to McGuire, Sundgreen, and Schneeweis (1988), both accounting and market variables look for different aspects of performance, and each is subjected to a particular bias. The usage of accounting data raises the possibility of distortions from inflation (Demsetz and Villalonga (2001). Accounting-based measures only tap historical aspects of a firm's performance (McGuire *et al.*, 1988). While short-term stock returns are very volatile for a reliable measure of corporate performance, long-term returns will capture corporate performance (Han and Suk, 1998).

Previous studies focus on  $q$ -ratio as a measure of a firm's performance, especially to measure the relationship between ownership structure and financial performance. The latest study by Elsayed and Paton (2004) also used Tobin's  $q$  to examine the environmental disclosure on the firm's financial performance. Tobin's  $q$  ratio is a noisy measure, and it is significantly affected by industrial organization (Lindenberg and Ross, 1981). Stock returns have more important implications for the business community than  $q$  ratio (Han and Suk, 1998). Some authors have used both accounting and stock market data to measure financial performance (e.g. McGuire *et al.*, 1988; Yoshikawa and Phan, 2003). Although there are still arguments about these measures, this study uses three alternative measures of financial performance as dependent variables. These are: Accounting-based performance measure is a Return on Assets (ROA); Market-based performance measure is the stock market return ( $R_i$ ); and Tobin's  $q$  ratio ( $Q$ ).

The reason for using these three variables are – using ROA as a dependent variable to measure financial performance is because it is less likely to be manipulated and is the most widely used measurement of a firm's performance (Yoshikawa and Phan, 2003); using  $R_i$  as a dependent variable is because investors primarily care about stock returns (Yoshikawa and Phan, 2003) and using market value rather than accounting-based measures of financial performance has become widespread in empirical analysis. The most widely used measure has been Tobin's  $q$ , defined as the market value of the firm divided by the replacement costs of assets (Hirsch and Seaks, 1993). Furthermore, Tobin's  $q$  ratio is important to test the robustness of reported results to the use of an alternate performance measure (Welch, 2003). Tobin's  $q$  is primarily represents the community of investors constrained by their insight, brightness, or doubt (Demsetz and Villalonga, 2001).

Based on the objectives of this study the variables used and their measurement are widely adopted in existing literature. There are three dependent variables, namely, return on assets (ROA), stock market return ( $R_i$ ) and Tobin's  $q$  ratio ( $Q$ ). The independent variables include corporate social responsibility (CSR), employee relation dimension (EMPL), community involvement dimension (COM), product dimension (PROD), and environmental dimension (ENV). The control of the effects of the firm-specific variables are as follows: systematic risk (BETA), financial leverage (LEV), firm's size (SIZE), firm's sales (SALES), asset turn over (ATR), and earnings per share (EPS).

### 3.4. Hypothesis

According to prior studies there are mixed findings. This study adopts the perspective that investments in CSR are associated positively with corporate financial performance. Hence, CSR helps build name recognition, customer loyalty (Rosen, Sandler, and Shani, 1991), and market position (Fombrun and Shanley, 1990). The perspective of this study is consistent with recent research documenting a positive relationship between CSR and CFP (Orlitzky, 2001; Roman, Hayibor, and Agle, 1999; Ruf, Muralidhar, Brown, Janney, Paul, 2001;

Simpson and Kohers, 2002; Tsoutsoura, 2004; Waddock and Graves, 1997). Thus, hypotheses mergers are:

*H1: CSR disclosure will be positive, significantly related to corporate financial performance (CFP).*

*H2: At least one of the CSR dimensions will be positive, significantly related to corporate financial performance (CFP).*

### 3.5. Econometric Model

The main focus of this study is to determine whether CSR and dimensions of CSR have any impact on corporate financial performance (CFP). The regression equations use panel data that consist of observations on cross sectional and time-series. Panel data usually gives the researcher a large number of data points, increasing the degree of freedom and reducing the collinearity among the independent variables. It may also improve the efficiency of statistical estimates (Hsiao, 2003). Panel data is also used to analyse dynamic change and helps detect and measure effects that simply cannot be observed in pure time series or cross-sectional data (Gujarati, 2003).

Generalized Least Squares (GLS) is a more appropriate method compared to Ordinary Least Squares (OLS) for panel data analysis. Unlike OLS, GLS considers the variability in the predictor and explanatory variables into account explicitly and is therefore capable of producing estimators that are BLUE (Gujarati, 2003). According to Johnston and DiNardo (1997), ignoring the panel structure of the data in the OLS model can be problematic for two reasons. First, even though the pooled OLS model yields consistent estimates of the regression coefficients, standard errors will be understated and significance levels are consequently overstated. Second, compared to the GLS model, the use of OLS as an estimation method does not result in efficient estimates of the regression coefficients.

