The Effects of Earnings Management, Free Cash Flow and Industry on Firm Performance: Empirical Evidence from Shariah-Compliant Companies in Malaysia

Mohd Taufik Mohd Suffian¹, Amir Hakim Osman², Zuraidah Mohd Sanusi³, Abdul Rahim Ridzuan⁴

¹²Accounting Research Institute (ARI) & Faculty of Accountancy, Universiti Teknologi MARA, Perak Branch, Tapah Campus, Tapah Road, 35400, Perak, Malaysia, ¹E-mail: taufiksuffian@gmail.com (Corresponding author)
³Accounting Research Institute (ARI), Universiti Teknologi MARA (UiTM), Selangor Branch, Shah Alam Campus, 40450, Selangor, Malaysia
⁴Faculty of Business and Management, Universiti Teknologi MARA (UiTM), Melaka Branch, Lendu Campus, 40450, Melaka, Malaysia

Abstract
This study examined the relationship between Shariah-compliant firms' market performance with earnings management, free cash flow and industry. In this analysis, data from 2009 to 2011 were used to assess the post-financial crisis impact in 2008 before the 2012 Malaysian Code on Corporate Governance was adopted. This research duplicated the method used by Roychowdhury to assess the companies that are accused of engaging in the selling of products at an inflated price and that have excessive discretionary spending which is the proxy for earnings management. Free cash flow was calculated by deducting capital expenditure from cash flow operations. Although, industry was denoted as number 1 to 9 based on the Bursa Malaysia (BM) type of industry. Linear regression was used to assess the effect of earnings management, free cash flow and industry on the output of shariah-compliant companies in Malaysia. The results showed that Shariah-compliant companies have been able to improve their performance through free cash flow and earnings management practices. Free cash flow was found to increase linearly with firm performance which contradicts the previous result. The type of industry in which a firm operates often plays an important role in the success of the business. This research, however, could not classify the industry that outperforms other industries as the mean comparison was negligible. Such results provided no clear proof that sharia-compliant companies would comply with Shariah laws to prevent ‘gharar’ (uncertainties) in business practices.

Key words
Shariah-compliant Companies, Earnings Management, Free Cash Flow, Industry

1. Introduction
Investors will inevitably choose to invest in profitable companies to ensure a high return on the investment. The main source of information regarding the financial performance and position of a company is presented in its financial statements. Normally, managers will present the best financial statements to the company's stakeholders as a leverage to gain cash inflow and trust from the stakeholders. Since stakeholders rely heavily on financial information, managers tend to manipulate financial statements to
ensure that the statements convey information that pleased the stakeholders. The manipulation of accounting figures is known as Earnings Management (EM). This concept is supported by Healy & Wahlen (1999) who stated that managers are willing to go as far as necessary to gain the trust and benefits of their stakeholders by displaying a false perception of the company’s positive performance. Yan Xiong (2006) further explained that managers may capitalize their expertise of business and accounting systems to expand the effectiveness of financial statements.

There are three types of earnings management, namely, Accrual Earnings Management (AEM), Real Earnings Management (REM) and Fraudulent Accounting. Gunny (2005) stated there are four types of REM which are favoured by managers, specifically, investing myopically in R&D to increase income, investing myopically in SG&A, timing of income recognition from the disposal of long-lived assets and investment and prices slash to boost sales in the current period and/or overproducing to decrease COGS expense. Roychowdhury (2006) defined REM activities as the departure from normal operational practices which is motivated by managers’ desire to mislead some stakeholders into believing certain financial reporting goals have been met in the normal course of operations.

Free cash flow (FCF), on the other hand, is also known as ‘cash is king’ by Western accounting theorists back in the late 1980s (Zhou et al., 2012). According to investopedia.com, FCF is the cash that the company generates after laying out the money required to maintain or expand its asset base. According to Richardson (2006), free cash flow is cash flow beyond what is necessary to maintain assets in place and to finance incoming new investments. In other words, FCF is the cash for distribution among all the securities holders of an organization such as convertible security holders, debt holders, equity holders and preferred stockholders.

The industry where a company is a part of plays an important role in determining its performance (Osman, 2008). This is consistent with the findings of Filatotchev et al. (2005) where different industries have a different level of performance. Studies on different industries that produce dissimilar results indicate that the industry where the company is a part of and the nature of its business is significant in influencing the company’s performance. Therefore, a different industry might impact the company’s performance in a distinctive manner.

