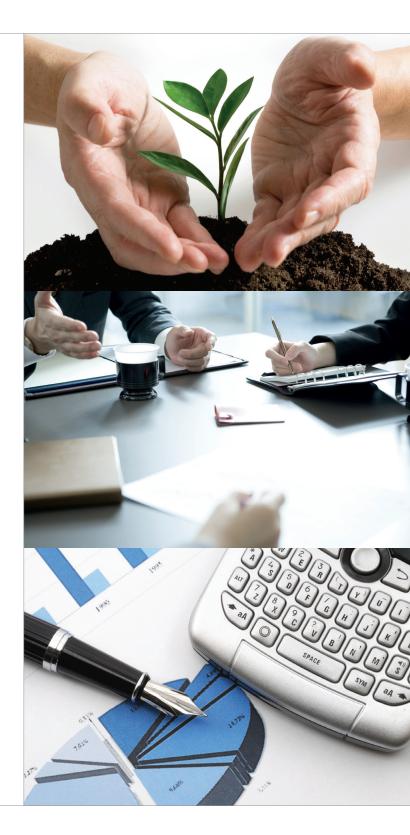


MALAYSIAN INSTITUTE OF ACCOUNTANTS

# ARTICLES OF MERIT AWARD ON PAIB 2011



ISBN 978-967-11317-3-6



# **PUBLICATION INFORMATION**

### **PUBLISHED BY**

Malaysian Institute of Accountants Dewan Akauntan No.2, Jalan Tun Sambanthan 3 Brickfields, 50470 Kuala Lumpur

December 2012

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# FOREWORD BY MIA PRESIDENT

### DATUK MOHD NASIR AHMAD

The Malaysian Institute of Accountants (MIA) continuously engages its members in developing their professional knowledge and skills with the objective of enhancing the members' status, in line with global demand and best practices. This endeavor is accomplished through the provision of continuous professional development and also by the dissemination of relevant articles.

Critical thinking is a key catalyst behind the expansion and realization of knowledge into something material and for practical application. With that in mind, we are pleased to extend to you this compilation of the winning articles of the MIA Articles of Merit Award on Professional Accountants in Business 2011.

Through these articles it is hoped that the reader is provided with fresh ideas for further thought in improving the profession. It is also hoped that through this medium, there would be an increase in the adoption and development of best practices amongst accountants in commerce and industry, internal audit, public practice, academia and in the public sector.

Whilst these collection of articles are a means of giving due recognition to the respective authors, it is also a clear indication of the significant role played by the PAIB segments in the advancement of the profession.

In July 2011, the competition was opened to professionals, academicians and students from the accountancy fraternity. Following a review process, seven (7) winning articles were selected and are featured in this e-book. We hope this e-book will offer much value to readers.

Thank you.

## **ACKNOWLEDGEMENTS**

We hope you find these articles interesting and insightful. We wish to record our appreciation to the parties that have made this Award and the publication of the e-book possible namely the Panel of Judges and the Review Team of the Professional Accountants in Business Committee.

We also wish to thank the PAIB Committee members for their guidance and the MIA PAIB Department Management team for their hard work in this Award.

To the authors who participated and contributed their time and effort in submitting their articles, we thank you.

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# SILVER AWARD

# *i*-SCORI: AN INTEGRATED SYSTEM OF CHARITY ORGANISATION REPORTING INDEX

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# *i*-SCORI: AN INTEGRATED SYSTEM OF CHARITY ORGANISATION REPORTING INDEX

### **ABSTRACT**

Other than the public sector and private sector, a third sector which is the non-profit sector is not emphasised much both in practice and regulation. In relation to financial accounting and reporting, there is no specific accounting standard that is applicable to non-profit organisations (NPOs) other than the Acts and Regulations of their registration. With the growth of NPOs in the country, we are interested to examine to what extent NPOs are providing information, not just to meet the requirement of the regulations but to also meet the needs of their stakeholders. Without sufficient disclosure of information, the stakeholders would not be able to assess whether these organisations are performing well in achieving their missions. Considering the importance of information disclosure for decision making and evaluation purposes, there must be ways to measure the extent of this disclosure of information. Based on scientific research findings, an Integrated System of Charity Organisation Reporting Index (i-SCORI) is developed. i-SCORI is an index which is innovated by means of the stakeholders' weight of importance.

i-SCORI is specifically designed to measure the extent of information disclosure made by the charity organisations in their annual returns. It is unique and has its own novelty because it is an integrated system performing the functions of transforming the input data into an output that generate reports automatically. It has significant practical implications and potential for future market commercialisation. It not only assists the regulatory bodies, such as the Registry of Societies and the Malaysian Institute of Accountants for the improvement of future reporting by charity organisations but can also be applied as a monitoring device for grants and resource allocations disbursed by the monitoring agency, such as the Welfare Department.

### 1. INTRODUCTION

Malaysia, with a population of 28.3 million people and with a multi-ethnic<sup>1</sup> and regional diversity, has given birth to thousands of non-profit organisations (NPOs) since its independence and the growth of NPOs<sup>2</sup> continue to increase. Statistics show that as of April 2011, there are 64,136 Malaysian NPOs registered with the Registry of Societies (ROS). The vast growing number of this sector demonstrates the increasing importance of this sector in the Malaysian economy. The growth of these NPOs has led to the important issue of accountability and transparency because they are established as legal non-governmental entities providing services to the public and they are governed by the Income Tax Act (ITA) 1967<sup>3</sup> which permits tax-free status for organisations operating within the specific guidelines. As of 2010, a total of 1,267 organisations were recognised as tax-exempt by the Inland Revenue Department (IRD).<sup>4</sup>

Some researchers have argued that for the charity organisations, the discharge of accountability by means of disclosure may attract the existing and potential donors (Banks, Fisher, & Nelson, 1997; D Coy, 1995; Waters, 2010). Disclosure of information becomes important in tandem with the financial meltdowns seen and related to NPOs (Chandranayagam, 2010). According to Chandranayagam (2010), "there just does not seem to be enough transparency and publicly available information on projects done by non-profit organisations, or projects in which such charitable organizations have invested". Such disclosures aim to demonstrate accountability and transparency, and reporting of the proper utilisation of resources.

<sup>&</sup>lt;sup>1</sup> As at 31 July 2009, Malaysia has about 28.3 million people, of whom 61.8% (17.5 million) are Bumiputera, 22.9% (14.4 million) Chinese, 7% (1.9 million) Indian and 8% (2.4 million) others. Of that, 14.4 million are male and 13.9 are female (Department of Statistics Malaysia, 2009 – www.statistics.gov.my)

<sup>&</sup>lt;sup>2</sup> For the purposes of this study, the terms NGOs, non-profits, charity organisations, charity and non-profit organisations are used interchangeably.

<sup>&</sup>lt;sup>3</sup> Section 44(6) Malaysia ITA 1967

<sup>4</sup> www.hasil.gov.my

Evidence from previous studies shows that NPOs' lack of disclosure and asymmetric information dissemination among stakeholders may not only cause inefficient resource allocations (Behn, DeVries, & Lin, 2007) but could undermine the credibility of NPOs. Therefore, there is a concern to measure the extent of disclosure in charity annual reports. This can be done through the use of disclosure index to measure the extent of disclosure.

The disclosure indices are mostly used in measuring the extent of reporting disclosure in various categories of the NPOs (colleges and universities, schools and museums). These studies stimulate the interest and motivation of this study to coincide with the move taken by accounting and regulatory bodies to enhance accountability, especially donors' accountability of the NPOs to develop a disclosure index through the improvement in reporting (IASB, 2009; Narain, 2009) based on Malaysia's regulatory environment.

### 2. OBJECTIVES AND SIGNIFICANCE OF THE STUDY

The objective of this study is to innovate an integrated system to measure the extent of information disclosure by charity organisations. The system, known as an *Integrated System of Charity Organisation Reporting Index* (*i*-SCORI) integrates five dimensions of information: basic background information, financial information, non-financial information, governance information and future information. The development of *i*-SCORI is unique because it considers the institutional donors' needs for information instead of solely based on the preparers' practice of information disclosure. Thus, the development of this system could significantly contribute in bridging the gap between the need for information by the institutional donors and the information provided by the charity management as the preparer of the annual reports. The charity organisations could enhance

their current reporting practice from mere reporting in annual reports to performance reporting based on their stakeholders' need for information.

### 3. DEVELOPMENT OF *I*-SCORI

Disclosure index is the list of selected items, which may be disclosed in annual reports (Marston & Shrives, 1991). Coy (1995, p. 121) states that a disclosure index is:

"... a quantitative-based instrument designed to measure a series of items which, when the scores for the items are aggregated, gives surrogate score indicative of the level of disclosure in a specific context for which the index was devised ..."

The main objective of a disclosure index is to codify certain levels of disclosure in a particular context (charity) to determine the quality score that can be applied with other reports in the sample. Thus, there is a need for an instrument that can be used to measure the level of disclosure. The instrument developed in this study, known as *i*-SCORI, involves a four-step process. First, the information by the key stakeholders is identified. In this study, institutional donors represent the key stakeholders. Second, measurement and scoring procedures are undertaken. Third, the procedures of assigning weight to each item of information according to its level of importance are performed and finally the assessment of the validity and reliability of the *i*-SCORI is conducted. Figure 1 summarises the development of *i*-SCORI.

Figure 1: Process of i-SCORI Development

Process	Description of	Instrument Information Ite			Item Status	em Status	
	Process		New	Retained	Modified	Deleted	
Process 1	A. Selection of information items from	Pre-Validated i-SCORI	34				
	review of literature, the statutory and regulations	•					
	B. Exploratory interviews with the stakeholders	R E	4	38	0	0	
<b>Process 2</b>	Measurement and scoring procedures	VOISION					
Process 3	Assigning the weights						
Process 4	Assessment of validity and reliability	+					
	A. Expert panel	Validated i-SCORI	18	85	28	2	
	B. Survey		3	88	3	0	

### 3.1 Selection of Information Items

The list of information items is primarily determined through a review of literature as identified in prior studies (D Coy, 1995; D. Coy, Tower, & Dixon, 1994; Hooks, Coy, & Davey, 2002; Hyndman, 1990). The minimum regulatory requirements of Malaysia's charity reporting issued by the Registry of Societies (ROS) and the Income Tax Act 1967 guideline for the tax-exempt status application were also referred to. Hyndman's (1990) priori model was also used as a benchmark in the selection of the information items. As a result, an initial list of index containing 34 items of information was developed. Out of these 34 items, seven items were Basic Background Information (BBI), thirteen items fall under the Financial Information (FI), three items for Non-Financial Information (NFI), five items of Future Information (FTI) and six items of Governance Information (GI). The 34-item list was

reviewed by the institutional donors and the management of the charity organisations who provided their feedback and the index was modified with a list of 38 items of information.

