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Internet Financial Reporting (IFR) Disclosure Position and Firm Value

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ABSTRACT

Nowadays, Internet Financial Reporting (IFR) disclosure is the global way to display firm performance to investors and stakeholders. Hence, it is imperative that firms properly manage their IFR disclosure to ensure their existence is conspicuous to the world in order to foster their firm value. We believe that in order to manage IFR disclosure, firms would probably behave either ritualistically or opportunistically in terms of their IFR disclosure position. In this study, we propose a quantitative measurement for the IFR disclosure position, i.e. utilizing IFR presentation score, taking into consideration latest IFR rules and regulations worldwide as well as relevant extant empirical studies. Based on a sample of 320 Malaysian listed firms in year 2012, our regression analysis shows that our quantitative measurement for the IFR disclosure position variable has a positive association with firm value. We found that 87 firms, categorized as poor performing seems to manage their IFR disclosure position ritualistically. While 233 firms, categorized as well performing manage their IFR disclosure position opportunistically. Hence, our study provide circumstantial evidence that firms' financial performance has a relationship with IFR disclosure position. In further analysis, our findings show that stakeholders seem to perceive ritualistic IFR disclosure's position is empirically valid to value poor performing firms. However, stakeholders seem to negate the opportunistic IFR disclosure position in valuing well performing firms even though theoretically the opportunistic IFR disclosure position should be able to offer vast benefits that could enhance firms' value. Our findings should be useful to firms and stakeholders likewise in making firms' valuation taking into consideration the existence of firms' financial performance and IFR disclosure position.

Keywords: IFR disclosure; IFR disclosure position; firm value; firm financial performance; IFR regulations

INTRODUCTION

Internet Financial Reporting (IFR) disclosure has become an established and significant communication platform for firms (Bollen, Hassink & Bozic 2006; Drake, Thornock, & Twedt 2017; Hodge & Pronk 2006) due to the rapid growth of internet technology (Chan & Wickramasinghe 2006; Momany & Al-Shorman 2006). IFR disclosure offers various benefits in terms of flexible presentation and provide space for abundant content apart from able to reach wider audience which will benefit firms and stakeholders, likewise (Trabelsi, Labelle & Laurin 2004; Quagli & Riva 2005). Therefore it is imperative that firms should manage their IFR disclosure appropriately in order to enhance their firm value and highlight their existence globally. The focus of our study is to investigate on how firms in Malaysia manage their IFR disclosure with the assumption that firms would grab the advantages offered by IFR disclosure and ultimately such behavior might influence firm value.

In this study, we define IFR disclosure as being different from traditional financial reporting (TFR) in terms of the methodology of reporting firms' performance. IFR disclosure take into consideration all information that could promote firms' performance through the medium of internet, including financial and non-financial information, apart from the annual reports. TFR mainly focus on information highlighted in annual reports. Trabelsi et al. (2004) stated that the difference between TFR against IFR disclosure is actually showing about how firms really manage their IFR disclosure. Trabelsi et al. (2004) suggest that in managing IFR disclosure, firms might display a *ritualistic* or *opportunistic* behavior. If the information reported in TFR and IFR is similar, it is indicated that firms display a ritualistic behavior. On the other hand, if there is a wide variability between TFR and IFR, it is interpreted that firms have an opportunistic behavior. However, there is almost scant studies that provide evidence on the influence of managing IFR disclosure on firm value, definitely none that utilize emerging countries data. Our study intend to extend prior studies by providing further evidence on how firms manage their IFR disclosure, specifically on IFR disclosure position and whether the IFR disclosure position influence firm value among our sample firms.

Our sample is firms' listed on Bursa Malaysia, considered an emerging country capital market. Bursa Malaysia is among the first emerging capital market in the world that issued guidelines on IFR for the purpose of listing requirements to be implemented by listed firms, that is, since year 2009. Nevertheless firms have the luxury of reporting their own specific content and style which theoretically would mean that firms can manage the methodology of their IFR disclosure position. In order to be able to have the luxury to manage IFR, firms need to invest a substantial amount of money on their internet infrastructure. As such, for the possibility to compensate

the huge investments on IFR infrastructure made by firms, the IFR disclosure position issue would be crucial to stakeholders in order to gauge a better understanding of how firms' behave regarding IFR disclosure position and whether there is any relationship between IFR disclosure position and firm's value. Our main contribution is in proposing a quantitative measurement for the IFR disclosure position, where we believe being the first study to attempt quantifying the IFR disclosure position. We believe that our measurement for IFR disclosure position is comprehensive enough since we include in the measurement a combination of latest rules and regulations on IFR disclosure as well as relevant prior studies such as Trabelsi et al. (2004), Percy (2000) and Marston and Polei (2004).