To address these problems, two well-established models, the fixed effects model and random effects model are conducted in this study. The difference between the fixed effects and the random effects models is based on whether the unobserved individual effects that are correlated with the regressors, which is the case for the fixed effects, or not in the models, as in the case of the random effects model. (Greene, 2008; Wagner, 2006) In the fixed effects model, the intercept in the regression model is allowed to differ among individuals in recognition of the fact that each individual or cross section unit may have some special characteristics of its own. In conclusion, the fixed effects model is represented by the following equation:

$$\gamma_{it} = x_{it}\beta + v_i + \mu_{it} \quad (1)$$

Where  $y$  is the dependent variable (in this study it refers to financial performance measures, namely, ROA, Stock Return, and Tobin's  $q$ );  $x$  represents the independent variables (in this study it refers to the variables CSR, Dimensions of CSR, namely, Employee Relation (EMPL), Community Involvement (COM), Product (PROD), Environment (ENV), and all of the control variables including Firms' systematic risk (BETA), Leverage (LEV), LogSize (SIZE), LogSales (SALES), Asset Turnover (ATR), and Earning per share (EPS);  $\beta$  is the coefficient of the independent variables;  $\mu$  represents the error term;  $v$  is the unobserved firm effect;  $i$  indicates a firm number; and  $t$  represents time.

To choose which of the two models (fixed or random effects) is more precise, the Hausman test is used. The error term ( $\mu_{it}$ ) for the random effects model in equation (1) can be defined as:

$$\mu_{it} = e_i + v_{it} \quad (2)$$



In (2),  $e_i$  is the cross-section error component and  $v_{it}$ , combines the cross-section and time series error component.

In addition, analysis that seeks to explore whether there is any impact on the long-term relationship between CSR and financial performance in this study also performs the dynamic function that can be used to determine the long-run relationship between CSR and financial performance derived from econometric or statistical theory. According to Munoz (2005), an advantage of using a dynamic model is that both short and long-term elasticities are obtained. The solution provided in this study is to apply Elsayed and Paton's (2004) technique, which uses the generalized method of moments (GMM) of Arellano and Bond procedure (1991). Hence, the dynamic model will be written as follows:

$$y_{it} = \beta_0 + \beta_1 y_{i,t-1} + \beta_2 x_{i,t-1} + \beta_3 z_{i,t-1} + \mu_{it} \quad (3)$$

When lagged dependent variables are included as explanatory variables, both the 'within groups' and 'random effects' estimators are biased and inconsistent, except when the number of time periods is large (Baltagi, 1995; Munoz, 2005). To solve this problem, the dependent variable lags ( $y_{i,t-1}$ ) are used as instruments for independent variable.

## 4. Empirical Results

### 4.1. Descriptive Statistics and Pearson's Correlation Matrix

In this section, descriptive statistics are used to test the bivariate relations by comparing the mean (average) for each variable. The results of descriptive statistics and Pearson's correlation matrix are reported in Table I. Column two and three in Table I report the findings of the descriptive statistics of mean and standard deviation. Leverage (LEV) and earnings per share (EPS) are positively correlated with return on assets (ROA) which is represented as firms' financial performance. All three of these variables are significant in explaining the relationship with formation of financial performance.

When using stock market return ( $R_i$ ) as a measure of a firm's financial performance, four variables: corporate social responsibility (CSR), size of company (SIZE), assets turnover (ATR) and EPS, are positive and significant in explaining a firm's financial performance. Lastly, a firm's financial performance is represented by Tobin's  $q$  found that positive significantly correlated to six control variables, namely CSR, LEV, SIZE, ATR and EPS respectively. It is interesting for BETA as the measures of risk level are consistently negative and significant to estimate the firms' financial performance. These results support previous studies by Graves and Waddock (1994); McGuire *et al.*, (1988); Waddock and Graves (1997). As such, these findings provide evidence that the variables are important instruments in explaining the firms' financial performance.

**Table I.**  
Descriptive Statistics and Pearson's Correlation Matrix

	Mean	Std Dev	ROA	Ri	Q	CSR	BETA	LEV	SIZE	SALES	ATR	EPS
ROA	0.0458	0.1662	1.00									
RI	-0.0859	0.2246	0.18**	1.00								
Q	0.8380	0.8797	0.31**	0.13**	1.00							
CSR	1.3608	1.3671	0.06	0.17**	0.07*	1.00						
BETA	0.9768	0.4175	-0.08*	-0.10**	-0.16**	-0.02	1.00					
LEV	0.4320	0.3374	0.13**	-0.04	0.18**	0.10**	0.14**	1.00				
SIZE	13.1463	1.3174	0.07	0.11**	0.32**	0.41**	-0.04	0.23**	1.00			
SALES	12.9129	1.5892	-0.07	0.06	0.02	0.41**	-0.02	0.24**	0.62**	1.00		
ATR	0.5632	0.5581	0.05	0.17**	0.30**	0.11**	-0.19**	0.02	0.03	0.39**	1.00	
EPS	0.2648	0.6107	0.18**	0.22**	0.17**	0.13**	-0.21**	-0.06	0.06	0.04	0.11	1.00

Notes: \*\*Correlation is significant at the 0.01 level (2-tailed),

\* Correlation is significant at the 0.05 level (2-tailed).

Referring to the correlation between CSR and the three alternative measures of a firms' financial performance it was found that both Ri and Q variables are positive and the significant difference from zero indicates the higher the level a firm's CSR disclosure, the higher its concurrent and subsequent financial performance. The bivariate correlation matrix of the variables used in this study show that all variables have low correlation coefficients with each other, that is; none of the variables shows serious multicollinearity. Judge *et al.*, (1982:620) consider that correlation coefficients are only indicative of serious collinearity if their coefficients of correlation exceed 0.80.