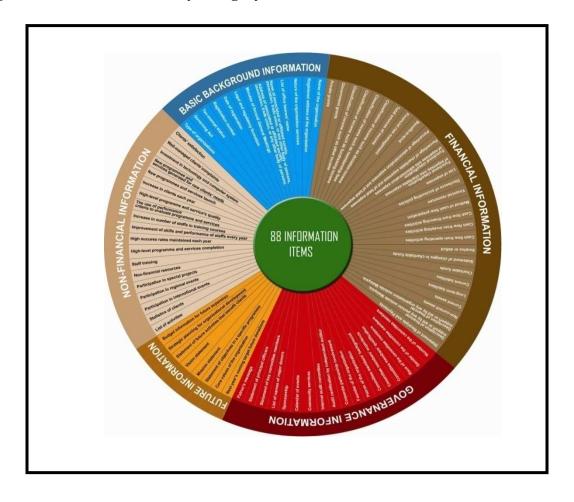
### 3.2 Assessment of Validity and Reliability

The next step in developing the index was testing the validity. Both face and content validity were used in this study. This is important because the quality of the research instrument becomes a focal point of the study. Both local and international experts participated in the validity process. Local panel experts included an institutional donor who was also a member of the National Council of Welfare and Social Development (NCSWD) of Malaysia, academicians with accounting, language and law background. The expert from the non-profit regulatory body, i.e. the Registry of Societies (ROS) was also invited to review this validity process.

The local experts were asked to review whether all items of information had been covered, and consequently, from the 38 items, two items were deleted, additional 21 new information items and 28 modified items were added, resulting in 85 items of information in the list. An example of the deleted item was 'Balance Sheet' and this item was replaced by the details of the balance sheet items such as 'the non-current assets, current assets, current liabilities and long-term liabilities'. On the modified items, the unfamiliar terms indicated by certain respondents were changed, for example, 'the ratio of charity expenses' was changed to 'percentage of charity expenses to total expenses'. *i*-SCORI was then sent for international experts review. Two international experts in survey research and non-profit organisation study were selected. The opinions from these international experts suggested three additional items to be included. The three additional items of information considered important are 'cash flow from financing activities,' 'private grants' and 'financial risk management.' All these additional items were classified under the financial

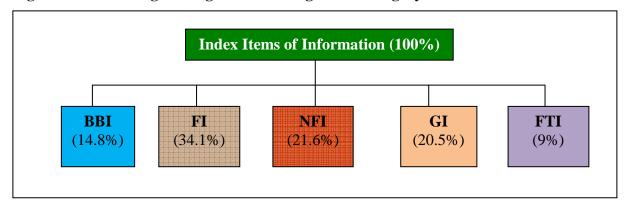
information category. Thus, the final list consists of 88 items of information. Figure 2 below shows the items of information in *i*-SCORI according to its category.

Figure 2: Information Items by Category in i-SCORI



As a result of the assessment of validity, the revised and validated index consists of 88 items of information with the most number of items of information (34.1%) under the FI category and the least number of items of information (9%) in the FTI category. Figure 3 below summarises the final weight assigned to the information accordingly in percentage form.

Figure 3: Final Weight Assigned According to the Category of Information



The index was then tested for reliability. The internal consistency of reliability was tested to indicate how free it is from random error. The internal consistency of reliability was assessed through Cronbach's coefficient alpha. This statistics provides an indication of the average correlation or how closely related set of items as a group with value range from 0 to 1. Higher values indicate greater reliability. Nunnally (1978) recommends a minimum level of 0.70 Cronbach alpha values. An examination of the Cronbach's coefficient alpha for the reliability test for each information item is presented in Table 1 below:

Table 1: Cronbach's coefficient alpha for each category of information

Items of Information	Number of items	Cronbach's coefficient alpha
Basic Background Information (BBI)	13	.917
Financial Information (FI)	30	.963
Non-Financial or Performance	19	.981
Information(NFI)		<i>y</i> 5-
Future Information (FTI)	8	.971
Governance Information (GI)	18	.958
<b>Total Items of Information</b>	88	

### 3.3 Weighted Index Disclosure Measurement

Weight has been used in this study to acknowledge the importance of each item of information disclosed. Previous studies have shown the use of weight (Chow & Wong-Boren, 1987; Mary Fischer, Gordon, & Khumawala, 2008; M. Fischer, Gordon & Kraut, 2010; Gordon, Fisher, Malone, & Tower, 2002) in measuring the extent of disclosures. In order to calculate the disclosure index that aggregates the scores of all information, the weight assigned is measured using a seven-point Likert scale (1= not at all important to 7= extremely important). The determination of weights is usually based on the perceived importance of the items by the institutional donors. This level of importance was determined from a web survey. In this survey, the target respondents were to rate the importance of the 88 items of information. They are representatives of public companies listed on the main board of Bursa Malaysia. As at 10 May 2011, there are 839 public companies listed on the main board of Bursa Malaysia. The companies were chosen based on the basis that the companies have made substantial amount of donations as one of their corporate social responsibility (CSR) pillars. From a total number of 590 web surveys sent, a total of 140 institutional donors responded. Out of the 140 returned questionnaires, 16.4% were incomplete responses and therefore only 117 fully completed questionnaires were used for further analysis. This contributed to 13.9% of response rate. Of the 88 items in the index, three were given extremely important (median weight of 7.00), 58 items or 65.9% were assigned very important (median weight of 6.00), 22 items were considered moderately important (median weight of 5.00), 4 items being neutral (median weight of 4.00) and only one item of low importance (median weight of 3.00). Table 2 below presents the categories of information according to their ranking of importance.

**Table 2: Categories of information by Ranking of Importance** 

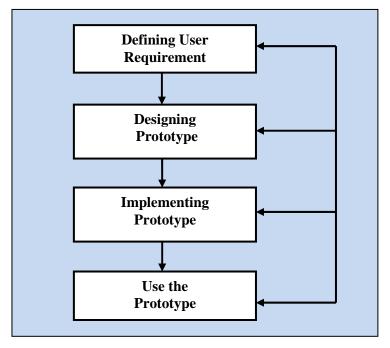
	Ranking of Importance			
Category of Information	Likert Scale	No. of items		
Basic Background Information (BBI)	Extremely Important Very Important Moderately Important Neutral Slightly Important Total BBI	nil 10 nil 4 1 15 items		
Financial Information (FI)	Extremely Important Very Important Moderately Important Neutral Slightly Important  Total FI	1 21 6 nil nil 28 items		
Non-Financial Information (NFI)	Extremely Important Very Important Moderately Important Neutral Slightly Important Total NFI	nil 6 14 nil nil 20 items		
	1011111	20 Items		
Governance Information (GI)	Extremely Important Very Important Moderately Important Neutral Slightly Important Total GI	2 13 2 nil nil 17 items		
Future Information (FTI)	Extremely Important Very Important Moderately Important Neutral Slightly Important  Total FTI	nil 8 nil nil nil 8 items		
TOTAL ITEMS OF INFORMATION		88 items		

It was noted that three items of information that carried the highest median weight of 7.00 (extremely important) were both from the financial information category (cash flow from operating activities) and the governance category of information (i.e. the internal audit and audit certification by independent auditor). The items of information are not required by the regulatory board and not surprisingly, the minutes of Annual General Meeting (AGM) was the only item of information that carried the least weight, with a median weight of 3.00 (slightly important). Nevertheless, minutes of AGM is required to be furnished to the ROS. The remaining items of information followed with their respective importance-weight assigned, making this instrument ready and complete for practical usage.

### 4. THE MODEL FOR *I*-SCORI SYSTEM DEVELOPMENT

*i*-SCORI was first developed on a prototype model before it was applied into an actual system. The *i*-SCORI system development process is shown in Figure 4 below. The process includes four steps: (i) defining user requirement, (ii) designing prototype, (iii) implementing prototype and (iv) use the prototype. The prototype becomes the final system once the user is satisfied.

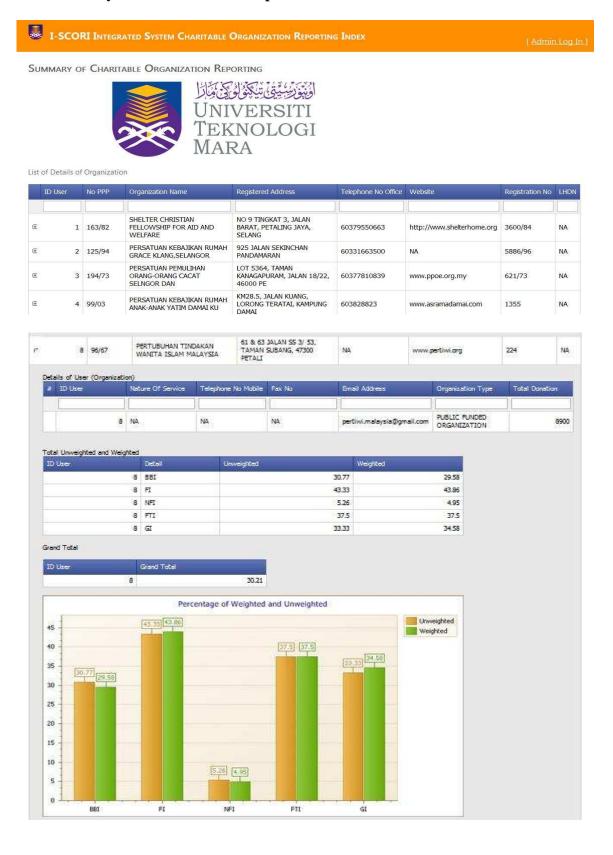
Figure 4: Model for *i*-SCORI System Development



Source: http://free-books-online.org/computers/information-system/spiral-model/

The above processes were undertaken based on the environment of Microsoft Visual Studio 2010 platform which consists of languages of ASP.net including C# and Ajax for the interface development and system code. In attachment for the database, Microsoft SQL Server 2008 and MySQL were used as the platform for database management and system software. The debugging process for *i*-SCORI was run at Microsoft Visual Studio 2010 at windows operating system environment. The ability of *i*-SCORI is to integrate and generate the reporting index for the data from input to an expected output which can work at real time. Table 3 below shows the *i*-SCORI system interface and reports generated by *i*-SCORI.

Table 3: i-SCORI System Interface and Reports



### 5. CONCLUSION

The most important novelty of *i*-SCORI is that it integrates the functions of transforming input data into an output which automatically generates output in terms of reports. The current disclosure of information made by NPOs may be compared against the full disclosure index in *i*-SCORI. The comparison from disclosure of information based on *i*-SCORI benefited the NPO and enabled the Management to improve the current reporting practice. In relation to accountability, the disclosure analysis provides the stakeholders more information to assess the NPOs' activities and operations (Calabrese, 2011). This could not only assist the management of NPOs in planning and decision making but also hold them more accountable to their stakeholders, even though the NPOs are not subject to public disclosure by the regulatory body.