The remainder of this paper is organized as follows. The next section discuss relevant prior research. Section 3 will discuss theoretical background and hypothesis development, followed by description of our research method in section 4. Section 5 discuss the results of statistical analysis and Section 6 will conclude our paper.

Literature Review on IFR Disclosure Position

The IFR disclosure is the result of an internal process of managing financial disclosure (Trabelsi et al. 2004). Disclosure position is how managers manage the position of their disclosure (Gibbins, Richardson & Waterhouse 1990). Before the worldwide use of IFR, Gibbins et al. (1990) proposed a model assuming that a firm has a relatively stable disclosure position in its industry. This position may vary between two dimensions: ritualistic and opportunistic. Managers may take a passive role in disclosing financial information and using systematic and bureaucratic procedures when they adopt a *ritualistic disclosure position*. On the other hand, when managers adopt an *opportunistic disclosure position*, managers may play an active role as an attempt to seek specific advantages from disclosure of financial information. These dimensions can coexist in the same company for different events or types of disclosure, but, on average, a company's policy will be either dominantly ritualistic or dominantly opportunistic.

Taking into account the advent of the corporate website as a medium for financial reporting in the middle of the 1990s, Gibbins's model has been modified by Trabelsi et al. (2004). Trabelsi et al. (2004) hypothesized that IFR through websites gives more room for companies to exercise their opportunism and/or to enhance the quality of their disclosure output than under traditional financial reporting (TFR). In their model, Trabelsi et al. (2004) expect that the firms will exercise their ritualistic or opportunistic dimension in IFR as they do for TFR.

Trabelsi et al. (2004) assume that some firms with a ritualistic propensity will not use their corporate website for financial reporting purposes but will just post a reference to, or reproduce the TFR information already available, as evidence in Trabelsi et al. (2004) sample data, i.e. firms' information on SEDAR[1]. At the other end of the spectrum, Trabelsi et al. (2004) expect that firms with a more opportunistic penchant will, to varying degrees, take advantage of the Web technology to exercise this opportunism and increase the extent of their disclosure.

Therefore, Trabelsi et al. (2004) has redefined IFR disclosure position. While a ritualistic position may be interpreted, within paper formats, as the compliance with regulations or the application of industry norms, the opportunistic position implies the dissemination of more voluntary disclosures. A ritualistic position indicates passive behavior by managers with regard to financial disclosure and the use of systematic and bureaucratic procedures. In the context of the IFR, a ritualistic position is defined as the simple replication of the financial information disclosed in traditional form or format on the company's website, normally in the form of showing the annual reports. Reproduction is a systematic process that does not imply a very active managerial role.

However, the possibility of communicating additional information in a more timely and intelligible fashion to investors and other stakeholders by enhancing its organization and presentation on the website by the use of various technological tools such as videos and by choosing the degree of user-friendliness all add up to give management other means to exercise even more opportunism than in TFR. To go beyond replication, the Internet involves a more active participation from managers in the disclosure-management process, which we interpret as reflecting a more opportunistic behavior.

Now, managers mainly use IFR to disseminate corporate information. Prior studies provide evidence that firms and users derive boundless benefits from the IFR (Ashbaugh, Johnstone & Warfield 1999; Hunter & Smith 2009; Poon, Li & Yu 2003; Silva & Alves 2004). With IFR, companies are able to attract foreign and local investors as well as promote the company to the public (Mohd Noor Azli, Nor Azizi & Norhayati 2013; Turmin, Hamid & Ghazali 2016) since IFR permits accessibility of information to a much wider audience as compared to the conventional means of communication. Firms can also reduce information dissemination costs such as printing and distribution costs associated with mailing annual and quarterly reports to the decision makers since they may use firms' website to obtain financial information (Ashbaugh et al. 1999; Beattie & Pratt 2001; Gowthorpe & Flynn 2001; Marston & Polei 2004; Neely, Adams & Kennerley 2002). Firms can also use IFR as a vehicle to communicate with previously unidentifiable information consumers. With IFR, financial information becomes public goods with unrestricted global access as compared to traditional paper-based reporting which restricts parties who request and/or require the financial information (Allam & Lymer 2003; Davis, Clements & Keuer 2003; Khadaroo 2005).

Apart from being beneficial to the firms, IFR also offers many advantages to users. IFR can provide users with an instantaneous access to timely information (Mohd Noor Azli et al. 2013). In other word, information can be made available to users immediately and equitably in a

form that they can store and subsequently manipulate electronically as they so need (Lymer 1999; Lymer et al. 1999). Furthermore, IFR can facilitate the dissemination of firms' financial disclosures via internet tools that facilitate users in the decision making process (Ashbaugh et al. 1999; Mohd Noor Azli et al. 2013). Users can also be provided with information that tailors to their needs, potentially enabling radical developments in the form and presentation of reporting information (Beattie & Pratt 2001, 2003; Dolinšek, Tominc & Skerbinjek 2014; Gowthorpe 2004; Jensen & Xiao 2001; Jones, Xiao & Lymer 2001; Ravlic 2000; Wagenhofer 2003). Furthermore, the IFR can arguably facilitate greater two-way communication between the company and its users as compared to traditional reporting (Paisey & Paisey 2006; Wickramasinghe & Lichenstein 2006).