#### 4.2. Estimation Results of Static Effects

This section shows the findings that determine the empirical relationship between CSR and financial performance based on the statistical procedures presented in the previous section through static approach, namely GLS with fixed and random effect models. The estimation is set to follow the White heteroscedasticity consistent estimator that solves the problem of heteroscedasticity.

Estimation results of the impact of CSR on financial performance are presented in Table II. Three dependent variables used to measure financial performance are as follows: Return on Assets (ROA), Stock market return (Ri) and Tobin's *q* ratio (Q). As shown for Model 1 when ROA is the dependent variable utilized to measure financial performance, the Fixed Effects (FE) model is more precise than the Random Effects (RE) model since the Hausman test is significant. These indicate that the hypothesis – there are no fixed effects in existence in any companies, is rejected. This means that in the FE model, the intercept in the regression model is allowed to differ between individuals in recognition of the fact that every company, or cross sectional unit may have specific characteristics of its own. Except the Leverage (LEV) variable, overall variables are strongly significant different from zero ( $p$ -value  $< 0.01$ ) whereas signs of independent variables have mixed findings. Adjusted  $R^2$  shows that financial performance is stylishly explained by the CSR and other explanatory variables in which the overall estimation is good at 66.96 percent.

Model 2, with the stock market return (Ri) as a measure of financial performance, found that the Fixed Effects (FE) model is also more appropriate than the Random Effects (RE) model, since results of the Hausman test is rejected the hypothesis – there are no fixed effects in existence in any companies is rejected. All of the  $t$ -statistics are significant at 1 percent level. Except SALES, all of the signs explanatory variables are consistent with the theory. Adjusted  $R^2$  shows that financial performance is strongly explained by the CSR disclosure and other explanatory variables in which the overall estimation is good at 65.16 percent. There is no evidence of positive first-order serial correlation. As can be seen in Model 3, when Tobin's *q* ratio (Q) as a measure of financial performance continues to show that the FE model has an advantage over the RE model. This shows that the Hausman test result rejects the null hypothesis that there is no evidence of fixed effects on any companies at 5 percent level significant. Overall  $t$  statistics are strongly significant related to financial performance ( $p$ -value  $< 0.01$ ) and Adjusted  $R^2$  value is 77.92 percent. In conclusion, comparing the two models the FE

**Table II.**  
Effect of CSR on Financial Performance using Unbalanced Data

Variable	Model 1 (ROA)		Model 2 (Ri)		Model 3 (Q)	
	FE Model	RE Model	FE Model	RE Model	FE Model	RE Model
C	-0.0167 (0.0243)	-0.7799*** (0.1962)	-4.0428 (0.0842)	-3.3761*** (0.4171)	-0.0485 (0.0842)	-0.9001*** (0.3466)
CSR	0.0021** (0.0008)	0.0221** (0.0088)	0.0258*** (0.0060)	0.0386*** (0.0047)	-0.0053** (0.0026)	-0.0040 (0.0050)
BETA	0.0087*** (0.0016)	-0.0673 (0.0483)	-0.3215*** (0.0329)	-0.3084*** (0.0270)	-0.0385*** (0.0074)	-0.0870** (0.0380)
LEV	-0.0457 (0.0022)	-0.3685* (0.1904)	-0.2749*** (0.0144)	-0.2264*** (0.0509)	0.8360*** (0.0172)	0.8977*** (0.0764)
Log SIZE	0.0191*** (0.0014)	0.2057*** (0.0401)	0.4265*** (0.0167)	0.3492*** (0.0373)	0.3778*** (0.0123)	0.4260*** (0.0319)
Log SALES	-0.0168*** (0.0013)	-0.1785*** (0.0395)	-0.1109*** (0.0149)	-0.0985*** (0.0115)	-0.3154*** (0.0148)	-0.3376*** (0.0199)
ATR	0.0374*** (0.0026)	0.6213*** (0.0675)	0.2917*** (0.0478)	0.2763*** (0.0707)	0.7031*** (0.0227)	0.7423*** (0.0946)
EPS	0.0007*** (6.22E-05)	0.0055*** (0.0013)	0.0057*** (0.0005)	0.0052*** (0.0006)	0.0011*** (0.0001)	0.0018*** (0.0003)
R <sup>2</sup>	0.7273	0.3332	0.7124	0.4146	0.8177	0.5439
Adjusted R <sup>2</sup>	0.6696	0.3292	0.6516	0.4111	0.7792	0.5412
F-statistic	12.620***	83.793***	11.722***	118.774***	21.236***	200.011***
DW-statistic	2.3375	1.8288	2.4820	2.0825	2.3619	2.1050
Hausman test ( $\chi^2$ )		19.3586***		168.4172***		19.1506***

Notes: (i) Figures in parentheses are standard errors robust to heteroscedasticity,  
(ii) DW statistic is Durbin-Watson d test for autocorrelation,  
(iii) \*  $p < 0.10$ , \*\*  $p < 0.05$ , and \*\*\*  $p < 0.01$ ,  
(iv) Number of observation is 1182.

model is more precise than the RE model, since the result of the Hausman test rejects the hypothesis all  $\mu_{it}$  are equal to zero.