One important issue that relates to the application of *i*-SCORI is whether it can be applied in other charity organisations from other countries, or on other categories of NPOs, such as the human resource, women, youth or culture categorisation of NPOs. As far as NPOs are generally concerned, the generic features on the basic and financial category of information can be applied elsewhere, but it would be meaningful if some modification could be made to suit several special features based on other countries' environment. However, an integrated system developed in this study is a valuable method to measure the accountability of the information disclosed in the annual reports of charity organisations. It also provides an acceptable charity disclosure instrument with weight assigned, which can be used by the regulators to assess the adequacy of charity disclosure reporting.

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# **BRONZE AWARD**

# **CREATIVE ACCOUNTING PRACTICES: BIG PLAYERS' GAME?**

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### CREATIVE ACCOUNTING PRACTICES: BIG PLAYERS' GAME?

### **ABSTRACT**

The growing practice of earnings management and fraudulent reporting in the financial world is a serious concern to the public and regulators. There are bigger motivations for big companies to engage in creative accounting practices such as better access to debt and equity markets and enhanced management compensations. Although not all creative accounting practices constitute fraud, aggressive adoption of such practices will mislead the users of financial statements; which in turn could deceive the users in making decision, hence tantamount to fraud. This paper discusses the creative accounting practices and its different facets, particularly in relations to its adoption by big organisations. The study identifies the possible areas in the financial statements that could be manipulated and the techniques that managers could use in showing the outcomes that they desire. By using the Creative Accounting Checklist, the evidences suggest that companies tend to be creative in three main areas in the financial statements, namely revenue, assets and amortisation policies. Information asymmetry between managers and shareholders has resulted in agency costs which most of the time is detrimental to the shareholders. In tackling this issue, the regulators are keeping a close watch on the companies suspected of engaging in aggressive creative accounting practices and various legal actions have been initiated.

### 1. INTRODUCTION

Over the last few years financial news reports have been overflowing with stories about accounting irregularities, fraud, and earnings management. Confidence in reported financial statement has been fading even though a financial report is the main source of financial information for stakeholders in making decisions. For over the decades, earnings management and fraudulent reporting have been part of the financial world and the results from recent government and private studies have shown that those practices are not thinning, but growing (Moore, 2007). In Malaysia, although the Securities Commission (SC) gave more attention on the quality of the reported financial statement, companies continuously practise financial restatement by performing various levels of earnings management.

The result of these acts has given a significant financial loss to investors and it also gave a bad reputation to the accounting practice, as exposed by the dissolution of one of the world's largest international accounting firms, Arthur Andersen (Moore, 2007). The late detection of these financial misstatements caused losses of millions of ringgits to the stakeholders. Ignorance of the issue will cause greater losses to the stakeholders and also affect the nation's economic condition.

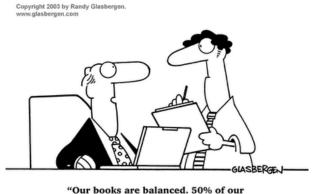
Consequently, reported financial statements were to be believed not reflecting the actual performance of companies. This is because of the practice of earnings management often results in inaccurate and misleading financial reports (Aman, Iskandar, Pourjalali, & Teruya, 2006). The reported earnings in the financial statements were not the accurate amounts but have been selected from a series of amounts derived from the different acceptable accounting accrual choices (Healy & Wahlen, 1999). Companies may choose various allowable accounting methods or can apply different assumptions or estimates within the bounds of acceptable practice – generally acceptable accounting principles or GAAP. For this reason, accrual accounting is said to be the reason of earnings management, for example creative accounting, which is difficult to differentiate from appropriate accrual accounting choices. The practice of earnings management has departed from the primary focus of financial reporting, which is to provide information on the company's performance measured by earnings and its components (Dechow & Skinner, 2000).

Misleading financial reporting will harm the users and the public at large especially the stakeholders on the quality and reliability of information provided in the reports. Therefore, detection of indicators of creative accounting practices is crucial not only to the regulators, but also to the shareholders of the company to ensure that the company's financial reporting reliability is upheld. Generally, distortion of data in one year often leads to the distortion of data in the next year. Typically the slump in a bad year will keep on piling onto the coming year and the company will continue to get more tied up to the misleading figures, often seemingly devoting more time in presenting of figures rather than managing the company. When a financial statement contains falsification, it will no longer represent the true picture and there are possibilities of fraudulent financial reporting.

The purpose of this paper is threefold; (i) to present the current stage of knowledge in the field of creative accounting practices, (ii) to provide some evidences of the creative accounting practices of large companies and (iii) to demonstrate past cases of financial misstatements charged and prosecuted by the Securities Commission. The study focuses primarily on big companies as they tend to benefit more by engaging in creative accounting practices. This is supported by Gillet and Uddin (2005) who state that larger companies are more likely to participate in fraudulent financial reporting. This is evident by the infamous corporate financial scandals of big companies such as Enron, WorldCom and Parmalat.

### 2. DEFINITION AND MOTIVATION OF CREATIVE ACCOUNTING PRACTICES

It is difficult to draw the line in creative accounting because it is too complicated to control and to set the level of creative accounting that can lead to fraud. GAAP offers various accounting methods to select from, and companies will choose a suitable method that would best project their financial statements which largely depends on the nature of their business. However, even by following the law, the standards and the recommended practice, and also with the results audited by external auditors, the scope for creative accounting remains large. Creative accounting practices can be defined as the transformation of financial figures from what they actually are to what preparers desire by taking advantage of the existing rules and/or ignoring some or all of them (Naser, 1993). The practices may involve any and all steps used to play the financial number game, including the aggressive choice and application of accounting principles, both within and beyond the boundaries of GAAP (Mulford and Comiskey, 2002). Creative accounting may lead to fraudulent financial information as the possibility of the misstatements is made by managers who misrepresent the company's true financial condition.



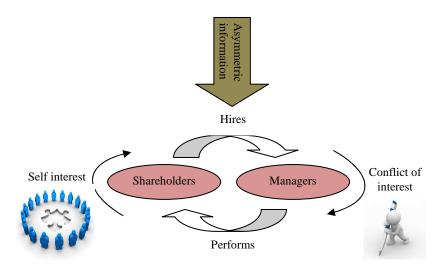
"Our books are balanced. 50% of our numbers are real and 50% are made up."

The quality of reported financial statement is being doubted by the stakeholders because managers have a tendency to manage earnings to show good performance and an aggressive earnings management will lead to fraud. Management has reporting choices which allows them to produce reports within the bounds of GAAP. The wider range of choices gives more opportunity to the management team to manage or some might say manipulate the earnings for their own advantage. One of the opportunities is by using creative accounting in manipulating the reported earnings. If the actions taken by the management team are taken outside the bounds of GAAP, it may lead to constitute financial fraud (Brown, 1999).

There are many factors which lead the management to be involved in creative accounting practices. Among the factors are analysts' forecast, accesses to debt markets, competition, contractual obligations, roaring stock market, new financial transactions, market disregard of big charges, management compensation, excessive profit followed by fear of decline and concealing unlawful transactions (Duncan, 2001). The motivator in doing creative accounting practices includes feeling pressure or having an incentive to commit fraud and also perceiving an opportunity to do so.

The issue of creative accounting practices lies in the fact that it might be used by the management for their own benefit against the interest of shareholders. This happened because the information asymmetry between the managers and external information users allows managers to use their discretion in preparing and reporting accounting information for their own advantage (Spohr, 2005). Creative accounting practices in particular can be considered as an agency problem. The agency problem occurs because investors and other stakeholders may not be able to make optimal decisions concerning a company when the practices distorted economic results and hinder the ability of all stakeholders to make financial decisions. Managers may have personal goals that conflicted with the shareholders. Since managers have been empowered by shareholders to make decisions, a conflict of interest has potential agency costs as illustrated in Figure 1.

Figure 1: Agency Theory

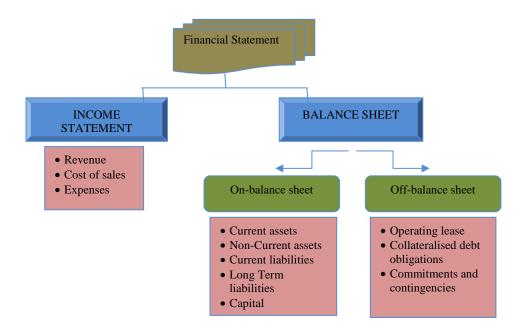


Creative accounting could be a problem that increases the agency costs from the opportunistic actions taken by the managers. To camouflage the effects of the non-wealth-maximising investments, managers use accounting discretion to increase reported earnings. Managers might discreetly mislead stakeholders on the economic performance of the company or influence contractual outcomes (Healey & Wahlen, 1999).

# 3. POSSIBLE AREAS FOR MANIPULATION AND CHOICES OF CREATIVE ACCOUNTING TECHNIQUES

Managers can be creative with possibly everything in the financial statements. It could involve both the on and/or off-balance sheet as well as the income statement routes. On-balance sheet items may appear less controversial as compared to off-balance sheet items as off-balance sheet items are not 'seen' on the balance sheet; hence providing more comfort for managers to play with the items. Furthermore, items that are considered as off-balance sheet are harder to track due to their complicated nature such as collateralised debt obligations and operating leases. The on-balance sheet items, although clearly visible, are still open for manipulation by making them appear more appealing to the users of financial statements. Income statement items are more prone to earnings management that could involve accelerating the recognition of revenue and deferring the recognition of expenses. Revenue is the most common item being manipulated as GAAP allows too many alternative ways to recognise it (Albrecht et al., 2006). The classes of areas for creative accounting practices and examples of their items are depicted in Figure 2.

Figure 2: Possible items that can be manipulated in the financial statements



The creative accounting techniques that managers can adopt in manipulating items in the financial statements can be further classified into five categories as shown in Figure 3.

Figure 3: Methods of creative accounting practices

Different Accounting	Subjective or	Artificial	Structure Corporate	Timing
Methods	Estimation Amount	Transactions	Transactions	
<ul> <li>For instance, the choice of Inventory methods: a company may choose between a FIFO or LIFO methods for the inventories.</li> <li>The choice of accounting depreciation: straightline and accelerated depreciation methods</li> <li>The company can choose the accounting policy that gives their preferred image.</li> </ul>	•Certain entries in the accounts involve an unavoidable degree of estimation, judgment and prediction.  •Estimation of numerous future economic events such as expected lives and salvage values of longterm assets, obligations for pension benefits and other postemployment benefits, deferred taxes, and losses from bad debts and asset impairments	<ul> <li>Artificial transactions can be entered both to manipulate balance sheet amounts and to move profits between accounting periods.</li> <li>This is achieved by entering two or more related transactions with an obliging third party, normally a bank.</li> </ul>	<ul> <li>For example, business combinations can be structured to qualify for pooling or purchase accounting,</li> <li>lease contracts can be structured so that lease obligations are on-or off-balance sheet,</li> <li>equity investments can be structured to avoid or require consolidation.</li> </ul>	•Genuine transactions can also be timed so as to give the desired impression in the accounts. •the timing of inventory shipments or purchases, and receivable policies, which will affects cost allocations and net revenues. •Selection to make or defer expenditures, such as research and development, advertising, or maintenance.