This study is a continuation of the work of Yusarina et al. (2013) who studied the relevance of earnings management, proxy by abnormal cash flow from operation (CFO) and leverage on the market performance of Shariah-compliant companies in Malaysia. This paper further sheds light on the other types of REM which are abnormal cost of goods sold (COGS) and abnormal discretionary expenses (DISEXP). The results of the study will contribute to the development of the best guiding principles to detect real earnings activities. It will help the authority and the regulatory bodies to come out with the best guiding principles to prevent real earnings activities while helping investors to make a better decision-making in their investments (Yusarina et al., 2013).

In addition, this study also trained its sight on the effect of FCF on performance to evaluate whether excess cash can adversely influence performance and signals inefficiencies in management. It is also important to study the relationship between FCF and market performance because of lack of clear empirical conclusion which is important basis for moderating overall grasp of corporate free cash and worth researching (Zhou et al., 2012).

Another relationship that needs to be examined is the link between the industry and performance. This will help to identify whether the industry affects performance level as suggested by Osman (2008). By using the data from 2009 to 2011, this study aims to identify the impact of financial distress that happened in 2008 to Shariah-compliant companies in Malaysia. This study also will provides a clear picture of the impact of financial distress in 2008 and the post introduction of Malaysian Code of Corporate Governance (MCCG) 2007 and prior the introduction of Malaysian Code of Corporate Governance (MCCG) 2012 in Malaysia. However, this study will not take the consideration the elements of corporate governance in Malaysia.

2. Literature review and hypotheses development

This study is an extension of the study by Yusarina et al. (2013) where they studied the relevance of earnings management, proxy by abnormal cash flow from operation (CFO) and leverage on the market
performance of Shariah-compliant companies in Malaysia. On the other hand, this paper will focus on the other types of REM which are abnormal cost of goods sold (COGS), abnormal discretionary expenses (DISEXP), and free cash flow (FCF). There is an urgent need to study the impact of REM and FCF on the market performance of Shariah-compliant companies and to scrutinize if those companies participate in non-permissible activities such as “riba” (interest) and “gharar” (uncertainty). By definition, riba’ is charged interest that needs to be paid to the moneylender due to deferred payment. Therefore, riba’ is considered unlawful under Shariah law. This study will also focus on the effect of industry on the company’s performance.

Islam has forbidden all forms of riba’ since it involves oppression and exploitation as stated in Al-Quran, “...they say: trade is like riba’, but Allah has permitted trading and forbidden (haram) riba’ (usury)” (Al-Baqarah: 275-281), while in another verse, “O you believe! Eat not your property among yourselves unjustly except in a trade amongst you by mutual consent” (An-Nisa’: 29).

Allah S.W.T. has said in the Al-Quran about the concept of riba’ and consequences of riba’ which includes “in the hereafter, they shall be raised by Allah like those who have been driven to madness by the touch of the devil (Al-Baqarah: 275)”. While according to the Hadith reported by Muslim has mentioned “A dirham of riba’ which a man receives knowingly is worse than committing adultery 36 times”.

The Islamic Shariah law covers every aspect of life such as crime, politics, and economics. The main sources of Shariah law are the percepts from the Al-Quran and the examples set by Prophet Muhammad S.A.W. in the Sunnah. In business, Shariah-compliant companies are prohibited from conducting impermissible (haraam) activities in Islam, for example, businesses that have links to alcohol, pork, pornography, tobacco, gambling, and many forms of western entertainment and advertising that are contrary to Muslim values. In Malaysia, the Syariah (Shariah) Index (SI) was established on April 17, 1999, by Bursa Malaysia (BM) which was known as Kuala Lumpur Stock Exchange (KLSE) back then. SI was enacted to facilitate participation in equity investments that are compatible with Islamic principles (Sadeghi, 2008; Isa et al., 2013).

According to Bhojraj et al. (2009) and Cohen & Zarrowin (2010), REM is implemented in countries with strong investor protection. Their study revealed that these countries participate in REM instead of AEM. As reported by the quarterly bulletin of Securities Commission of Malaysia (SC) which was released in October 2009, Malaysia has continued to receive positive reports on its corporate governance framework, particularly for its investor protection regime. As a result, Malaysia has the distinction of being among the top ten countries in the world that has a solid investor protection regime. Some of the dimensions that are covered in the investor protection are the transparency of transactions, the extent of directors’ liability for self-dealing and the ease of shareholders’ suits.