The detailed analysis, based on the dimension of CSR, is reported in Table III. Again, overall, with three alternate dependent variables, as measures of financial performance, the Fixed Effects (FE) model is more appropriate compared to the Random Effects (RE) model. The Hausman test results support the hypothesis that the individual effect is related to the independent variables. Summarized, the fixed effects are decisively more precise in the estimation process than the random effects which in the results of the Hausman test are rejection of the hypothesis there are no fixed effects in existence in any companies. Referring to the results of the dimensions of CSR and using the fixed effects model, apart from the product (PROD) and environmental dimension (ENV), it was found that the overall  $t$  test of explanatory variables are significant at least at  $p$ -value  $< 0.05$ . Sign of CSR dimension variables shows mixed results. The environmental (ENV) dimension is negative significant for Model1, whereas Employee (EMPL) and Community involvement (COM) dimensions show a negative significant impact on the financial performance for Model 3. Adjusted  $R^2$  shows that financial performance is also solidly explained by the dimension of CSR and other explanatory

**Table III.**  
Effects of CSR Dimensions on Financial Performance using Unbalanced Data

Variables	Model 1 (ROA)		Model 2 (Ri)		Model 3 (Q)	
	FE Model	RE Model	FE Model	RE Model	FE Model	RE Model
C	-0.0184** (0.0255)	-0.7723*** (0.2173)	-4.0602*** (0.0951)	-3.3769*** (0.3878)	-0.5103*** (0.0974)	-0.8403** (0.3540)
EMPL	0.0029** (0.0013)	0.0414 (0.0265)	0.0536*** (0.0173)	0.0757*** (0.0219)	-0.0127*** (0.0043)	-0.0249*** (0.0047)
COM	0.0023** (0.0013)	0.0395*** (0.0126)	0.0449*** (0.0148)	0.0645*** (0.0212)	-0.0059*** (0.0039)	0.0198 (0.0136)
PROD	0.0040*** (0.0014)	0.0326 (0.0321)	-0.0042 (0.0152)	0.0026 (0.0264)	0.0127** (0.0057)	0.0169 (0.0140)
ENV	-0.0034*** (0.0013)	-0.0325 (0.0277)	0.0149 (0.0203)	0.0143 (0.0167)	-0.0210 (0.0139)	-0.0414** (0.0194)
BETA	0.0080*** (0.0012)	-0.0685 (0.0509)	-0.3289*** (0.0309)	-0.3085*** (0.0267)	-0.0373*** (0.0052)	-0.0937** (0.0397)
LEV	-0.0439*** (0.0022)	-0.3746* (0.1930)	-0.2771*** (0.0184)	-0.2343*** (0.0546)	0.8305*** (0.0229)	0.8929*** (0.0786)
Log SIZE	0.0179*** (0.0011)	0.2038*** (0.0394)	0.4199*** (0.0161)	0.3471*** (0.0359)	0.3723*** (0.0122)	0.4223*** (0.0329)
Log SALES	-0.0166*** (0.0012)	-0.1790*** (0.0395)	-0.1164*** (0.0137)	-0.0996*** (0.0113)	-0.3108*** (0.0151)	-0.3359*** (0.0202)
ATR	0.0375*** (0.0023)	0.6192*** (0.0688)	0.3106*** (0.0481)	0.2795*** (0.0709)	0.6930*** (0.0227)	0.7333*** (0.0939)
EPS	0.0007*** (6.38E-05)	0.0055*** (0.0013)	0.0056*** (0.0005)	0.0052*** (0.0006)	0.0012*** (0.0001)	0.0018*** (0.0003)
R <sup>2</sup>	0.7006	0.3350	0.7172	0.4171	0.7997	0.5466
Adjusted R <sup>2</sup>	0.6362	0.3293	0.6564	0.4122	0.7567	0.5427
F-statistic	10.881***	58.991***	11.795***	83.803***	18.570***	141.177***
DW-statistic	2.3207	1.8244	2.4855	2.0763	2.3746	2.1055
Hausman test ( $\chi^2$ )		16.823***		215.802***		17.543***

Notes: (i) Figures in parentheses are standard errors robust to heteroscedasticity,  
(ii) DW statistic is Durbin-Watson d test for autocorrelation,  
(iii) \*  $p < 0.10$ , \*\*  $p < 0.05$ , and \*\*\*  $p < 0.01$ ,  
(iv) Number of observation is 1182.

variables for all three models in which the overall estimation ranges between 63.62 and 75.67 percent.

### 4.3. Estimation Results of Dynamic Effects

In addition to the statistical approach, this section also tests for dynamic effects in the model. According to Elsayed and Paton (2004), the general approach in studies of financial performance, in the area of industrial organization, uses the dynamic effects in panel data models. Therefore, this section attempts to explore any dynamic effect between CSR and a firm's financial performance.