(Adapted from Amat et. al, 1999; Healy and Wahlen, 1999)

Management has the option in choosing different accounting methods for the recording of inventory amounts and also depreciation of assets. For instance companies are allowed to choose the inventory methods between LIFO and FIFO or between straight-line and accelerated method for depreciation of non-current assets. The flexibility recognised by GAAP would give opportunity for the managers to increase or decrease the company profits. Although GAAP preaches that any of the method chosen should be applied consistently in giving a more comparable and balanced financial position, managers may intentionally exploit the application of the methods to show what they want instead of the true picture.

Managers may also attempt to manipulate earnings through judgment or estimation of certain accounts in the financial reporting. There are high levels of ambiguity in determining the amount of certain expenses, for example, provision for doubtful debt and impairment of securities, hence giving managers the flexibility to choose the estimation that gives better figures in the financial statements. Companies may sometimes artificially recognise profits before they are realised or try to disproportionately divide profits between accounting periods. Some of these transactions may not be an arm's length transaction, which make them even easier to conceal.

Another method is through the structure of transactions to alter financial reports to either mislead the stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers. This is especially true in the event some of the off-balance sheet items such as commitment and contingencies be exploited to project better financial position. Timing is another possible area that managers might manipulate in showing better than expected financial position, such as deferment in recognising research and development costs.

Figure 4: Examples of Malaysian companies engaging in creative accounting practices

### Inflated revenue Misleading statement Misleading statement •The Director of GP Ocean Food •Former Managing Director and •The Director of MEMS Bhd (GPB) was deemed to have **Executive Director of Welli Multi** Technology Bhd (MEMS) was committed an offence when Corporation Berhad (WMCB), charged for knowingly were both charged for furnishing submitted through Alliance authorising the furnishing of a Merchant Bank Bhd, misleading misleading statements in misleading statement to Bursa Malaysia. It was about MEMS information to the Securities WMCB's annual report FYE 2005 Commission contained in GPB's and quarterly report for the group's revenue for year ended **Directors' Report and Financial** financial period ended 31 Mac 31 July 2007 contained in its Statements 31 January 2006. 2006, 30 June 2006 and 30 condensed consolidated income September 2006. statements for the 12 month period ended 31 July 2007

*Notes*: Sourced from the Securities Commission Annual Report (2007 to 2009)

Some of these techniques, if adopted within those allowable within GAAP, may not be fraudulent in nature. Availability of these various accounting techniques, however, opens up opportunities for managers to choose the one that best projects the company's financial position. As the techniques for creative accounting can be within and beyond GAAP, it raises the question of what is clearly allowable and what is not. Some instances show that the creative accounting techniques which are applied 'considerably' may not be construed as fraud, but if 'aggressively' adopted it could be accounted as fraud as shown in Figure 4.

### 4. SURVEY ON CREATIVE ACCOUNTING PRACTICES

### 4.1 Creative Accounting Checklist

Various criteria have been suggested by financial experts to identify company fraud; however, not all information is directly available in the company's financial reports. Mulford and Comiskey in their book entitled "The Financial Numbers Game: Detecting Creative Accounting Practices" has discussed extensively the tools employed to detect fraud red flags. Based on his work, the Creative Accounting Checklist used in this study has been modified to include revenue, assets as well as amortisation policy. The details of the checklist are shown in Table 1.

Table 1
Creative Accounting Checklist

No.	Items
	Revenue Checklist
1.	Does the company have a right of return policy?
2.	Was there any change in revenue recognition policy?
3.	Was the revenue of the company recognized before the product/ service is given?
4.	Does the company have physical capacity to generate reported revenue?
	Assets Checklist
5.	Did the company change its credit policy?
6.	Have payment terms been extended?
7.	Has the company changed its inventory method?
8.	Does the company reclassify its properties plants and equipment (PPE)?
	Amortization Policies Checklist
9.	Was the company extending amortization and depreciation period for capitalized cost?
10.	Was there an example of a prior year write-down of assets that become value impaired?
11.	Was there any reason to believe that normal operating expenses are converted to reserve?

Revenue is likely to be manipulated by the management as there are numerous ways it is recognised in the financial statement. Recognition of revenue can be done through both legal and illegal manner. Two of the most common practices adopted by companies are to recognise premature revenue as well as to overstate their revenue. Premature revenue refers to revenue obtained from legitimate sales in the prior period; on the other hand, overstatement of revenue entails recording of revenue more than what is supposed to be realised. Generally, it is difficult to make a distinction which method as mentioned above is potentially to be adopted to show a better earnings capacity.

Besides, in many instances, assets are overvalued in a company in order to strengthen its financial position and net worth. Misappropriation of assets by management and internal staff is also known to be one of the most common frauds. This is because assets are closely related to revenue and hence companies are highly motivated to creatively alter assets figures in the balance sheet. Amortization is defined as a deduction of capital expenses over a specific period of time, usually

over the asset's life. Based on the definition, it can be seen that amortization expenses are also closely related to assets and revenue of companies. Therefore, it can be used to manipulate the company's earnings i.e. to extend the amortization period which results in an increase in current year earnings.

#### 4.2 Evidence of Malaysian Large Public Listed Companies

The modified *Creative Accounting Checklist* as shown in Table 1 was used in the preliminary study conducted on the top 100 companies listed on Bursa Malaysia Berhad ranked by market capitalisation for the year ended 2008. The sample excludes financial institutions as this industry is highly regulated with a different governing mechanism. Content analysis is used to analyze the 2008 annual report of each company. The 11 indicators in the checklist are measured using a score of "0" and "1". "0" denotes each item in the checklist with a 'No' answer while score of "1" is signified to each item in the checklist with a 'Yes' answer. For the three categories in the checklist, the maximum score for 'Revenue' is 3, 'Assets' is 4 and 'Amortization' is 4.

The preliminary study found that companies under studied scores are in a range of a minimum of 0 and a maximum of 5. Figure 5 depicts the results of the top 23 companies obtaining a total score in the range from 3 to 5. The highest two companies scored 5, followed by two companies scoring 4 and the remaining 19 companies scoring 2. Generally, these scores are due to the high score in the 'Revenue' checklist. The result implies that revenue is commonly used to manipulate earnings. In addition, the results show that a majority of the top 23 companies scored in the range of 1 to 2 in the 'Assets' checklist. The results also indicate that about half of the 23 companies scored 1 in the 'Amortization' checklist and none obtained 2 and 3 in such a checklist. Although the scores are minimal, in fraud detection, every little sign should be taken as a red flag and should not be construed as meaningless.

Figure 5: Frequency analysis of companies with different total of Creative Accounting Checklist score

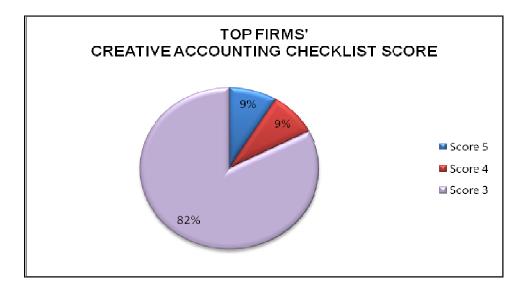
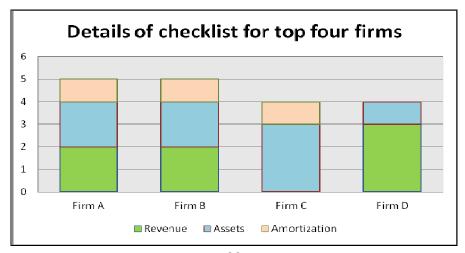


Figure 6 below shows the breakdown of the total *Creative Accounting Checklist* score for the top four companies (i.e. companies scoring a total score of 4 to 5). Company D, an oil and gas company, obtained a score of 3 in the 'Revenue' checklist and 1 in 'Assets' checklist. However, it scored 0 in the 'Amortization' checklist. Company C, a property development company, scored 3 in the 'Assets' checklist, 1 in "Amortization' checklist and 0 in 'Revenue' checklist. Company A and Company B obtained the highest total of 5; both of them are sizeable companies, with cross border diversified business. Similarly both of them obtained 2 from the "Revenue" checklist, 2 from the 'Assets' checklist and 1 from the 'Amortization' checklist.

Figure 6: Details of score breakdown according to the different dimensions of Creative Accounting Checklist



The score presented in Figure 6 may reveal the real financial predicament of some of the companies in Malaysia. For example, Company B, despite having a good financial performance in prior years, in 2010 sought for legal counsel following a major loss of RM2.1 billion. The loss is due to cost overrun in four projects over the last few years. These include building of oil and gas installations in Qatar, Bakun hydro-electric project as well as a marine project involving the construction of vessels for the use in a Qatari project. Therefore, it is not a matter of surprise for such a company to obtain a high creative accounting score for its annual report in 2008.

In the case of Company A, although there is no apparent issue surfacing in recent years, the company has been under close scrutiny as a result of volatile return on assets (ROA) i.e. 66% in 2009 and 44.5% in 2010. Since the company has been gradually losing its market share to its close competitor, the company has acquired a new bulk of assets in 2009 in order to beef up its operations to rival its competitors. Thus, a careful analysis would be warranted for its 'Assets' checklist as it obtained a score of 2.

As the modified *Creative Accounting Checklist* used in this study only focuses on the critical areas prone to creative accounting practices i.e. revenue, asset and amortization policies, future studies may expand the research area further to include cash flow and liability. Furthermore, it is also suggested that the checklist should be used in combination with other tools especially the financial ratios in detecting the red flags of creative accounting. Apart from using the checklist in detecting financial irregularities, it can also be a simple but useful tool for the stakeholders to assess the risk associated with company's financial performances.

## 5. FALSE FINANCIAL STATEMENTS: CHARGES AND PROSECUTIONS ON PUBLIC LISTED COMPANIES

In recent years, the securities market regulators, Bursa Malaysia and Securities Commission have enhanced the monitoring compliance with the use of new rules on disclosure requirements in order to make the financial information more reliable and transparent for stakeholders. However, financial manipulation is still an unresolved problem as each year there are criminal actions caught on the media's limelight.