Kamarul Baraini, Zaleha, Zakiah and Mohamat Sabri (2014) analysed the corporate websites of two sample firms from the trading and service sectors using the Nvivo 7 software application. The results revealed that different disclosure position were used by the two firms in practicing IFR. Both companies positioned their IFR disclosure accordingly in order to assist them in maximising the benefits from IFR. Specifically, one company managed their IFR disclosure ritualistically, where they strictly adhered to their own internal policy to disclose a minimum amount of social, environmental or financial information to avoid complications. In contrast, the other company opted for an opportunistic disclosure position to create the impression that the company is responsible, transparent and rational.

The empirical literature also suggests a positive relationship between IFR and firm value (Silva & Alves 2004; Lai et al. 2010). However, Silva and Alves (2004) find that the relationship could vary according to the company size or industry sector of the company. Silva and Alves (2004) also find that the country in which the company operates is irrelevant to the relationship between the IFR and the firm value. Furthermore, according to Lai, Lin, Li and Wu (2010) the disclosure of financial information on the internet by a company leads to faster response of its share price than a company without the IFR disclosure. A higher degree of the IFR by a company will also prompt its share price to change more quickly. On the other hand, a company with a lower degree of IFR would take a longer time for the share price to respond. Furthermore, the share of a company with IFR performs better than that of a company without IFR. They also suggest that the greater the information transparency provided by a firm, the better the firm's share price.

The literature discussed above mainly provide findings about the relationship between IFR disclosure in general with firm value, and none that focus specifically on the issue of the management of IFR disclosure, specifically disclosure position. Studies that discussed on IFR disclosure position were only providing conceptual arguments on possible firms' behavior with regards to the IFR disclosure. Therefore there is limited empirical evidence on the more refined concept of IFR disclosure influence towards firm value (Cormier, Ledoux & Magnan 2009; Lai et al. 2010; Silva & Alves 2004), particularly none that focus on IFR disclosure position. Understanding the situation of firms' IFR disclosure position and its relationship with firm value should be a serious issue towards stakeholders of the capital market worldwide especially during this era of digital technology, because it could affect their investments' decision making process. In the absence of such evidence, hence, the effect of IFR disclosure position upon firm value is an empirical issue that should be examined. As such, our objective in this study is to investigate on the situation of IFR disclosure position potentially existing among Malaysian listed firms and the relationship between the IFR disclosure position and firm value.

Theoretical Background and Hypothesis Development

Firms' Behavior in Managing IFR Disclosure

Legitimacy theory has been employed to explain why IFR is managed in a certain manner since firms manage their corporate disclosure, including IFR disclosure in order to provide information that is strongly believed to be legitimate (Deegan 2002). Legitimacy theory advocates that corporate voluntary disclosures, specifically via IFR disclosure, are considered as part of a process of legitimation (Van der Laan 2009). Companies may disclose an adequate amount of online financial information as well as non-financial information to demonstrate that they are fulfilling their obligations to society (A'lvarez, Sa´nchez & Domı´nguez 2008; Gutie´rrez-Nieto, Fuertes-Calle´n & Serrano-Cinca 2008).

Companies can use their IFR disclosure as a legitimating device in the process of attaining legitimacy (Rowbottom 2002). It is agreed that companies may use disclosures to communicate changes in their activities (Deegan, Rankin & Voght 2000). Companies may also use disclosures as an attempt to alter stakeholders' perceptions of their activities (Cormier & Gordon 2001). Companies may choose various way to manage their IFR disclosure to legitimize their ongoing activities (Deegan et al. 2000). The choice of managing IFR disclosure that companies make will differ depending on whether it is trying to gain, maintain or repair legitimacy (Suchman 1995).

Prior to the issue on IFR disclosure, Gibbins et al. (1990) suggest that generally there is two possible disclosure positions managers might choose to report their corporate information, that is, either ritualistic or opportunistic. Accordingly, with regards to IFR, when managers choose a *ritualistic disclosure position*, they tend to disclose only minimum information on their website as an attempt to avoid compliance violations. Alternatively, if managers choose an *opportunistic disclosure position*, they tend to communicate detailed information on their website as an attempt to enhance companies' legitimacy. These disclosure positions therefore would affect the way companies disseminate online corporate information

to various stakeholders (Patten & Crampton 2004). Subsequently, it can be argued that the disclosure position might enhance firm's value.