Table IV presents the dynamic panel data estimates for CSR and the firm's financial performance. Table IV shows that for statistical consistency, this procedure

**Table IV.**  
Dynamic Effect of CSR and Dimension of CSR on  
Financial Performance using Unbalanced Data

Variables	Model 1 (ROA)	Model 2 (Ri)	Model 3 (Q)	Model 1 (ROA)	Model 2 (Ri)	Model 3 (Q)
Dependent lag1	2.0693** (0.9115)	-1.1751*** (0.1047)	0.6440*** (0.1186)	0.5315 (1.0130)	-1.1177*** (0.1014)	0.8662** (0.3611)
Lag CSR	-0.7435 (1.0774)	0.3795** (0.1735)	-0.0298 (0.0589)	-	-	-
Lag EMPL	-	-	-	-0.4926** (0.2470)	0.4118 (0.2679)	-0.0399 (0.1549)
Lag COM	-	-	-	0.7785 (1.0123)	-0.6413** (0.2994)	0.0022 (0.1480)
Lag PROD	-	-	-	-0.7490 (0.8251)	-0.2803 (0.5279)	-0.3611 (0.3013)
Lag ENV	-	-	-	1.1811 (0.9038)	0.5436 (0.4383)	0.2957 (0.2521)
Lag BETA	-1.3731 (1.3254)	0.1224 (0.1575)	0.1029* (0.0551)	-0.2880 (0.2243)	0.0354 (0.1607)	0.1688** (0.0740)
Lag LEV	-0.6881 (1.1997)	0.0549 (0.1521)	0.1228 (0.0779)	-0.2677 (0.3107)	0.2392 (0.1586)	0.1546** (0.0769)
Lag SIZE	2.3193 (2.1561)	0.0065 (0.1681)	0.5514*** (0.1746)	-0.3129 (0.3018)	0.1372 (0.1496)	0.7753** (0.3106)
Lag SALES	0.6762 (1.3946)	-0.3659* (0.2064)	-0.5836*** (0.2014)	0.4550 (0.4612)	-0.2715 (0.2051)	-0.7934** (0.4021)
Lag ATR	-0.9578 (1.0105)	0.1291 (0.1668)	0.5504*** (0.1615)	-0.2738 (0.3941)	0.1906 (0.1721)	0.6917** (0.2981)
Lag EPS	-1.1160 (0.7911)	1.0533*** (0.1995)	0.1076 (0.0709)	-0.2346 (0.5473)	1.1613*** (0.2145)	-0.1303 (0.1205)
AR(1)	1.6180	0.9921	-0.3302	3.2410***	0.5010	0.3455
AR(2)	0.5907	-11.2938***	-5.1209***	-1.6210	-10.5948***	-5.3277***
J-statistic	1.6272	9.2560	52.2400***	2.3400	13.5104	18.8048

Notes: (i) Figures in parentheses are standard errors robust to heteroscedasticity,  
(ii) AR(1) and AR(2) are tests for first and second order autocorrelation in the differenced residual;  
(iii) J-statistic is the test for the validity of overidentifying restriction,  
(iv) \*  $p < 0.10$ , \*\*  $p < 0.05$ , and \*\*\*  $p < 0.01$ ,  
(v) Number of observations is 1182.

requires the absence of first order serial correlation for both Models 2 and 3. The  $J$ -statistic tests, of overidentifying restrictions, provide support for the choice of instrument set for overall dependent variables. Under the null hypothesis, the overidentifying restrictions are satisfied, since the  $J$ -statistic computed value is lower than  $\chi^2=20.0902$  at 1 percent level of significant and eight degrees of freedom for Models 1 and 2.

Overall the first lag dependent variables are significant at least at 5 percent. This means that the long-run impact of financial performance has occurred. In addition, the first lag CSR variable is only positively significant related to financial performance as represented by market based measures (Ri). But, for Models 1 and 3, with the ROA and Tobin's  $q$  as the measures for financial performance, neither of the lag coefficients is significant. There are only two controlled variables, namely lag SALES and lag EPS which are significant at 10 percent and 1 percent level for Model 2. There are four

controlled variables, namely lag BETA, lag SIZE, lag SALES, and lag ATR which are significantly related to financial performance for Model 3 at least at 10 percent levels, whereas, for Model 1, neither of the lag coefficients of controlled variables are significant.

Results for the detailed analysis, based on dimensions of CSR, are also shown in Table IV. It can be seen that only two dimensions of CSR are significant, lag EMPL (employee dimension) and lag COM (community involvement dimension) are negative significant at  $p$ -value  $< 0.05$  level when ROA and Ri represent dependent variables. Except lag ROA, both lag Ri and lag Q are significantly related to the long-term relationships. In general, there are a limited number of control variables with a significant influence on financial performance in the long-term. In other words, although dynamic effects may be important in models of a firm's performance, these results support the latest study by Elsayed and Paton (2004) – there is no empirical evidence to suggest that the relationship between the dimensions of CSR and a firm's financial performance is affected in the long-run.

## 5. Discussion and Conclusion

Based on the findings presented in Section 4 this study designed the research to answer the question of whether the results present robust and generally acceptable findings on the relationship between CSR and financial performance for Malaysian public companies. The sample size is based on 200 companies, with the highest market capitalizations, listed on the main board of the Bursa Malaysia during the period 2000 to 2005. For determinants of relationships between CSR and financial performance, the outcome of the regression analysis fits the theory relatively well. The results from the evaluation yield the following discussions.