The companies engaging in creative accounting practices have been under close scrutiny particularly if there is a track record of such practices. In displaying their seriousness in tackling aggressive creative accounting practices, the regulators have taken various measures and actions against the culprits ranging from a reprimand to judicial proceedings and litigations. Despite commitment by regulators to fight inappropriate treatment in the financial statements, recent revelation indicates that companies might be finding it hard to learn the right way to treat their shareholders. Figure 7 outlines several instances of Malaysia listed companies which have cried foul of the law.

The Securities Commission has been active in taking stern actions against the companies with accounting irregularities. Some of these companies were not first time offenders, and yet they are very aggressive in manipulating the financial figures to make them look good in the eyes of the stakeholders.

INIX Technologies Berhad • Directors and officers of INIX were charged for furnishing false statements to Bursa Malaysia in four of its quarterly reports on the unaudited results for Financial Year 31 July 2007. They were further charged in relation to a false statement pertaining to the revenue contained in INIX's prospectus dated 29 July 2005 (Securities Commission, 23 September 2010).

Granasia Corporation Berhad • The former MD of Granasia was charged by Securities Commission for submitting false statements to Securities Commission in Foowood International Sdn Bhd reports and financial statements for the year ended 31 December 2002. Foowood's shares are to be acquired by Granasia as part of Gransaia proposed listing exercise. (*The Star, 3 March 2010*).

Mems Technology Berhad (MEM) • Securities Commission had directed MEM to rectify and reissue its financial statements for the Financial Year 31 July 2007 and 2008. Based on Securities Commission investigations, MEM's group revenue for 2007 a sum of RM13.0M sales which were not transacted whilst a sum of RM24.2 M revenue was not transacted in 2008 (Securities Commission 5 August 2009).

Kosmo Technology Industrial Berhad

- A director and the accounts manager of Kosmo was charged by Securities
   Commission for providing false information with regards to its eight quarterly reports
   on the unaudited consolidated results for FY 2006 & 2007 (Securities Commission, 26
   May 2011).
- Transmile Group Berhad was charged for submitting misleading information statements to Bursa Malaysia. A special audit of Transmile Group has discovered that its revenue for 2005 and 2006 may have been overstated by over RM500 million in the "Quarterly Report of Unaudited Consolidated Results for the Financial Year ended 31 December 2006."

Transmile Group Berhad •On May 30 2007, the company announced the findings of the special audit by Moores Rowland Risk Management Sdn Bhd and amongst others, it was found that the company had overstated its revenue by RM333 million for Financial Year ended 31 December 2006 and RM197 million for Financial Year ended 31 December 2005 whist for Financial Year ended 31 December 2004, there were an absence of documents to verify revenue of RM97 million (*Transmile announcement to Bursa Malaysia*, 30 May 2007).

Megan Media Holdings Berhad

- Megan Media Holdings Berhad had furnished false financial statements to Bursa Malaysia for the Financial Year ended 30 April 2006 and its quarterly report on consolidated results for the Financial Period ended 31 July 2006, 31 October 2006 and 31 January 2007 respectively.
- In its report to Bursa Malaysia on 7 June 2007, the company provided additional information from the investigative report from Ferrier Hodgson MH Sdn Bhd. The findings had resulted the company to report an additional losses of RM563 million for Quarter 3 in 2007. The losses were the results of an overstatement of gross profit of RM16 million as a results of fictitious revenue recognition of RM173 million and the writing off of fictitious trade debtors of RM334 million and the write down of an apparent fictitious prepayment of machinery of RM212 million (Megan Media announcement to Bursa Malaysia, 7 June 2007).

GP Ocean Food Berhad • GP Ocean Food Bhd was charged for the submission of misleading information to the Securities Commission in relation to Gropoint Fisheries Sdn Bhd's and Gropoint Seafood Industries Sdn Bhd's directors' report and audited financial statements 31 January 2006 where both the companies are subsidiaries of GP Ocean. The misleading information pertained to revenue; RM142.5M for Gropoint Fisheries Sdn Bhd's, RM38.0 M for Gropoint Seafood Industries Sdn Bhd and RM180.1 M for GP Ocean Bhd (Securities Commission, 22 May 2007).

NasionCom Holdings Berhad •NasionCom Holdings Bhd was charged for submission of false information to the Securities Commission in relation to the financial statements for the year ended 31 December 2005 involving its main operating subsidiaries NasionCom Sdn Bhd's and Express Top-Up Sdn Bhd. Securities Commission's investigations showed that revenue of RM143.1M were not transacted (Securities Commission, 15 February 2007).

Figure 7: Samples of companies being charged by the Securities Commission

Apart from the charges undertaken by the Securities Commission, some of the companies have been prosecuted in court and found guilty of their offences. Table 2 shows the prosecutions initiated by the Securities Commission on companies that were charged for various accounting frauds. The prosecutions have resulted in the offenders being fined or imprisoned, and some cases are still under trial.

**Table 2 - Prosecution Cases on Public Listed Companies** 

Table 2 - Prosecution Cases on Public Listed Companies	
YEAR	REGULATOR PROSECUTIONS
2011	Inix Technologies Holdings Berhad  The Chief Executive Officer was fined a total sum of RM1.0 million whilst 2 other directors were fined a total of RM325,000 and the senior financial executive was fined RM350,000. The default in these fines will be imprisonment of various terms ranging from 6 months to two years.
	Granasia Corporation Berhad The Group Managing Director was fined RM500,000 and in default imprisonment of two years.
	Kosmo Technology Industrial Berhad The Group Managing Director, the Group Executive Director and the Accounts Manager were charged in 2011. If convicted they will be liable to a fine not exceeding RM3.0 million and imprisonment for a term not exceeding 10 years for each charge.
	Mems Technology Berhad A director who is a substantial shareholder was fined a sum of RM300,000 and a 6 months imprisonment. The Chief Financial Officer cum Director was also fined RM300,00 with a 6 months imprisonment.
	GP Ocean Food Berhad The Executive Director and Finance Director were charged in 2007 but were later acquitted and discharged in 2011 by the Session Court. Prosecution had filed an appeal against the acquittal to the High Court.
2010	Polymate Holdings Berhad The Group Managing Director was charged in 2007 and the Session Court convicted him in 2009 and sentenced him to a fine of RM300,00 and in default a year imprisonment. Prosecution filed an appeal against the sentence in 2010 but the sentence was upheld by the High Court.
	Transmile Group Berhad Trial has commenced against the Chief Executive Officer and another Director.
2009	Megan Media Holdings Berhad The former Financial Controller was charged in 2007 and in 2009, he pleaded guilty and was fined RM350,000 and in default a year's imprisonment. Prosecution filed an appeal against the sentence.
	Pasaraya Hiong Kong Sdn Bhd The Managing Director and Executive Director were charged in 2005. The Managing Director pleaded guilty and was convicted and sentenced to 2 years imprisonment and the charge against the Executive Director was withdrawn upon the Managing Director guilty plea. In 2009 as the warrant of arrest had not been able to be executed, the Court
	of Appeal struck out the appeal against the sentence.

Note: All information in the above table was obtained from the website of Securities Commission

#### 6. CONCLUSION AND FUTURE STUDIES

This paper deals with conceptual and motivational aspects of the creative accounting issue. The continuance of managers to creatively manipulate financial reporting, despite the availability of various legislations, is the result of the weakness of the control and enforcement system together with human greed. Although the systems might cater for the crucial areas that are prone to financial reporting manipulation, human greed will always find ways to circumvent the system to achieve their motives. This 'brain' game portrays the ability of the managers to shape, more or less, the image of the enterprise (Balaciu, Bogdan & Vladu, 2009).

Some large companies have been found to engage in creative accounting practices – sometimes aggressively. It is observed that large companies involved in manipulation of financial reporting were experiencing net losses during periods before the manipulation occurred. Large companies with a high debt structure are also likely to be related with the manipulation of financial statements. The need to meet certain debt requirements provides incentives for managers to manipulate the financial statements. When a company highly relies on their external debt, the company tends to manipulate its revenue to show that they have the ability to pay off the debts.

It is hoped that the results of this study will be able to help the regulators to examine the application of creative accounting in large companies. A stricter law regarding creative accounting can be gazetted and enforced for serious misrepresentation in financial reports to ensure compliance with business regulations and corporate legislation; possibly through comprehensive enforcement and monitoring activities. The implementation of this enforcement can sustain positive developments in the corporate and business sectors of Malaysia.

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### **CONSOLATION PRIZE**

**Enhancing Audit Quality Through Clan Control in Malaysian Public Accounting Firms** 

Ms Aida Hazlin Ismai

Dr. Zakiah Muhammaddun Mohamed

### ENHANCING AUDIT QUALITY THROUGH CLAN CONTROL IN MALAYSIAN PUBLIC ACCOUNTING FIRMS

#### **ABSTRACT**

The aim of this paper is to explicate the ways in which auditing firms in Malaysia develop control systems in human resource management to improve audit quality. This study focuses specifically on clan control within auditing firms to enhance audit quality which is the core component of ISQC 1 implementation. IFAC has introduced six elements of ISQC 1 including human resource that could promote audit quality within auditing firms. Six audit partners representing Big Four and Non Big Four auditing firms in Malaysia were interviewed. Data obtained through the in-depth interviews were analysed using the constant comparative method. Elements of human resource management investigated in the study are communication, recruitment, training, leadership style or involvement, review process and appraisals. Findings suggest that the Big Four institute different forms of clan control than their counterparts, the Non Big Four firms. The Big Four firms have more formal, systematic and structured control as compared to the Non Big Four firms. The main contribution of this study is the emerging framework that depicts the differences in clan control and audit quality measures between the Big Four and Non Big Four auditing firms. The framework promotes a new understanding on the diverse process of attaining audit quality among auditing firms in Malaysia.

#### 1. INTRODUCTION

The major determinant of an auditor's professional status is the perceived quality of the service provided by the auditors to their clients and society [10]. However, auditors face constant conflict between the cost of auditing and the pressure to perform quality audit work [22]. The International Federation of Accountants (IFAC) in introducing the International Standard of Quality Control 1 (ISQC 1) to auditors is purported to improve quality in auditing firms. ISQC 1 comprises six elements of quality control which include leadership responsibilities for quality within the firm, ethical requirements, acceptance and continuance of client relationships and specific engagements, human resource, engagement performance and monitoring. Auditing firms need to apply ISQC 1 in their audit work to enhance audit quality. Hence, knowledge on how auditing firms currently control their operations is essential in light of this new requirement.

Management control systems (MCS) could best be defined as all devices and system that managers use to ensure that behavior and decisions of their employees are consistent with the organisation objectives and strategies [9]. Previous literature has revealed that the management control system of auditing firms has an impact on audit quality based on the organizational structure, job continuity, informal controls such as social control and clan control ([15]; [22]). Therefore, it is important for the auditing firm to have an efficient management control system to boost the quality of the auditor's work. The clan control or human resource management is essential although other forms of control are in place [22].