ASSOCIATION BETWEEN IFR DISCLOSURE POSITION AND FIRM VALUE

Signaling theory has been widely used by accounting researchers as a further theory to explain why companies voluntarily disclose additional information in their annual reports (e.g. Akhtaruddin & Hossain 2008; Haniffa & Cooke 2002; Raffournier 1995; Watson, Shrives & Marston 2002). Signaling theory encourages the disclosure of higher quantity and quality as well as voluntary corporate information to send specific information to the investors (Khlifi & Bouri 2010) and to reduce information asymmetry (Botosan & Plumlee 2002).

Consistent with technology advancement, companies would use IFR disclosure as a signal of high quality disclosure (Craven & Marston 1999) since IFR disclosure offers more flexibility in the presentation and content as well as a vast amount of information at minimal cost than traditional disclosure (Allam & Lymer 2003). In the Malaysian context, even though public listed companies must have their own websites as a medium of corporate reporting, as required by Para 9.21 Chapter 9 Bursa Listing Requirements, the regulation is very general that allows flexibility in what and how to disclose. Therefore even though having IFR is a mandatory practice but the content and presentation of IFR is still considered as a voluntary disclosure practice.

To disseminate higher quantity and quality corporate information, firms are expected to utilize IFR disclosure that could lead to potential higher firm value (Lai et al. 2010). Consistent with Williams (2008), we believe signaling theory would explain that in order to maximize firm value, managers of well performing firms might choose a *disclosure position* which allow their higher performance to be disclosed, whereas managers of poor performing firms might choose a *disclosure position* which attempt to legitimize their poor performance. Williams (2008) suggests that managers of well performing firms will tend to use an *opportunistic* disclosure position that provide additional information in order to distinct themselves from others. Managers of poor performing companies, on the other hand, will tend to utilize *ritualistic* disclosure position that provides information to prevent misinterpretations about their poor performance. Such behavior is expected to work well in enhancing firms' value for the respective firms' category.

In summary, legitimacy and signaling theories could be used to explain the interrelation on the existence of the signal from the information provided by managers toward the stakeholders. The mechanisms used to disclose information may serve as signals to the capital market and a way of reporting good management by firms' managers. Legitimacy theory and signaling theory therefore could provide explanation on possible companies' incentives to disclose information. By voluntarily revealing certain information online using the appropriate disclosure position, companies can communicate with stakeholders, who as a result we believe will feel more assured about the performance of the company.

Therefore, we anticipate that the way IFR disclosure is managed should have an effect on firm value. We expect poor performing firms have a tendency to disclose their IFR ritualistically (Williams 2008). We define poor performing firms as firms that have negative income or decreases in income (Conrad, Cornell & Landsman 2002) or increase in loss. When poor performing firms use ritualistic disclosure position, their IFR disclosure will provide a minimum amount of relevant information that society needs to judge them as legitimate (Woodward, Edwards & Birkin 1996). Based on the signaling theory, when using ritualistic disclosure position, the IFR disclosure signals to the stakeholders that poor performing firms are legitimate in complying with relevant regulation. Thus, in order to ensure the stability of their firm values, poor performing firms are expected to disclose their IFR position ritualistically.

Alternatively, it is expected that well performing firms will have the tendency to disclose their IFR position opportunistically (Williams 2008). We define well performing firms as firms that have positive income or increases in income (Conrad et al. 2002) or decreases in loss. When well performing firms employ the opportunistic disclosure position, they will provide additional information to communicate their distinctive identity or to highlight their performance as an effort to enhance their legitimacy (Williams 2008). Based on signaling theory, when using opportunistic disclosure position, the IFR disclosure can be regarded as a signal to stakeholders that well performing firms provide their disclosure with highly descriptive, contextual information to assist stakeholders to interpret firm performance correctly and predict future firm performance better. Thus, we argue that well performing firms are expected to disclose their IFR position opportunistically. Since there is no empirical evidence yet with regards to whether there is a different findings between poor performing and well performing firms in terms of their IFR disclosure position association with firm value, we do not propose a separate hypothesis for the poor performing and well performing firms. In general, with regards to firms' IFR disclosure position overall, based on theory and closely relevant prior studies on IFR disclosure, we post our hypothesis as follows:

H_1: IFR disclosure position has a positive association with firm value.