The findings obtained reveal that the situation in Malaysia is in a period of infancy with respect to the disclosure of CSR information. The findings presented in this study suggest that CSR has a contemporaneous impact on financial performance for companies listed in Bursa Malaysia. The financial performance change, in a statistically significant manner, in response to CSR increases and decreases is quite evident. This is widely supported by existing findings from the developed markets. These results support the argument that CSR, as the decoupling strategy for Malaysian companies, makes them follow business associates from overseas who are already applying CSR reporting and are also trying to be good corporate citizens for the purpose of obtaining contracts from the government (Amran and Devi, 2007). Hence, most of them are involved in socially responsible activities.

When ROA and Tobin's  $q$  are used as dependent variables for Models 1 and 3, and using the fixed effects model, it was found that product dimension was positively significant related to financial performance. The argument supports the view that companies which have solid financial performance have more resources available to invest in product development. In addition, the care activities related to the environmental dimension, that are assumed to have a higher cost as well as community involvement, were found to be negatively significant related to subsequent financial performance for Models 1 and 3. The findings indicate that community involvement

activities such as philanthropy, with its pressure on how money is spent rather than made, fails to add sufficient value to the reputation of the firm among stakeholders (Whitehouse, 2006). The reason behind this is that in order to implement environmental management plans, some companies have been investing as capital expenditure. These investments influence the companies' cash flow during financial reporting. It is also noted that the number of companies producing stand alone environmental reports is very low (Nik Ahmad and Sulaiman, 2004). Therefore, companies can improve their social performance through proactive promotion and recruiting of managers who are concerned with environmental scanning (Simerly, 2003). However, these results consistently support prior studies by Balabanis, Philipps and Lyall (1998); Mahoney and Roberts (2007); and Wagner (2005).

The findings also confirm the solid relationship between CSR and financial performance for all three models using GLS with the fixed effect technique. The Hausman test results support the hypothesis that the unobserved individual effects are related to the independent variables. As summarized, the fixed effects model is better for the estimation process compared to the random effects model. Finally, there are reported results of a dynamic model between the CSR and the financial performance. In general, the findings confirm that there is limited evidence of a significant relationship between CSR and financial performance in a long-term relationship. These results suggest that allowing company heterogeneity is much more crucial than dynamic effects in this study.

Some limitations of the study and suggestions on how to overcome them are elaborated in the following arguments. The first limitation is the inconsistency of results obtained using various financial performances. This problem can be solved by future research paying more attention to the selection of measures for the firms' financial performance used in the study of CSR. Secondly, the sample size in this study, taken from the 200 highest market capitalisations of companies listed in Bursa Malaysia, is also a limitation as it imposes certain limitations on the generalization of the findings. The inclusion of medium-sized firms and industry characteristics in the future might improve the results. Lastly, given that this study has considered the evaluation for only six years these findings should be interpreted with caution. Future research in this area should consider it necessary to extend the number of periods studied to evaluate recent legal requirements as well.

## REFERENCES

Abbott, W.F., Monsen, R.J., 1979. On the measurement of corporate social responsibility: Self-report disclosure as a method of measuring social involvement. *Academy of Management Journal* 22, 501-15.

Abdul Hamid, F.Z., 2004. Corporate social disclosure by banks and finance companies: Malaysian evidence. *Corporate Ownership and Control* 1(4), 118-129.

Abu-Baker, N., Nasser, K., 2000. Empirical evidence on corporate social disclosure (CSD) practices in Jordan. *International Journal of Commerce and Management* 10 (3/4), 20-35.



Al-Tuwaijri, S.A., Christensen, T.E., Hughes II, K.E., 2004. The relations among environmental disclosure, environmental performance, and economic performance: A simultaneous equations approach. *Accounting, Organizations and Society* 29, 447-471.

Amran, A., Devi, S.S., 2007. Corporate social reporting in Malaysia: An institutional perspective. *World Review of Entrepreneurship, Management and Sustainable Development (WREMSD)* 3 (1), 20-36.

Arellano, M., Bond, S., 1991. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies* 58, 277-297.

Aupperle, K.E., Carroll, A.B., Hatfield, J.D., 1985. An empirical examination of the relationship between corporate social responsibility and profitability. *Academy of Management Journal* 28 (2), 446-463.

Balabanis, G., Philip, H.G., Lyall, J., 1998. Corporate social responsibility and economic performance in the top British companies: are they linked?. *European Business Review* 98 (1), 25-44.

Baltagi, B.H., 1995. *Econometric Analysis of Panel Data*, Wiley, Chichester.

Berman, S.L., Wicks, A.C., Kotha, S., Jones, T.M., 1999. Does stakeholder orientation matter?. The relationship between stakeholder management models and firm financial performance. *Academy of Management Journal* 42 (5), 488-506.

Bernhut, S., 2002. Corporate social responsibility, with Pratima Bansal. *Ivey Business Journal* 66 (4), 18-20.

Brammer, S., Pavelin, S., 2004. Building a good reputation. *European Management Journal* 22 (6), 704-713.