The practice of earnings management by managers will inevitably impact the performance of the company in the long run. According to Subramanyam (1996); DeFond & Park (1997); and Altamuro (2005), the managers’ expectation of the company is linked with earnings management as the managers tend to downplay future income in order to boost current income (Graham et al., 2004). Hence, hypothesis 1 and 2 are as the following:

Hypothesis 1: The abnormal cost of goods sold (COGS) has a significant relationship with firm performance.

Hypothesis 2: The abnormal discretionary expenses (DISEXP) have a significant association with firm performance.

Jensen (1976) explained that firms with excess cash will face greater agency problems as the free cash flow exacerbates the conflict of interest between the shareholders and managers. The free cash flow agency theory indicates that a firm with fewer free cash flows outperforms the firms with more free cash flows. Brush et al. (1998) presented consistent results as per agency theory where firms with free cash flow perform worse than firms without free cash flow. Agrawal & Jayaraman (1994) shared the same view and claimed that agency cost can be controlled by dividends and debt mechanism. It is also important to study the relationship between FCF and market performance because of the lack of clear empirical conclusion which is important basis for moderating overall grasp of corporate free cash and worth researching (Zhou et al., 2012). When taking the view of agency theory into account, hypothesis 3 can be described as:
Hypothesis 3: The free cash flow (FCF) has a significant relationship with firm performance.

In regards to the link between the industry and performance, it is widely accepted that the industry where a company is a part of can lead to different outcomes. Previous research on Malaysian Public Listed Companies concluded that the type of industry has a significant relationship with performance (Osman, 2008). Similar relationships can be found in other countries as well (Filatotchev et al., 2005). Nevertheless, previous researchers found mixed results on the relationship between the industry and performance. As a result, the link between the industry and performance can be hypothesized as:

Hypothesis 4: The industry has a significant relationship with firm performance.

3. Methodology of research

This study only relied on the financial data from Data Stream Thompson Reuters. The selected Shariah-compliant companies are the current public listed companies in Bursa Malaysia. Since Malaysia was listed among the top ten countries in the world with a solid investor protection in those particular periods, these ten countries have a greater probability of participation in earnings management (Bhojraj et. al., 2009 and Cohen & Zarowin, 2010). This study covered the samples from 2009 to year-end 2011 in order to capture the impact of financial distress in 2008 and before the introduction of the Malaysian Code of Corporate Governance (MCCG, 2012). Initially, data included were three years data totalling 2,901 which is listed in Bursa Malaysia and traded in the main market. After considering the limitations in some companies and excluding the companies that are listed under Financial Institutions Act 2012, this study only took into account 942 firms-years for abnormal COGS; 959 firms-years for abnormal DISEXP; and 956 firms-years for FCF. This means that some of the firms engaged in more than one REM activities and FCF.

Below are the adopted models from Roychowdhury (2006) to determine the suspect firms for each REM activity if the standardized residual (\(\varepsilon_t\)) show positive values:

The normal level of Cost of Goods Sold (COGS)

\[
\text{COGSt} / \text{At}-1 = \alpha_0 + \alpha_1 (1 / \text{At}-1) + \beta_1 (\text{St} / \text{At}-1) + \varepsilon_t \tag{1}
\]

Where:
- \(\text{COGSt}\) = Cost of goods sold (current year)
- \(\text{At} - 1\) = Total assets (previous year)
- \(\text{St}\) = Sales (current year)

The normal level of Discretionary Expenses (DISEXP)

\[
\text{DISEXPt} / \text{At}-1 = \alpha_0 + \alpha_1 (1 / \text{At}-1) + \beta_1 (\text{St}-1 / \text{At}-1) + \varepsilon_t \tag{2}
\]

Where:
- \(\text{DISEXPt}\) = Discretionary expenses (current year)
- \(\text{At}-1\) = Total assets (previous year)
- \(\text{St}-1\) = Sales (previous year)

The calculation of free cash flow (FCF) is:

\[
\text{FCF} = [(\text{Net profit} + \text{Interest Expense} + \text{Non-cash expense}) - \text{Increase in working capital} - \text{Capital expenditure}] \tag{3}
\]