Clan control refers to the additional control to formal quality control of human resource that operates+ within auditing firms [11]. The human resource management which involves the recruitment, socialization and acculturation, job satisfaction, organizational and professional commitment, promotion and turnover of staff is important because auditing firms rely heavily on the staff for performance and quality of the firm [2]. The number of prior studies on the recruitment and socialising of accountants is limited [1]. In addition, concerns about the quality of auditors and criticism of the auditing profession have risen due to the high staff turnover and difficulty to attract suitable staff resulting in the recruitment of low caliber staff [22]. Hence, there is a need to investigate human resource management in the Malaysian context taking into account the Non Big Four firms to obtain a better understanding on the association of clan control and audit quality.

The current study investigates the ways in which auditing firms in Malaysia develop control systems in human resource management to improve audit quality. The study delineates the differences and similarities in clan control between the Big Four and Non Big Four firms to come up with a new framework on clan control and audit quality in auditing firms. The rest of the paper is organised as follows: the ensuing section describes the background of the study, followed by a section on the methodological approach of the study. The paper continues with the discussion and findings section and concludes with a section on limitations and suggestion for future research.

#### 2. BACKGROUND OF THE STUDY

#### 2.1 International Standard on Quality Control 1 (ISQC 1)

In 2004, the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC) approved the International Standards on Quality Control (ISQC 1) concerning the quality control for firms performing audit and review of historical financial information and other assurance and related service engagements. In line with this requirement by IFAC, the Malaysian Institute of Accountants (MIA) has imposed that all registered accountants and audit practitioners in Malaysia comply with the new quality control standards by 30 June 2006. As a result, audit practitioners face additional responsibilities to implement new quality control safeguards and procedures.

ISQC 1 deals with firm-wide quality control which provides reasonable assurance that auditing firms and its personnel comply with professional standards, regulatory and legal requirements. In addition, the standards also require auditing firms to document the operation of each of the six elements in its quality control system and retain that documentation for an appropriate period. Pflugrath et al. (2007) support the requirements of ISQC 1 as relevant to the quality control of accounting firms and have potential to positively impact the quality of the audit performance. As the adoption of ISQC 1 is still in the early stages, hence, review of the literature has revealed there is limited study conducted in the ISQC 1 and the impact on audit quality particularly for the Non Big Four firms.

#### 2.2 Audit Quality Literature

Audit quality is inversely related to audit failure, where a higher audit failure rate is associated with lower quality of auditing work [7]. The collapse of a Big Four Firm Arthur Andersen and proliferation of corporate scandals such as Enron and WorldCom in the United States (US) have brought a big impact to the auditing profession. Similarly in Malaysia, in 2006, the public were taken aback by the 'Mini Enron' case of Transmile Corporation scandal. It is the job of auditors to provide assurance on the credibility and reliability of the information. Therefore, the vital issue is on how effective are the auditors in ensuring the credibility of accounting information in the audited financial statements [4].

Prior research on audit quality that relates to management control systems in auditing firms concerns the controlling of cost and quality of audit work performed by auditors ([22]; [14]; [19]). The greatest difficulty in controlling audit quality is the ambiguity of outputs and the uncertainty for the auditors to conduct a 'good audit' [19]. In addition, auditing firms are not able to objectively measure output and have imperfect knowledge of the transformation systems [22]. In this situation, the informal control such as the clan control characterized by ritual and ceremonies could be useful and it requires stability of membership and strong social memory [23]. Hence, the role of a management control system in the auditing firm is important in mitigating the issue of cost and quality conflict [10].

#### 2.3 Management Control Systems in Auditing Firms

The two main types of control in management control system literature are formal control and informal control. Consequently it has been argued that the characteristics of the audit environment render formal behavioural and output control less effective in the control of audit quality [6]. As a result, audit firms may employ formal controls to the extent that it is possible but may also rely on the informal mechanisms of control such as clan control [11]. Ouchi (1980) supports that clan control is one of the most important forms of control in the management control system. An empirical study conducted by McGarry and Sweeney (2008) examined clan control over the audit quality issue from the perspective of senior auditors. Findings reveal that the two forms of clan type control are informal communication and role of modally aspect of mentoring.

#### 3. METHODOLOGY

This study adopts the constant comparative method of analysis which was originally developed for grounded theory methodology (Glaser 1978; Strauss and Corbin 1990). The method falls under an interpretive paradigm with the intention to build theory rather than to test theory. The method requires the researcher to take one piece of data and compare it with other pieces of data in order to identify similarities or differences. During this process, the researcher begins to look at what makes this piece of data different and/or similar to other pieces of data. The steps start with a problem statement of what is to be studied and tentative research questions. However, this methodology is fairly new in accounting research as compared to other fields of research (Parker & Roffey 1997).

In recent years, the acceptance of the method is more prevalent amongst the management and auditing research [22].

The constant comparative method is a more appropriate approach for this study because most prior studies on control in auditing firms used the quantitative methodology by either using a survey or an experimental study as the research design. Some of the variables examined using these methods have been studied for more than two decades. In addition, with the constant comparative approach, researchers are able to investigate more in-depth about the phenomenon and uncover new variables relating to the phenomenon. Since there are changes in the auditing environment globally and also the management and structure of the auditing firms resulting from the fall of Arthur Andersen [22], it is befitting to conduct new studies that could offer new insights on control systems in auditing firms particularly from the partners' perspectives. Using in- depth interviews to collect data can reveal the actual variables that currently impact control systems in auditing firms.

Interviewees were selected based on purposive sampling and six audit partners were chosen representing the Big Four and Non Big Four auditing firms around the Klang Valley area which represents the main business center in Malaysia. Prior studies suggest that size of the auditing firms have an influence on audit quality ([12]; [5]; [16]) and therefore respondents were selected based on the auditing firms they represent. The appropriate sample size for qualitative research depends on when 'theoretical saturation' is achieved, that is when no new or relevant information regarding a category emerged from new data collected. The main category or theme is considered to have been well developed in terms of its properties and dimension [21]. Semi-structured interviews were used in the study to collect the data. The questions are mainly open-ended and this allows the researcher the opportunity to probe more questions during the interview [3]. In addition, the interviewer usually has some latitude to ask further questions in response to what are seen as significant replies. In order to ensure all relevant information is captured during the interview, a tape recorder is used to record the conversation throughout the interview sessions. In addition, notes were also taken by the researcher during the interview as a backup if the tape recorder was not functioning well.

#### 4. DISCUSSION OF THE FINDINGS

#### 4.1 Definition of Audit Quality

Two partners from the Non Big Four are of the opinion that audit quality is a 'very subjective matter' (P4 and P6), with one partner defining it as 'doing what is right' (P5). Being in the industry, doing what is right is by 'having the right people, the right documentation, right systems and audit processes in place for daily work routine' (P4). The definition of audit quality is supported further by three Big Four partners that consider audit quality as 'using the right method of process in accordance to relevant standards applicable in Malaysia' (P1). Audit quality can also be defined as 'risks that need to be addressed properly during the work of audit' (P3). Therefore, 'having a good control in the firm' (P5) is also said to be an alternative definition of audit quality.

All of the partners agree that audit quality can best be defined as by having the right people (staff) and audit procedures in the firm. This should lead to good quality audit work and thus increase the possibility of providing the right audit opinion. Human resource management through clan control is said to play a vital role in promoting audit quality. The staff of the firms are the main asset and the 'human factors are the ultimate factors that determine whether the firm succeeds or not (P4). The human resource control is important regardless of the size of the firms.

#### 4.2 Clan Control

Management control system (MCS) has a very broad conception of what should be considered as the components of MCS. The concept of clan control in research has been developed by Ouchi (1980) that individuals are exposed to a socialization process that instills in them a set of skills and values which relates to certain groups of professions such as doctors and accountants. Clan control is particularly perceived to be applicable to the audit environment [11]. However, not many published research provides empirical evidence on clan control and the relationship with audit quality. Prior studies in auditing examines the issue of clan control from the perspective of Big Four auditing firms partners and seniors in United Kingdom (UK) and role modeling as a control procedure in the firms[22]; [28].

#### 4.3 Clan Control in the Big Four Firms

Five forms of clan control are discussed in this study which is adapted from the findings Pierce and Sweeney (2004). Figure 1 provides details of the findings on clan control. The human resource elements are communication, recruitment, training, review process and appraisals. Formal communication could be found in the Big Four auditing firms. All forms of communications are conducted through emails or meetings among the staff. The whole cycle of the auditing process has been programmed according to the firm's audit methodology and culture. In addition, the audit review processes to maintain high quality audit work is very structured with proper audit procedures to be followed by the auditors. This formal type of control is also a form of bureaucratic control such as formal review of audit working papers, compliance with audit methodology and supervision of junior staff [22].

Recruitment of new staff is according to the firm's policies and criteria. Knowledge and skills of the candidates are the top priority of selection for an interview. The interview process will be conducted by the human resource department working together with the pre-selection of candidates conducted by the audit partners. IQ test and English proficiency test will be conducted before the interview process. Therefore, the recruitment process for the Big Four firms is more structured and systematic with proper procedures and screening processes.

Formal and informal training is also considered as important quality control in auditing firms [22]. For the Big Four firms, the training is structured and systematic according to the firm's procedures and policies. Training sessions are conducted during the off peak period and compulsory for all the audit staff at every level. The modules for the training are just like the syllabus for the university courses. There are also soft skill training such as leadership skills and negotiation skills. Most of the trainers are in-house trainers.

Review processes for both groups of Big Four and Non Big Four are structured. However, the Big Four firms institute more formal procedures as compared to the Non Big Four firms. This is evident from the findings that the Big Four firms have external reviewers from other offices to maintain high quality audit work. However, the external review process is lacking in the Non Big Four firms.

The Big Four firm's appraisal process is formal and structured in nature. The appraisals are conducted annually or in some firms twice a year. It is considered as formal as the senior in-charge will assess the junior team members and provide feedback to the managers. Then discussion between the managers and the senior in-charge will be conducted before comments and feedback are formed on the performance of each staff member. The appraisal for the junior staff for the Big Four firms is conducted twice a year because the first three years in the firms are considered to be the most progressive and demanding for the staff. Therefore, the appraisal will be used as guidance to promote the staff or increase the salary. Another reason is to ensure that the staff will feel appreciated and sustain in the firm for a longer period of time.

#### 4.4 Clan Control in the Non Big Four Firms

Clan control in the Non Big Four firms is less bureaucratic as compared to the Big Four firms with communication control being informal. Findings indicate that being in small and medium size auditing firms the partners are more involved in the daily operation of the firm. Meetings and discussions are conducted informally between the junior staffs and top management. The partners and managers have the time to go through all the working papers prepared by the staff and provide detailed feedback on audit work. Hence, this will increase the quality of the audit work and additional on-the-job training provided for the junior staff could benefit them tremendously. Small firms conduct appraisals for the staff less formally compared to those conducted by Big Four firms. The partners of small firms are very much involved in assessing staff. Any information can be disseminated to the staff by either announcement in the office or emails.