METHODOLOGY

SAMPLE DESCRIPTION

Our sample is Malaysian public firms listed on the Main Board of Bursa Malaysia. Public listed firms are chosen

because they are more likely to have sufficient resources and incentives to implement financial reporting on websites (Fathilatul & Suhaimi 2005; Homayoun & Rahman 2010). A lack of disclosure or minimal disclosure on the website is likely indicating the consequence of a conscious choice made by the firms that may represent the behavior of managing IFR disclosure. This study was carried out in year 2012 (data collected from 1st January to 31st March 2012). Initially, 350 companies were randomly selected as sample firms using a stratified random sampling procedure to ensure each industry has the same sampling fraction. However, due to changes in some companies' legal status, changes in some companies' ownership structure, and data availability, the final sample consists of 320 companies in 9 industries according to Bursa Malaysia classification which includes construction, consumer products, industrial product, plantation, properties, technology, trading/services, IPC, and hotel. The number of sample companies by industry is presented in Table 1.

TABLE 1. Number of sample companies by industry

Industry	No. of original sample firms	No. of final sample firms
Construction	20	18
Consumer	60	55
Industrial Product	111	105
Plantation	19	17
Properties	41	36
Technology	13	13
Trading/Services	81	72
IPC	3	3
Hotel	2	1
Total	350	320

MEASUREMENT OF DEPENDENT VARIABLE

The dependent variable in this study is firm value (FV), measured using Tobin's Q ratio, consistent with prior studies (Hasan & Akmalia 2016; Haslindar & Fazilah 2011; Terjesen, Couto & Francisco 2015). The formula for Tobin's Q is as follows:

$$Tobin's\ Q = \frac{(Firm's\ Share\ Closing\ Price\ on\ the\ Date\ of\ Data\ Collection\ X\ Number\ of\ Shares\ Outstanding\ at\ Date\ of\ Data\ Collection)}{Total\ Book\ Value\ of\ Asset}$$

MEASUREMENT OF INDEPENDENT VARIABLE

The independent variable of interest is IFR disclosure position. In managing IFR disclosure, firms is assumed to behave either *ritualistically* or *opportunistically* (Gibbins et al. 1990; Trabelsi et al. 2004). The measurement to indicate whether firms manage their IFR disclosure position *ritualistically* or *opportunistically* is based on Trabelsi et al. (2004) and Percy (2000) where the measurement is technically using the *IFR presentation* score items depicted in Table 1. Trabelsi et al. (2004) suggest that the technical components of a firm's website should be included in order to evaluate *IFR presentation*. This is consistent with Marston and Polei (2004) which classified *IFR presentation* into *technological features* and *convenience and usability of website*. *Technology features* items examine the extent to which the companies under investigation make use of some of the technology features. Meanwhile, *convenience and usability of website* items measure the design and layout of the factors such as how easy to access information and how the website structure ease the searching of information. Thus, this study considers items for *IFR presentation* based on the guidelines for listing requirements of Bursa Malaysia and the studies by Marston and Polei (2004); Trabelsi et al. (2004) and Percy (2000), which in total consist of 26 items as shown in Table 2.

TABLE 2. Items for *IFR presentation*

A.	*Technological features*
1.	Loading time of the web site <10 seconds
2.	Text only alternative available
3.	Hyperlinks inside the annual report
4.	Annual report in PDF-format
5.	Annual report in html-format
6.	Graphic images
7.	Flashes
8.	Sound files
9.	Video files
B.	*Convenience and usability of website*
1.	Help site
2.	Table of content/site map
3.	Pull-down menu
4.	Click over menu
5.	Internal search engine
6.	Next/previous buttons to navigate sequentially
7.	Direct e-mail hyperlink to investor relations
8.	Online investor information order service
9.	Mailing list
10.	Email alert
11.	Page divided into frames
12.	Number of clicks to get to investor relation information (2 score if 1 click; 1 score if more than 2 clicks)
13.	Number of clicks to get to press releases or news (1 score if 1 click; 0 score if more than 1 clicks)
14.	Clear boundaries between the annual report (audited) and other information
15.	Change to printing friendly format possible
16.	Function to recommend the page
17.	Service to change data in the Share register online

Each item will be given a score of 1 if it is available and zero otherwise, except for item "*Number of clicks to get to press releases or news*". For this item, a score of 2 is given if 1 click is needed to get to the press releases or news and a score of 1 if more than 1 click is needed. As such, the total scoring for the 26 items is actually 27.

In this study, a firm is assumed to be more ritualistic in their disclosure position if its IFR disclosure is a simple replication of traditional financial report. Thus, if a firm's Presentation score is less than Presentation 50% score, a firm is considered to display an IFR ritualistic position. In contrast, firms with an opportunistic disclosure position are expected to go beyond mere replication of traditional financial reports. Consequently, if a firm's Presentation score is more than Presentation 50% score, the firm is considered to deploy an opportunistic IFR disclosure position. This method of scoring is consistent with Trabelsi et al. (2004) and Percy (2000).