The classification of the industry is based on the category by Bursa Malaysia (BM). There are eight major industries which are trading or services, industrial product, consumer product, construction, properties, technology, infrastructure, and plantation. Any industry that doesn’t fall under these categories will be classified as others. (Note that other companies which are regulated under Financial Institutions Act 2013 (previously known as Banking and Financial Institutions Act 1989) were not included in this study due to the differences in regulations act).
In order to determine the firm value, this study used Tobin’s Q, which is an option measure to find out market performance. According to Zunaidah Sulong & Fauzias Mat Nor (2008), the modified version of Tobin’s Q can be depicted as:

\[
\text{Tobin's Q} = \frac{\text{MVE} + \text{TDEBT}}{\text{TOTASST}} \quad (4)
\]

Where:
- \(\text{MVE}\) = market value of equity
- \(\text{TDEBT}\) = book value of short-term liabilities net of short-term assets, plus book value of long-term debt
- \(\text{TOTASST}\) = book value of total assets

The estimations models for each independent variables are:

**Abnormal Cost of Goods Sold (COGS)**

\[
\text{Tobin's Q} = \alpha_0 + \alpha_1 \text{RES}_\text{COGS} + \alpha_2 \text{Aud} + \alpha_3 \text{SIZE} + \alpha_4 \text{LEV} \quad (5)
\]

Where,
- Tobin’s Q = market value of equity plus book value of short-term liabilities net of short-term assets, plus book value of long-term debt, divided by book value of total assets
- \(\text{RES}_\text{COGS}\) = residual cost of goods sold
- \(\text{Aud}\) = dummy variable of ‘1’ if auditor is BIG4 (Deloitte, Ernst and Young, KPMG, PricewaterhouseCoopers) and ‘0’ otherwise
- \(\text{SIZE}\) = the natural logarithm of total assets
- \(\text{LEV}\) = total debt divided by total assets

**Abnormal Discretionary Expense (DISEXP)**

\[
\text{Tobin's Q} = \alpha_0 + \alpha_1 \text{RES}_\text{DISEXP} + \alpha_2 \text{Aud} + \alpha_3 \text{SIZE} + \alpha_4 \text{LEV} \quad (6)
\]

Where,
- Tobin’s Q = market value of equity plus book value of short-term liabilities net of short-term assets, plus book value of long-term debt, divided by book value of total assets
- \(\text{RES}_\text{DISEXP}\) = residual discretionary expenses
- \(\text{Aud}\) = dummy variable of ‘1’ if auditor is BIG4 (Deloitte, Ernst and Young, KPMG, PricewaterhouseCoopers) and ‘0’ otherwise
- \(\text{SIZE}\) = the natural logarithm of total assets
- \(\text{LEV}\) = total debt divided by total assets

**Free Cash Flow (FCF)**

\[
\text{Tobin's Q} = \alpha_0 + \alpha_1 \text{LOG}_\text{FCF} + \alpha_2 \text{Aud} + \alpha_3 \text{SIZE} + \alpha_4 \text{LEV} \quad (7)
\]

Where,
- Tobin’s Q = market value of equity plus book value of short-term liabilities net of short-term assets, plus book value of long-term debt, divided by book value of total assets
- \(\text{LOG}_\text{FCF}\) = the natural logarithm of free cash flow
- \(\text{Aud}\) = dummy variable of ‘1’ if auditor is BIG4 (Deloitte, Ernst and Young, KPMG, PricewaterhouseCoopers) and ‘0’ otherwise
- \(\text{SIZE}\) = the natural logarithm of total assets
- \(\text{LEV}\) = total debt divided by total assets

**Industry (IND)**

\[
\text{Tobin's Q} = \alpha_0 + \alpha_1 \text{IND} + \alpha_2 \text{Aud} + \alpha_3 \text{SIZE} + \alpha_4 \text{LEV} \quad (8)
\]

Where,
- Tobin’s Q = market value of equity plus book value of short-term liabilities net of short-term assets, plus book value of long-term debt, divided by book value of total assets
IND = Industry of company
Aud = dummy variable of ‘1’ if auditor is BIG4 (Deloitte, Ernst and Young, KPMG, PricewaterhouseCoopers) and ‘0’ otherwise
SIZE = the natural logarithm of total assets
LEV = total debt divided by total assets