Brown, B., Perry, S., 1994. Removing the financial performance halo from fortune's "most admired" companies. *Academy of Management Journal* 37 (5), 1347-1359.

Che Zuriana, M.J., Kasumalinda, A., Rapih, M., 2002. Corporate social responsibility disclosure in the annual reports of Malaysian companies: A longitudinal study. *Social and Environmental Accounting Journal* 22 (2), 5-9.

Cochran, P.L., Wood, R.A., 1984. Corporate social responsibility and financial performance. *Academy of Management Journal* 27 (1), 42-56.

Christopher, T., Hutomo, Y.B.S., Monroe, G., 1997. Voluntary environmental disclosure by Australian listed mineral mining companies: an application of stakeholder theory. *The International Journal of Accounting and Business Society* 5 (1), 42-65.

Demsetz, H., Villalonga, B., 2001. Ownership structure and corporate performance. *Journal of Corporate Finance* 7 (3), 209-333.

Elsayed, K., Paton, D., 2004. The impact of environmental performance on firm performance: static and dynamic panel data evidence. *Structural Change and Economic Dynamics* 16 (3), 392-412.

Fombrun, C., Shanley, M., 1990. What's in a name? Reputation building and corporate strategy. *Academy of Management Journal* 33, 233-56.

Fukukawa, K., Moon, J., 2004. A Japanese model of corporate social responsibility? A study of website reporting. *Journal of Corporate Citizenship* 16, 45-59.

Gardiner, L., Rubbens, C., Bonfigliani, E., 2003. Research big business, big responsibilities. *Corporate Governance* 3 (3), 67-77.

Gelb, D.S., Strawser, J.A., 2001. Corporate social responsibility and financial disclosures: An alternative explanation for increased disclosure. *Journal Business Ethics* 33, 1-13.

Graves, S. B., Waddock, S. A., 1994. Institutional ownership and corporate social performance. *Academy of Management Journal* 37 (4), 1034-1046.

Greene, W.H., 2008. *Econometric Analysis*, sixth edition, Pearson Education Inc, New Jersey.

Griffin, J.J., Mahon, J.F., 1997. The corporate social performance and corporate financial performance debate: Twenty-five years of incomparable research. *Business and Society* 36, 5-31.

Gujarati, D. N., 2003. *Basic Econometrics*, Fourth Edition, McGraw-Hill, Boston.

Guthrie, J., Parker, L.D., 1990. Corporate social disclosure practice: a comparative international analysis. *Advance in Public Interest Accounting* 3, 159-75.

Hackston, D., Milne, D.M., 1996. Some determinant of social and environmental disclosures in the New Zealand companies. *Accounting, Auditing and Accountability Journal* 9 (1), 77-108.

Han, K.C., Suk, D.K., 1998. The effect of ownership structure of firm performance: additional evidence. *Review of Financial Economics* 7 (2), 143-55.

Hannon, J., Milkovich, G., 1996. The effect of human resource reputation signals on share prices: An event study. *Human Resource Management* 35 (3), 405-424.

Haniffa, R. M., Cooke, T. E., 2005. The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy*, 1-40.

Hirsch, B.T., Seaks, T.R. 1993. Functional form in regression models of Tobin's q", *Review of Economics and Statistics* 75 (2), 381-386.

Hsiao, C., 2003. *Analysis of Panel Data*, 2<sup>nd</sup> Edition, Cambridge University Press.

Hughes, S. B., Anderson, A., Golden, S., 2001. Corporate environmental disclosures: are they useful in determining environmental performance?. *Journal of Accounting and Public Policy* 20, 217-240.

Judge, S. A., Smith, W. E., Carter, H. R., Lutkepohl, H., Lee, T-C., 1982. *The Theory and Practice of Econometrics*, John Wiley and Sons, New York.

Kin, H.S., 1990. Corporate social responsibility disclosures in Malaysia. *Akauantan Nasional* January, 4-9.

Kuasirikun, N., Sherer, M., 2004. Corporate social accounting disclosure in Thailand. *Accounting, Auditing and Accountability Journal* 17 (2), 629-660.

Lindenberg, E., Ross, S., 1981. Tobin's q ratio and industrial organization. *Journal of Business* 54 (1), 1-32.

Mahoney, L., Roberts, R.W., 2007. Corporate social performance, and financial performance and institutional ownership in Canadian firms. *Accounting Forum* 31, 233-253.

Margolis, J. D., Walsh, J. P., 2003. Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly* 48, 655-689.

McGuire, J., Sundgren, A., Schneeweis, T., 1988. Corporate social responsibility and firm financial performance. *Academy of Management Journal* 31 (4), 854-872.

McWilliams, A., and Siegel, D., 2001. Corporate social responsibility: a theory of the firm perspective. *Academy of Management Review* 26 (1), 117-127.

Moor G., Robson, A., 2002. The UK supermarket industry: an analysis of corporate social and financial performance. *Business Ethics: A European Review* 11 (1), 25-39.

Munoz, T.G., 2005. German demand for tourist in Spain. *Tourism Management*, 1-11.

Murphy, E., 2002. Best corporate citizens have better financial performance. *Strategic Finance* 83 (7), 20-21.