MEASUREMENT OF CONTROL VARIABLE

The hypothesized relations between IFR disclosure position and firm value are based on the assumption that other variables are held constant. In practice, nonetheless, other factors are likely to vary systematically with both the firm value and IFR disclosure. Therefore, this study include variables to control for factors that could affect the association. Based on past studies, factors such as firm size, profitability, leverage and growth could affect firm value (Baek, Kang & Park 2004; Hassan, Romilly, Giorgioni & Power 2009; Healy, Hutton & Palepu 1999; Lang, Lins & Miller 2003; Silva & Alves 2004) as well as IFR disclosure. Thus, this study also considers factors including firm size, profitability, leverage and growth as control variables.

Following prior studies, firm size is measured by the total assets at the financial year-end (e.g. Jackling & Johl 2009; Homayoun & Rahman 2010) while profitability is measured by return on assets (ROA) (e.g. Xiao, Yang & Chow 2004; Hassan et al. 2009; Homayoun & Rahman 2010). Leverage is the ratio of long-term debt to book value of asset at the financial year-end (Hassan et al. 2009; Homayoun & Rahman 2010) and growth is the ratio of total sales for current year minus total sales of prior year over total sales of prior year (Hassan et al. 2009).

REGRESSION MODEL

This study adopts the concept of value relevance of accounting information in the methodology to test the association between IFR disclosure position and firm value. The following main regression model is estimated to test our hypothesis on overall IFR disclosure position data:

$$FV_{it} = \beta_0 + \beta_1 IFRDis_{it} + \beta_2 SIZE_{it} + \beta_3 PROFIT_{it} + \beta_4 LEV_{it} + \beta_5 GROWTH_{it} + \varepsilon_{it}$$

where:

FV : *Tobin's Q = (firm's closing price on the date of data collection x Number of shares outstanding at date of data collection) / total book value of assets*
IFRDis : *IFR Disclosure Position = IFR presentation score (refer to Table 1)*
SIZE : *Firm size = log of total assets*
PROFIT : *Profitability = net profit divided by total assets*
LEV : *Leverage = Total debt divided by total assets*
GROWTH : *Growth = total sales for current year minus total sales for prior year divided by total sales for prior year*

FINDINGS AND DISCUSSIONS

Our descriptive statistics shows how Malaysian public listed firms seem to manage their IFR disclosure position. Multivariate analysis will discuss on findings for our hypothesis.

DESCRIPTIVE STATISTICS

A total of 320 Malaysian public listed firms were surveyed in 2012 to gain a general overview of how they manage their IFR disclosure. Table 3 shows the summarized results of the overview. There were 87 firms demonstrated a *ritualistic* disclosure position which simply replicates the printed financial information on the company's website in order to avoid non-compliance of Para 9.21 Chapter 9 Bursa Malaysia Listing Requirements (2009). On the other hand, 233 firms displayed an *opportunistic* behavior that might allow them to gain benefits from the IFR disclosure by providing timely and fashionably additional information using various technological tools.

Further analysis on sample firms' performance was done. Interestingly, firms that demonstrated *ritualistic* disclosure position was *poorly performing firms*. Firms are considered to be *poorly performing* if in the current year they faced a loss or reduction in profit or increase in loss compared to the previous year. Whereas, firms that displayed opportunistic behavior was well performing firms. Firms are considered *well performing* if currently they obtained a profit or an increase in profit or a decrease in loss compared to the previous year.

The checklist described in Table 1 has been used to award an individual score for IFR presentation to each sample company. Table 4 shows the descriptive statistics for the total sample. The mean value of the dependent variable, ***FV***, measured by Tobin's Q, is 0.64, with standard

TABLE 3. Summary of IFR Disclosure Position

Disclosure Position	Number & category of firms	Percentage (%)
Ritualistic	87 (Poor performing)	27
Opportunistic	233 (Well performing)	73
	320	100

deviation 0.77. ***FV*** has a minimum value of 0.03 and a maximum value of 7.72. The results indicate that on average, sample firms have a lower share market value compared to their assets' book value during the year 2012. The result also shows that the mean score for the presentation of the IFR (***IFRDis)*** at 15.23 is higher than the Presentation 50% score (which amount to 13.5, i.e. total score of 27 multiply by 50%). Highest presentation score is 27 and lowest presentation score is zero. The zero score is due to information available on the firm's website does not match with items that we proposed in our quantifying measurement of IFR disclosure position. Our finding therefore indicates a high variation in the presentation of IFR disclosure among firms during year of study. This study also reveals that companies' financial performance do determine their IFR disclosure position. Companies with poor performance position their IFR disclosure ritualistically and well-performing companies tend to use opportunistic IFR disclosure position.