The estimation model for the study is:
Firm Performance = REM + FCF + IND + SIZE + LEV

Where,
REM = real earnings management (proxy by COGS and DISEXP)
FCF = free cash flow
IND = industry
SIZE = the natural logarithm of total assets
LEV = total debt divided by total assets

4. Findings
Table 1 shows the descriptive statistics for abnormal COGS; Table 2 shows the descriptive statistics for abnormal DISEXP; Table 3 shows the descriptive statistics for FCF; and Table 4 shows the descriptive statistics for IND. The first two columns for all three models show the minimum and maximum for each variable. Furthermore, the last two columns for all models show the skewness and kurtosis for each variable. The third and fourth column for all three models shows the mean and standard deviation for each variable. The mean for Tobin’s Q in abnormal COGS model was .4430; while it was .4425 and .4306 for abnormal DISEXP model and FCF model, respectively. The mean for standardized residual in abnormal COGS was .1741; in abnormal DISEXP was .5970; in FCF was 3.463; and in IND was 2.95.

The standard deviation for Tobin’s Q in abnormal COGS model was .21717; in abnormal DISEXP model was .21972; and in FCF model and IND model were .21907 and 1.954 respectively. The standard deviation for standardized residual in abnormal COGS was .1193; in abnormal DISEXP was .4981; in FCF was 3.463; and in IND was 2.95.

The results were consistent with the previous study by Subramanyam, (1996); DeFond & Park, (1997); Altamuro et al., (2003) and Zhou et al. (2012).

Table 1. Descriptive Statistics for Abnormal Cost of Goods Sold (COGS)

|                | Minimum | Maximum | Mean   | Std. Deviation | Skewness | Kurtosis |
|----------------|---------|---------|--------|----------------|----------|----------|
| TobinQ         | -.14    | 1.03    | .4430  | .21717         | .047     | -.419    |
| RES_COGS       | 0       | .51     | .1741  | .11399         | .645     | -.257    |
| LEV            | 0       | .71     | .1962  | .17769         | .778     | -.315    |
| AUD            | 0       | 1.00    | .5456  | .49818         | -.184    | -1.970   |
| LOGTA          | 0       | 6.97    | 5.4999 | .57158         | -.806    | 8.363    |

Note: This table presents the descriptive statistics of abnormal COGS for a sample of 942 firms-years.

Table 2. Descriptive Statistics for Abnormal Discretionary Expenses (DISEXP)

|                 | Minimum | Maximum | Mean   | Std. Deviation | Skewness | Kurtosis |
|-----------------|---------|---------|--------|----------------|----------|----------|
| TobinQ          | -.14    | 1.03    | .4425  | .21972         | -.005    | -.419    |
| RES_DISEXP      | 0       | 1.66    | .5970  | .38332         | 5.36     | -.325    |
| LEV             | 0       | .71     | .1897  | .17511         | .851     | -.148    |
| AUD             | 0       | 1.00    | .5339  | .49911         | -.136    | -1.986   |
| LOGTA           | 0       | 6.97    | 5.463  | .71774         | -3.09    | 22.610   |

Note: This table presents the descriptive statistics of abnormal DISEXP for a sample of 959 firms-years.
Table 5 displays the R square, adjusted R square and F statistics as well as the linear regression results for each model. By using the same regression model for each variable, this study applied linear regression. The objective of linear regression for all three models was to determine the relationship between dependent variables and independent variables. As shown in Table 4, all variables for the three models were positively related to the firm’s value, except for firm size in abnormal DISEXP and FCF models which were negatively related to the firm’s value. However, all results for firm size were insignificant.

Table 3. Descriptive Statistics for Free Cash Flow (FCF)

|          | Minimum | Maximum | Mean    | Std. Deviation | Skewness | Kurtosis |
|----------|---------|---------|---------|----------------|----------|----------|
| TobinQ   | -.14    | 1.03    | .4306   | .21907         | .075     | -.408    |
| LOG_FCF  | 0       | 6.03    | 3.463   | 1.8253         | -1.099   | -1.983   |
| LEV      | 0       | .71     | .1919   | .17626         | .822     | -1.216   |
| AUD      | 0       | 1.00    | .5366   | .49892         | -.147    | -1.983   |
| LOGTA    | 0       | 7.10    | 5.459   | .72687         | -2.937   | 21.454   |

Note: This table presents the descriptive statistics of Free Cash Flow for a sample of 956 firms-years.