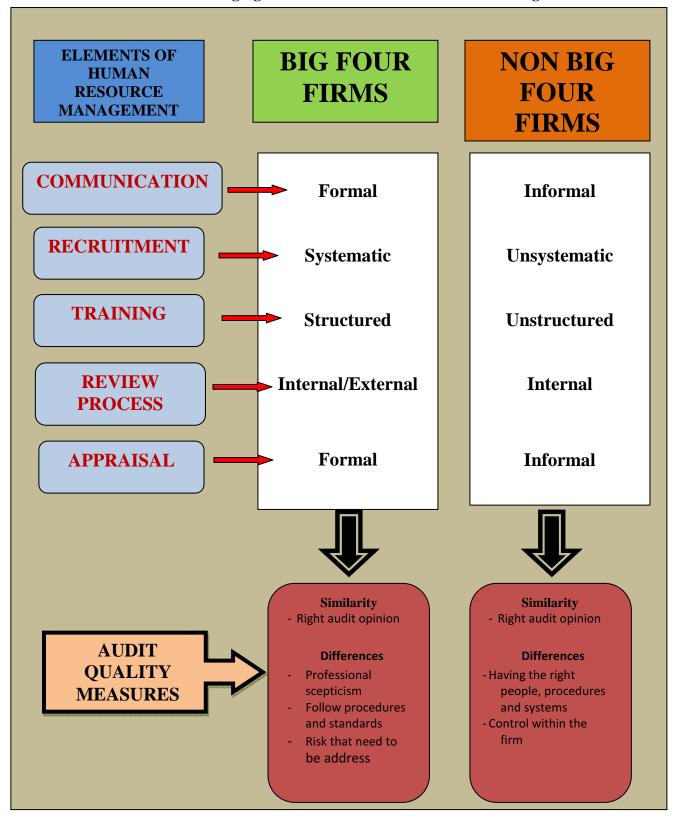
The recruitment process is more flexible as compared to the Big Four firms. The Non Big Four firms are mostly between five to ten years of incorporation. This is supported by Otley & Pierce (1996) that in general there is an increase of informal control in new and flatter organisational structures. The selection criteria for new staff do not emphasise academic results per se. The most important criterion is involvement in the co-curricular activities. Active candidates are selected because they are able to work in teams and have cultivated good interpersonal skills. Partners are also found to be directly involved in the recruitment of audit staff consistent with Pierce and Sweeney's (2004) study.

For the Non Big Four firms, structured training program are not in place. Training is based on requests from all departments every year. Most of the training sessions attended by the staff are conducted in-house or organised by MIA or other professional bodies. Informal training sessions such as on the job training which involves getting feedback from the managers and partners involved in active review of the files for each audit job are considered to be more effective for the junior staff [22]. One of the audit partners supports the fact that if the audit manager spends time reviewing the files at the client's place, then the quality of the audit job will increase.

#### 5. CONCLUSION

This paper provides an emerging framework that promotes a new understanding of audit quality and the differences in human resource elements of control for auditing firms in Malaysia. The study reveals that Non Big Four auditing firms institute less bureaucratic control mechanism than their counterparts the Big Four Firms. In addition, while all partners agree that audit quality is very much dependent on the quality of their staff, control systems in the Big Four auditing firms are found to be more structured and embedded in the firms' policies and procedures and require less of the partners intervention. The small sample used in the study limits the generalisation of the findings to the population of auditing firms. Therefore further research needs to be conducted using either a survey method or an experimental design to statistically validate the findings obtained from this study.

FIGURE 1: Emerging Framework of Clan Control in Auditing Firms



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### **CONSOLATION PRIZE**

# THE RELEVANCE OF MANAGEMENT ACCOUNTING IN HIV HARM REDUCTION PROGRAMMES

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## THE RELEVANCE OF MANAGEMENT ACCOUNTING IN HIV HARM REDUCTION PROGRAMMES

#### **ABSTRACT**

This paper is the result of a collaborative project between a group of management accountants and INFORMM (Institute of Molecular Medicine), a pharmacogenomic research centre. The study, in examining how management accounting techniques can be applied in HIV harm reduction programmes, developed a CEA model "4Cs" for which an application for trademark is in process.

Recent years have seen increasing cases of intravenous drug users (IDUs) not only in Malaysia but also worldwide and their consequential negative impact upon society, one of which is the rising cases of HIVs. Recognising that it is impossible to eradicate HIVs, many countries have embarked on harm reduction programmes such as syringe exchange programmes and methadone maintenance programme.

The cost effectiveness of such programmes has seldom been examined, much less by management accountants and this paper explores the possibility of measuring the cost effectiveness of such harm reduction programmes through the lens of management accounting. This project builds the cost effectiveness model based on the concept of Total Quality Management (TQM), illustrating that management accounting can be interdisciplinary. This model was built based on information gathered from interviewing medical staff involved in harm reduction programmes.

This report represents the first stage of the study. The second stage of the study will involve the rigorous testing of the model through data gathering from NGOs, government clinics and private clinics involved in harm reduction programmes.

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<sup>&</sup>lt;sup>5</sup> The team acknowledges the contribution of Adjunct Professor Michael Tayles (University of Hull, U.K.) toward the development of 4Cs.

The general perception is that management accounting is a discipline associated with profits and losses. It is high time for management accounting to be woven into the fabrics of society even though profit maximisation is not the main issue. This is the crux of its corporate social responsibility (CSR), whereby management accounting can be seen as a practical discipline that can provide solutions across a wide spectrum of society. In this context, accounting can be seen, not as a lofty tool of managing directors alone but a worthy tool of also the neediest of society. CSR is not just a part of management accounting but management accounting can be CSR itself.

The concept of 4Cs as applied to CEA indicates the relevance of management accounting in medical science. Management accounting is not an exclusive and ethnocentric discipline, but there is a need for its greater pervasiveness into other disciplines.

#### 1. **INTRODUCTION**

Businesses operate in a very volatile environment, where uncertainty is a commonality. The ability for businesses to adapt to changes is the key to surviving in a competitive environment. However, businesses are but one cluster of a vast environment, Non-Governmental Organisations (NGOs) being the other. The former focuses on profitability while the latter focuses on helping the helpless. Management accounting techniques are equally relevant in both clusters, and provide equally powerful tools in making decisions, be it in profit maximising or analysing cost effectiveness. Government hospitals, private clinics and some NGOs have been running harm reduction programmes to reduce the occurrence of HIVs. The cost-effectiveness of such harm reduction programmes has rarely been discussed and published, much less by management accountants. The following sections on harm reduction and HIVs set the background in understanding how a cost-effectiveness model can be developed.

#### 2. HARM REDUCTION PROGRAMMES

Harm reduction activities conducted both by the NGOs and Governments all over the world have a common goal, which is to promote a healthy and productive lifestyle for an individual and the community. Various campaigns have been initiated to promote healthy lifestyle, for example, No Smoking Day, No Smoking Area, Don't Drink and Drive, sex education in school.

Generally harm reduction is a way of dealing with behaviour that damages the health of the persons involved and their community. Many individuals acquire these damaging behaviours despite being aware of the adverse effects on their health. These would include smoking, drinking too much alcohol and drug abuse. The International Harm Reduction Association (IHRA) defines harm reduction as practices that aim primarily to reduce the adverse health, social and economic consequences of the use of legal and illegal psychoactive drugs without necessarily reducing drug consumption. Also referred to as risk reduction or harm minimisation, harm reduction principles can be applied to reduce HIV-related risks of drug use or unsafe sexual activity (www.bloodinex.com)

The following have been identified as the three immediate tasks for harm reduction (Des Jarlais, 1995).

- 1. Provide adequate treatment for persons with psychoactive drug use problems which include both legal and illegal drugs, short and long term treatments.
- 2. Reduce transmission of HIV associated with illicit drug use, which includes treatment on demand and legal access to sterile injection equipment.
- 3. Develop new regulatory formats for distributing drugs for some nonmedical use.

Methadone Maintenance Therapy (MMT) is a harm reduction programme for persons with psychoactive drug use problem while Needle Syringe Exchange Program (NSEP) is another programme where clean syringes are provided to reduce transmission of HIV. Regulatory frameworks for such programme can be best developed with reference to a cost-effectiveness model since public funds are involved.

Several case studies conducted by Crofts et al (1998) reveal that several countries in Asia which established harm reduction programmes have seen a reduction in HIV infections. Various NGOs in Asia have established harm reduction programmes; for example, the Needle Syringe Exchange Program (NSEP) was introduced by the Lifesaving and Life giving Society (LALS) in Nepal, the Save the Children Fund in Ho Chin Minh City, Vietnam, the Aids Surveillance and Education Project (ASEP) in the Philippines and Mae Chan, Thailand. Injecting Drug Users (IDUs) are given bleach, iodine, gauze, information and counseling about HIV/AIDS, food and provided with

medical attention. Drop-in centres were also established in these Asian countries where IDUs receive free syringes, medical aid etc. Harm reduction in Odessa, Ukraine started in September 1999. The activities involved the promotion of safe drug use practices and sexual behavior through the provision of condoms, syringes and educational materials (Vickerman et al, 2006).

In Bangladesh, the Stopping HIV/ AIDS through Knowledge and Training Initiatives (SHAKTI) Project initiated by CARE started the NSEP in 1995 (Habib, 2004). The project is aimed at reducing the transmission of HIV/AIDS through brothel sex workers intervention, street sex workers intervention, and local NGOs working among IDUs.

Setting up Drop-in Centres (DICs) is another NSEP initiative aimed at reducing HIV, Hepatitis C virus and Hepatitis B virus in Iran (Mirahmdizadeh et al, 2009; Varizan, 2003). DICs run NSEP as well as provide condoms and MMT.

## 3. HUMAN IMMUNODEFICIENCY VIRUS/ ACQUIRED IMMUNE DEFICIENCY SYNDROME (HIV/AIDS)

HIV refers to the Human immunodeficiency virus that can cause an individual immune system to fail and lead to life threatening infection. HIV can be transmitted through unsafe sex, contaminated needles, breast milk and transmission from an infected mother to her baby. This is the virus that causes AIDs. HIV attacks the immune system cells that are supposed to protect us from illness.

HIV/AIDS is a worldwide problem that affects mostly young people at their most productive life. Millions of people all over the world are living with HIV/AIDS and many have died. ABD/UNAIDS (2004) reported that there has been rapid growth in special populations such as injecting drug users, commercial sex workers and mobile populations.