Nik Ahmad, N.Z., Abdul Rahim, N.L.A., 2003. Awareness of the concepts of corporate social responsibility among Malaysian managers in selected public listed companies, paper presented at the 7<sup>th</sup> International Conference on Global Business and Economic development, Plaza Athanee Hotel, Bangkok, Thailand, 8-11 January.

Nik Ahmad, N. N., Sulaiman, M., 2004. Environmental disclosure in Malaysian annual reports: a legitimacy theory perspective. *International Journal of Commerce and Management* 14 (1), 44-58.

- Nik Ahmad, N.N., Sulaiman, M., Siswantoro, D., 2003. Corporate Social Responsibility disclosure in Malaysia: An analysis of annual reports of KLSE listed companies. *IUM Journal of Economics and Management* 11 (1), 1-37.
- Orlitzky, M., Schmidt, F.L., Rynes, S.L., 2003. Corporate Social and Financial Performance: A Meta-Analysis. *Organization Studies* 24 (3), 403-441.
- Imam, S., 2000. Corporate social performance reporting in Bangladesh. *Managerial Auditing Journal* 15 (3), 133-141.
- Investor Digests., 2003. Why Corporate Social Responsibility Matters. Available on Database: Business Source Premier, May, 16.
- Itkonen, L., 2003. Corporate social responsibility and financial performance. *Academy of Management Journal* 6, 321-338.
- Pava, M. L., Krausz, J., 1996. The association between corporate social-responsibility and financial performance – the paradox of social cost. *Journal of Business Ethics* 15 (3), 321-357.
- Posnikoff, J. F., 1997. Disinvestment from South Africa: They did well by doing good. *Contemporary Economic Policy* 15 (1), 76–86.
- Rashid, Z. A., Ibrahim, S., 2002. Executive and management attitudes towards corporate social responsibility in Malaysia. *Corporate Governance* 2 (4), 10-16.
- Roman, R.M., Hayibor, S., Agle, B.R., 1999. The relationship between social and financial performance: repainting a portrait. *Business and Society* 38, 109-18.
- Rosen, B.N., Sandler, D.M., Shani, D., 1991. Social issues and socially responsible investment behavior: a preliminary empirical investigation. *Journal of Consumer Affairs* 25 (2), 221-34.
- Ruf, B.M., Muralidhar, K., Brown, R.M., Janney, J.J., Paul, K., 2001. An empirical investigation of the relationship between change in corporate social performance and financial performance: a stakeholder theory perspective. *Journal of Business Ethics* 32, 143-156.
- Simerly, R.L., 2003. An empirical examination of the relationship between management and corporate social performance. *International Journal of Management* 20 (3), 353-359.
- Simpson, W.G., Kohers, T., 2002. The link between corporate social and financial performance: Evidence from the banking industry. *Journal of Business Ethics* 35, 97-109.
- Spiller, R., 2000. Ethical business and investment: a model for business and society. *Journal of Business Ethics* 27, 149-60.
- Subroto, P. H., 2003. A correlational study of corporate social responsibility and financial performance: an empirical survey toward ethical business practices in Indonesia. Unpublished Doctoral Dissertation. Capella University.

Perry, M., Sheng, T.T., 1999. An Overview of trends related to environmental reporting in Singapore. *Environmental Management and Health* 10 (5), 310-320.

Teoh, H.Y., Thong, G., 1984. Another look at corporate social responsibility and reporting: an empirical study in a developing country. *Accounting, Organizations and Society* 9 (2), 189 -206.

Thompson, P., Zakaria, Z., 2004. Corporate social responsibility reporting in Malaysia progress and prospects. *Journal of Corporate Citizenship* 13, 125-136.

Tsang, E. W. K., 1998. A longitudinal study of corporate social reporting in Singapore: the case of the banking, food and beverages and hotel industries. *Accounting Auditing and Accountability Journal* 11 (5), 624-635.

Tsoutsoura, M., 2004. Corporate social responsibility and financial performance, Working paper series (7), Center for Responsible Business, Berkeley: University of California.

Waddock, S.A., Graves, S.B., 1997. The corporate social performance-financial performance link. *Strategic Management Journal* 18, 303-19.

Wagner, M., 2005. How to reconcile environmental and economic performance to improve corporate sustainability: corporate environmental strategies in the European paper industry. *Journal of Environmental Management* 76, 105-118.

Williams, S.M., Ho.,W.P.C., 1999. Corporate social disclosures by listed companies on their web sites: An international comparison. *The International Journal of Accounting* 34 (3), 389-419.

Williams, A., Siegel, A., 2000. Corporate social responsibility and financial performance: correlation or misspecification?. *Strategic Management Journal* 21 (5), 603-09.

Wiseman J., 1982. An evaluation of environmental disclosures made in corporate annual reports. *Accounting, Organizations and Society* 7 (1), 53-63.

Wright, P., Ferris, S.P., 1997. Agency conflict and corporate strategy: Effect of divestment on corporate value. *Strategic Management Journal* 18 (1), 77-83.

Yoshikawa, T., Phan, P.H., 2003. The performance implications of ownership-driven governance reform. *European Management Journal* 21 (6), 698-06.

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