Table 4. Descriptive Statistics for Industry (IND)

|          | Minimum | Maximum | Mean    | Std. Deviation | Skewness | Kurtosis |
|----------|---------|---------|---------|----------------|----------|----------|
| TobinQ   | -.1431  | 3.2065  | .4306   | .21907         | .075     | -.408    |
| IND      | 1       | 9       | 3.463   | 1.8253         | -1.099   | -1.983   |
| LEV      | 0       | 2.529   | .1919   | .17626         | .822     | -1.216   |
| AUD      | 0       | 1.00    | .5366   | .49892         | -.147    | -1.983   |
| LOGTA    | 0       | 7.8726  | 5.459   | .72687         | -2.937   | 21.454   |

Note: This table presents the descriptive statistics of Industry for a sample of 1,018 firms-years.

The standardized residual for abnormal COGS and abnormal DISEXP models were positively related with firm’s value with a significance of 1%. This result is in line with the previous study by Subramanyam, (1996); DeFond & Park, (1997); Altamuro et al., (2005); and Yusarina et al. (2013) as they found a significant negative relationship between EM and firm’s value as well as FCF and firm’s value.

In FCF model, the log FCF had a significant positive relationship with firm’s value at 1%. This result was inconsistent with the previous study by Brush et al. (2000); Qing & Gan (2007); and Zhou et al. (2012) as they found a significant negative relationship between free cash flow and firm’s value. This may suggest that for Shariah-compliant companies, stewardship theories prevail over agency theory. All models showed a significant positive relationship between leverage and firm’s value at 1%. The study by Choi et al. (2010) used leverage as a control variable since firms that incurred high leverage or loss have a greater probability to be involved in EM. This is quite normal as firms that face difficulties in making earnings tend to manipulate its accounting figures in order to present profitable financial statements. According to Jelinek (2007); Cheng & Tzeng (2011); and Yusarina et al., 2013, they found that leverage was positively associated with the firm’s value. Previous studies have supported the results of this study which provided a positive relationship between leverage and firm’s value. A firm with high leverage will subsequently have a high firm value (Yusarina et al., 2013). However, this contradicts the study by Rayan (2008), where it was found that the higher the level of leverage, the lower the firm’s value. But this may not necessarily be the case. When a firm has a high level of debt, it may benefit the firm from the tax shield from interest payment that eventually increases firm’s value. According to Modigliani & Miller (M&M) Proposition II, one of the things that will increase the value of the firm is the level of the firm’s debt. As the debt level increases, the value of the firm will also increase (Suffian, 2013). All models signalled a positive relationship between the type of auditor and firm’s value. Nevertheless, only abnormal DISEXP and FCF models were significant at 1%. This result is constant with the previous study by Beatty (1989) where clients who hired reputable auditing firm
(CPA firm) will exhibit higher returns compared to a situation with a less reputable auditing firms. However, in this study, a positive relationship with the firm’s value was established for abnormal COGS and FCF models. Information asymmetry could be the key factor for this result, as it creates friction between the management and shareholders/investors.

The managers possess private information about the firm that the shareholders/investors are not privy to (Suffian, 2013), where such information will allow the managers to manage earnings (Richardson, 2000). EM occurs when there is asymmetry information between the firm’s management and the firm’s shareholders (Dye, 1988; Trueman & Titman, 1988). A positive relationship was also established between free cash flow and firm’s value. Whenever the company is enjoying high free cash flow, the company will have less debt. The excess cash flow can be used to produce new products, repurchase of stock, and an increase in dividend payments (Vincent & Collins, 2010). It will benefit the performance of the company in the long run. The link between the industry and performance was identified as significant and positive. This is consistent with the findings of Osman (2008) and Filatotchev et al. (2005) where industry plays a significant role in the company’s level of performance. The mean comparisons showed that the property industry had the best performance after the financial crisis. Nevertheless, the differences between other industries were minute. This indicates that further research is needed to have a better understanding of the link between the industry and performance.