With regards to control variables, Table 4 shows that, the average sample firm size (***SIZE***) is 5.65, with a range of 4.35 to 7.94. The mean value of profitability (***PROFIT***) is 0.08. Minimum value of *PROFIT* is -1.00 and maximum value is 6.00. It can also be observed that the average sample firm leverage ***(LEV***) is 0.18, with a range of -9.00 and 11.00 while the mean value of ***GROWTH*** is 1.12, with minimum of 0.00 and maximum of 6.00.

STATISTICAL UNIVARIATE ANALYSIS

Table 5 present the results of univariate analysis using Pearson correlations. IFR disclosure position (***IFRDis***) is positively associated ($\beta = 0.21$) with firm size (***SIZE)*** at 1% level ($P<0.01$). The finding is consistent with prior studies (Ettredge, Richardson & Scholz 2002; Oyelere, Laswad & Fisher 2003). Larger firms are assumed to have more resources; thus able to position their IFR disclosure better than smaller firms. Profitability (***PROFIT***) and leverage (***LEV***) show a significant relationship ($\beta = 0.17$; $\beta = -0.14$ respectively) with firm value (***FV)*** at 1% level ($P<0.01$), consistent with prior studies (Alvarez et al. 2008).

STATISTICAL MULTIVARIATE ANALYSIS

This section reports and interprets the results for multivariate test on the effect of IFR disclosure position on firm value using the Ordinary Least Squares (OLS) regression model. Before running the OLS linear regression analysis, in line with prior research (e.g. Hossain, Tan & Adams 1994; Raffournier 1995; Inchausti 1997; Depoers 2000) the natural logarithmic transformation of ***SIZE*** were performed in order to satisfy the assumption of normality for the multivariate OLS linear regression model (Tabachnick & Fidell 2012).

Multicollinearity issue is not a problem since the Tolerance coefficient for all variables in the multiple regression are more than 0.10 and VIF values are less than 10. The results of the OLS regression model is presented in Table 6. The result shows that there is no significant association between the *IFR disclosure position* overall and firm value. Hence H_1*: IFR disclosure position has a positive association with firm value,* is not supported in this overall disclosure analysis.

In order to gauge a better understanding of the IFR disclosure position situation, additional analysis was undertaken by adding a new variable named *IFRDis Opportunistic (**IFRDisOpp**)*. This variable is derived by multiplying presentation score with dummy score of 1 for

TABLE 4. Descriptive statistics for all variables (n=320)

	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
FV	0.03	7.72	0.64	0.77	4.99	36.00
IFRDis	0.00	27.00	15.23	3.70	-0.33	3.08
SIZE	4.35	7.94	5.65	0.63	0.77	0.83
PROFIT	-1.00	6.00	0.08	0.44	8.32	95.30
LEV	-9.00	11.00	0.18	1.06	1.92	59.23
GROWTH	0.00	6.00	1.12	0.55	6.33	53.92

Note: ***FV*** *(Tobin's Q= (Firm's Share Closing Price on the Date of Data Collection x Number of Shares Outstanding at Date of Data Collection) / Total Book Value of Asset;* ***IFRDis*** *(IFR presentation score);* ***SIZE*** *(Log of total assets);* ***PROFIT*** *(Profit divided by assets);* ***LEV*** *(Debt divided by assets);* ***GROWTH*** *(Total sales for current year minus total sales for prior year divided by total sales for prior year).*

TABLE 5. Pearson correlation between variables

	FV	*SIZE*	*PROFIT*	*LEV*	*GROWTH*
IFRDis	0.04	0.21***	0.02	0.05	0.03
FV		0.02	0.17***	-0.14***	0.02
SIZE			-0.01	0.19***	0.04
PROFIT				-0.39***	-0.02
LEV					0.02

*, **, *** denote significant at 10%; 5%; and 1% level respectively.

TABLE 6. Regression results for overall IFRDis

Variable	Coefficient	t-statistic	Tolerance	VIF
(Constant)		.709		
IFRDis	.032	.571	.956	1.046
SIZE	.032	.559	.921	1.085
PROFIT	.131	2.171**	.841	1.190
LEV	-.094	-1.522	.812	1.232
GROWTH	.019	.348	.998	1.002
R^2				0.04
Adjusted R^2				0.02
F-Statistics				2.418**

Note: *, **, *** denote significant at 10%, 5% and 1% level respectively. ***Firmvalue*** *(Tobin's Q= (Firm's Share Closing Price on the Date of Data Collection x Number of Shares Outstanding at Date of Data Collection) / Total Book Value of Asset),* ***IFRDis*** *(IFR presentation score),* ***SIZE*** *(Log of total assets),* ***PROFIT*** *(Profit divided by assets),* ***LEV*** *(Debt divided by assets),* ***GROWTH*** *(Total sales for current year minus total sales for prior year divided by total sales for prior year)*

companies with opportunistic IFR disclosure position and 0 score for ritualistic IFR disclosure position. The new model is as follow:

$$FV_{it} = \beta_0 + \beta_1 IFRDis_{it} + \beta_2 IFRDisOpp_{it} + \beta_3 SIZE_{it} + \beta_4 PROFIT_{it} + \beta_5 LEV_{it} + \beta_6 GROWTH_{it} + \varepsilon_{it}$$

where:

FV : *Tobin's Q = firm's closing price on the date of data collection x Number of shares outstanding at date of data collection / total assets*

IFRDis : *IFR Disclosure Position = IFR presentation score (refer Table 1)*

IFRDisOpp : *Opportunistic IFR Disclosure Position = Dummy 1 for companies with opportunistic IFR disclosure position, 0 otherwise*

SIZE : *Firm size = log of total assets*

PROFIT : *Profitability = net profit divided by total assets*

LEV : *Leverage = Total debt divided by total assets*

GROWTH : *Growth = total sales for current year minus total sales for prior year divided by total sales for prior year*

Table 7 presents the regression result for the opportunistic IFR disclosure position. IFR disclosure (***IFRDis***) which represent ritualistic position shows a positive and significant (β=0.22) association with firm value (***FV***) at 5% level. On the other hand, opportunistic IFR disclosure position (***IFRDisOpp***) shows a negative significant association (β=-0.24) with firm value (***FV***) at 5% level. The findings revealed that investors of well performing firms valued the opportunistic IFR disclosure position negatively. One reason could be that investors of well performing firms may not perceive presentation of IFR disclosure done opportunistically as something worthy for their purpose of firm valuation. However, the finding implies that investors of poor performing firms appreciate the ritualistic IFR disclosure position. This finding indicates that shareholders of poor performing firms may perceive having IFR disclosure is enough for poor performing firms to be seen as "good".

CONCLUSION

The purpose of this study is to provide insights into the way Malaysian public listed firms manage their IFR disclosure and whether IFR disclosure position has an association

TABLE 7. Regression results for IFRDisOpp

Variable	Coefficient	t-statistic	Tolerance	VIF
(Constant)		-.367		
IFRDis	.224	2.316**	.324	3.091
IFRDisOpp	-.237	-2.436**	.318	3.140
SIZE	.048	.840	.909	1.100
PROFIT	.128	2.135**	.840	1.190
LEV	-.101	-1.647	.810	1.234
GROWTH	.032	.580	.989	1.011
R^2				.055
Adjusted R^2				.037
F-Statistics				3.036***

Note: *, **, *** denote significant at 10%, 5% and 1% level respectively. ***FV*** *(Tobin's Q= (Firm's Share Closing Price on the Date of Data Collection x Number of Shares Outstanding at Date of Data Collection) / Total Book Value of Asset),* ***IFRDis*** *(IFR presentation score),* ***IFRDisOpp*** *(IFR presentation score x Dummy Variable (1=Opportunistic, 0=Ritualistic);* ***SIZE*** *(Log of total assets),* ***PROFIT*** *(Profit divided by assets),* ***LEV*** *(Debt divided by assets),* ***GROWTH*** *(Total sales for current year minus total sales for prior year divided by total sales for prior year)*

with firm value of the sample firms. The results of the descriptive statistical analysis showed that IFR disclosure position varied across the firms. This study also reveals that firms' financial performance determines their IFR disclosure position. Firms with poor performance position their IFR disclosure ritualistically and well performing firms tend to use opportunistic IFR disclosure position.

The results of regression analysis suggests overall IFR disclosure position do not associate with firm value. Nevertheless, when we separate our sample into ritualistic and opportunistic IFR disclosure position, stakeholders of poor performing firms seem to perceive ritualistic IFR disclosure position is enough to value the firm. Whereas, because of good financial performance, stakeholders of well performing firms seem to deny the opportunistic IFR disclosure position even though the IFR disclosure would offer various benefits that should enhance firm value.

As usual our study do have its own limitation. Our sample firms listed on the main board of Bursa Malaysia which generally represent only large firms. Thus generalization of findings towards all firms listed on Bursa Malaysia is not possible in the absence of firms on other boards. Furthermore, this study only reviews companies' website from January to March 2012 in order to determine the IFR disclosure position used by the firms. Hence, the conclusions and implications extracted from the empirical evidence in the study may not be generalized to other periods.

Future research might extend the scope of this study by making comparative studies with other countries. Nevertheless, it is hoped that the results of this study would provide an insight into the IFR disclosure position of Malaysian firms and is a starting point for further research in this area.

NOTES

[1] SEDAR is the Canadian system used since January 1, 1997 for the compulsory electronic deposit of all regulated information concerning public corporations

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