**Table 5. The Regression Results for Abnormal COGS, Abnormal DISEXP, FCF and Industry**

|                        | COGS   | DISEXP  | FCF    | IND    |
|------------------------|--------|---------|--------|--------|
| **Tobin Q**            | .447***| .331*** | .163***| .029***|
| LEV                    | .227***| .220*** | .189***| .306***|
| LOG TA                 | .002   | -.003   | -.008  | -.047***|
| Audit                  | .004   | .030*** | .036***| .041***|
| R Square               | .295   | .301    | .227   | .117   |
| Adjusted R Square      | .087   | .091    | .052   | .113   |
| F statistics           | 6.297***| 6.737***| 12.976***| 26.865***|

Note: This table shows the model summary of each REM activity towards firm’s value.

- **R-square** is the regression coefficient determination
- **Adjusted R-square** is the adjusted regression coefficient determination
- **F-statistics** is the indication on how much variation is explained by the regression equation
- **TobinQ** is a proxy for firm’s value; **LEV** is measured by total debts deflated by total assets; **logTA** is a proxy for size; **Audit** is a control variable of ‘1’ if auditor is BIG4 and ‘0’ otherwise.

**Significant at the 1% level**
**Significant at the 5% level**
**Significant at the 10% level**

5. Conclusions
This study was carried out to examine the relationships between the market performance of Shariah-compliant companies, earnings management, free cash flow, and industry. By using the data from 2009 to 2011, this study aims to identify the impact of financial distress that happened in 2008 to Shariah-compliant companies in Malaysia. This study also will provide a clear picture of the impact of financial distress in 2008 and the post introduction of Malaysian Code of Corporate Governance (MCCG) 2007 and prior the introduction of Malaysian Code of Corporate Governance (MCCG) 2012 in Malaysia. However, this study will not take the consideration the elements of corporate governance in Malaysia. This could be a gap for future study in order to determine whether the elements of corporate governance introduced in Malaysia had played a significant role in increasing the firm’s value.
The results showed significant positive relationships between REM activities for both models and market performance. This result is consistent with the findings of Subramanyam, (1996); DeFond & Park, (1997); Altamuro et al., (2005); and Yusarina et al. (2013). One of the possible root causes is the existence of information asymmetry where managers hide certain information from the shareholders’ in order to benefit themselves. However, this study may not straightforwardly pointed out that those companies involved in this study were practicing REM activities. It might be ‘creative accounting’ activities. Creative accounting is an accounting practice which is not entirely illegal but nonetheless can be quite peculiar. However, this study did not discuss creative accounting and its impact on the firm’s value. This is a gap where future studies could fill in to investigate the motivation behind creative accounting and its consequences.

A significant positive relationship was found between FCF and market performance. This indicates that the company’s performance can be enhanced if the company has high free cash flow. It has to be noted that this result contradicts the findings of Brush et al. (2000); Qing & Gan, 2007; and Zhou et al., 2012, where they believe that more attention should be given to FCF in addition to the use of traditional financial index based on profits and other manipulation indexes by the company’s manager. There were also positive relationships between the leverage and firm’s value as well as between the types of auditor and firm’s value. A firm with a high leverage has a high firm value (Jelinek, 2007; and Cheng & Tzeng, 2011. Beatty (1989) also found that clients who hired reputable auditing firm (CPA firm) will exhibit higher returns compared to a situation with less reputable auditing firms. Future studies could also investigate the potential influences of different industries which may give different results for the company’s performance. While this study showed a positive relationship between the types of industry and performance, this study didn’t discuss the types of industry that may impact the company’s performance. Future studies could potentially narrow the focus on each type of industry and the elements of corporate governance such as board characteristics and auditing committee. This could lead to novel results on the performance of the company.

The results of this study can aid the authorities and regulatory bodies such as Malaysian Institute of Accountant (MIA) and Bank Negara Malaysia (BNM) to come out with proper guidelines to overcome REM. It would be interesting to investigate the market performance of Shariah-compliant companies with other types of REM activities such as delaying or cutting travelling budget and maintenance expenses, postponing or eliminating capital investments and asset securitizations. Further research are necessary to gauge the extent of how far Shariah-compliant companies really engage in earnings manipulation or other types of accounting manipulation such as creative accounting. After an economic downturn, investors are recommended to invest in property companies as the results showed a significant relationship between the industry and performance. Furthermore, property industry showed the highest value of mean and considered to be a safe option for investment. However, the differences with other industries are insignificant and more research should be done to have a better understanding of the relationship between industry and performance.

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