However, HIV patients will not have AIDs immediately once they are infected by HIV. If HIV is left untreated they will eventually have AIDs because the immune system will wear out. This is the advanced stage of HIV infection.

The number of HIV positive people in Malaysia has increased dramatically in recent years. The first recorded case of AIDs was detected in 1986. Malaysian Ministry of Health reported that injection drug use (IDU) accounts for a largest proportion of HIV transmission in Malaysia. 75% of all HIV infections have resulted from needle-sharing in IDU. The real figure may be higher. It was reported that 65% of HIV infections in IRAN are due to drug injection among IDUs (Mirahmdizadeh et al, 2009; Varizan, 2003). It is expected that IDU will continue to be a major mode of transmission.

#### 4. HARM REDUCTION AND HIV

Malaysia's policy of zero tolerance and total abstinence in drug use was the reason why harm reduction was not given much emphasis. The introduction of harm reduction, particularly needle exchange programmes, was met with much public opposition (Kamarulzaman, 2009). However, when about 70% of IDUs were found to be HIV positive or had AIDs, harm reduction strategies were considered by the Government.

In June 2005, the Ministry of Health Malaysia approved the setting up of a pilot Needle and Syringe Exchange Programme (NSEP) at 3 sites for a period of 1 year. The availability and utilisation of sterile injecting equipment by IDUs reduces rates of HIV infection.

The Malaysian Government's harm reduction programmes include NSEP, MMT and condom distribution targeted at IDUs. These harm reduction programmes are among the more successful harm reduction programmes in developed countries (Crofts et al., 1998).

This project focuses on developing a CEA model for MMT, a harm reduction programme which has not seen wide acceptance in Malaysia. Hence, a CEA model is critically relevant at this point for decision makers.

## 5. METHADONE MAINTENANCE (MM) THERAPY: A TREATMENT FOR OPIATE ADDICTION

It is a widely accepted fact that methadone is a widely used and highly accepted medication for heroin and opiate addiction (Schilling et al, 2006) since it is safe and has relatively few side effects (O'Brien, 1996). WHO (2001) promotes methadone maintenance therapy (MMT) as an effective treatment for IDUs, particularly with respect to reducing HIV transmission.

MMT has been found to be effective in reducing heroin use, HIV-related needle sharing and criminal activity (Sorensen & Copeland, 2000) and maintaining treatment adherence. Sorensen and Copeland (2000) concluded that MMT reduces the likelihood that a client will become HIV positive. The average maintenance dose however, ranges from 60mg to 120mg depending on the quality of the heroine that has been used and the different ethnic groups (Jesjeet et al, 2007; Dole et al, 1966,)

#### 5.1 Advantages of MMT

Jesjeet et al (2007) found that MMT can lead to abstinence from heroine, decrease in high risk behaviour and crime, and improvement in work performance and relationship with care providers. The result is similar to a study done in Lithuania by Padaiga et al (2007). Those on methadone reported that there was improvement in their work performance or they had gained employment. However they agreed that they still needed to attend frequent follow ups as part of the overall protocol of MMT. Other studies (Deren et al, 2007 and Millson et al, 2007) reported that there was a reduction in injecting behavior in those on methadone.

#### 5.2 Benefits and Costs of MMT

Longitudinal studies indicate that opiate dependents in MM treatment earned more than twice as much money annually as those not in treatment (Schilling et al, 2006). Additionally, MM treatment has a lower cost-effectiveness ratio than what is commonly accepted (Barnett & Hui, 2000). Based on a sample of 10,000 clients, Hubbard et al (1989) found that "modest investment of \$5,000 for a year of outpatient drug-free or MM treatment ... will produce benefits that far outweigh the costs" (p. 166). The expenditure of MM treatment outweighs the lifetime treatment costs of \$103,552 (in 1999) for one HIV-infected individual (Barnett & Hui, 2000).

#### 5.3 Cost Input

A review of literature on cost effectiveness of interventions on HIV/AIDS yields very limited results of such research having been conducted in Malaysia. However, the paucity of Malaysian data does not in any way nullify the relevance of such studies. Attempts have been made in identifying cost input by Van Hulst et al (2008) but these costs are mainly financial costs. Sendi et al (2004) attempted to capture productivity costs of HIV patients in Switzerland and identify characteristics influencing patients' productivity. Their conclusion was that productivity losses for the HIV infected population were substantial. "Given a patient's clinical health status, a higher education level and a stable partnership were associated with greater ability to work. Socioeconomic characteristics may influence the cost-effectiveness of health care interventions in HIV-infected patients".

#### 5.4 Intervention Costs

In a study by Wilson et al (2005), allocations of resources were made to two interventions, street outreach and methadone maintenance. Their model sought to minimise HIV incidence in a population of heterosexual IDUs and their non-injecting sex partners. Their results indicated that an inexpensive intervention like street outreach proved to be less cost-effective than an expensive, narrowly focused intervention such as methadone maintenance.

Other additional services provided for methadone maintenance patients can be considered as equally important to the success of MMT (Patrick et al.1998). Generally, the opiate—dependent patients do have other problems like psychiatric disorders and medical illness (Barthwell & Gastfield, 1992; Condelli et al, 1991; Milby et al, 1996). Appropriate psychotherapeutic services (Abbott et al. 1996; Woody et al. 1987; Woody et al.1995) can improve the MMT outcome. Such problems are revealed during the screening process and thus enable necessary treatment to be given to the patients.

#### 5.5 Output/Benefits

The output in cost benefits/effectiveness analyses, various measurements of output have been utilised such as standardised estimates of the cost per HIV infection prevented e.g. US\$ for year 2000 (as cited by Creese et al, 2002) and disability-adjusted life-year (DALY) gained. Life-years of survival as a measure of treatment benefits has been widely used in the evaluation of health care interventions but rarely applied to substance abuse treatment (Barnett, 1999). The findings by Creese et al (2002) show that cost-effectiveness varied greatly between interventions in Africa. "A case of HIV/AIDS can be prevented for US\$11, and a DALY gained for US\$1, by selective blood safety measures, and by targeted condom distribution with treatment of sexually transmitted diseases".

The various MMT literature indicates the possibility of building CEA models despite the complexity of identifying certain costs. The MMT programme is relatively newer to NSEP, and an examination of NSEP will enhance our understanding of CEA.

#### 6. NEEDLE SYRINGE EXCHANGE PROGRAM (NSEP)

The first official NSEP was established in 1983 in Amsterdam. Its establishment was in response to the Hepatitis B outbreak (Wodak & Cooney, 2005). However, the programme has been officially operating in 65 countries (Aceijas, 2004).

In China, NSEP was initiated by various agencies as a harm reduction strategy. Till 2008, 2.5 million syringes were distributed (Zhang et al, 2011, Kwon et al, 2009, Lu et al, 2008). The total cost that the country spent on NSEP was US\$1.04 million. Similarly, in England, there were over 1,700 NSEP. These were largely provided by pharmacies. The other sources include specialist services, outreach and mobile services, accidents and emergency departments. Apart from distributing syringes, these NSEP provided the following services: i) advice on safer injecting practices, ii) advice on how to avoid an overdose, iii) information on safer disposal of injecting equipment, iv) access to blood-borne virus testing, vaccination and treatment services, v) help to stop injecting drugs, including access to drug treatment and encouragement to switch to non-injecting methods of drug taking and vi) other health and wealth services.

In Bangladesh, SHAKTI "Stopping HIV/ AIDS through Knowledge and Training Initiatives" project was initiated by CARE started the NSEP in 1995 (Habib, 2004). The project aimed at reducing the transmission of HIV/AIDS by operating in brothel sex workers intervention, street sex workers intervention, injecting drug users in partnership with local NGOs.

Another initiative in NSEP is the Drop-in Centres (DICs) that aimed to reduce HIV, Hepatitis C virus and Hepatitis B virus in Iran (Mirahmanizadeh et al, 2009, Varizan, 2003). The DICs run needle syringe exchange program (NSEP, provided condoms and MMT) for referring people. It was reported that 65% of HIV infections in IRAN are due to drug injection among IDUs.

#### 6.1 Advantages of NSEP

Apart from reducing HIV infection, the needles are provided free of charge and thus drug users do not have to spend money. Drug users do not have to steal money to purchase these needles and the criminal activities are controlled. Sinyang (2004) reported that drug users in Malaysia are estimated to spend an average of between RM30 and RM50 per day or RM900 to RM1,500 per month for the drug. Grund et al. (1996) and Priya et al. (1996) further added that when the drug users receive free needles, the risk of being detained by police is reduced since incidents of theft and pick pocket are reduced.

Drug users in Malaysia were receptive towards NSEP. They felt appreciated and the programme did not put any stigma against the IDUs (Simmonds & Coombur, 2009). In the long run, NSEP helps to increase the IDUs' self esteem and slowly abstain them from using drugs (Denga, Lib, Sringer & Zhanga, 2007).

Wodak and Clooney (2005), reported additional benefits to NSEP, such as an increase in enrolment in drug treatment and higher treatment retention rates among NSEP users when compared to the non-users of NSEP. Gibson (2000), Hagan et al (2000) and Heimre et al, (1998) stated that there was a change in attitude towards drug using patterns among NSEP clients. Bluthethal et al., (2001) further agreed that there was substantial reduction or cessation of injecting among NSEP clients compared to IDUs that never attended a NSEP.

In a research conducted on supervised injecting site, Broadhead et al (2002), found that supervised injection sites offer safer and hygienic environment for people to inject drugs. Boyoumi et al (2008), Kerr et al (2005) and Wood et al (2006) added that supervised injection helps to decrease in sharing of needles among IDUs, reuse of the syringes, fewer people injecting drugs in public, increase in referrals of counselling, reduction in discarded syringes and no apparent increase in police reports of drug dealings or crime.

While there are obvious advantages to NSEP globally, pockets of resistance can be found.

#### 6.2 Challenges in NSEP

In most Muslim countries, such initiatives were met with resistance. For example, in Bangladesh, the initiatives were seen as condoning illicit drug users. Likewise, in Malaysia, challenges came from religious groups (Sarnon et al, 2005) that have a strong influence on moral issues. The use of condoms and clean needles in accordance with the teachings of the Quran and Sunnah has been implemented in other Muslim countries like Uganda, Senegal, Iran and Indonesia. The problems in NSEP are further magnified when addicts refuse to enter rehabilitation programmes. They often leave before they are ready while others relapse.

Social stigma against drug users presents a big barrier in the successful establishment of harm reduction programmes in Afghanistan. The Afghan society gave negative labels to the drug users and considered that any effort involving them will be a waste since history recorded that these drug users never recovered. Even in the US, NSEP was criticised as society perceived it as a first step to legalise illegal drug use.

A study conducted in Vancouver by Boyoumi and Zaric (2008) reveals that prominent law enforcement groups were not too happy with the resources spent on this programme. They felt that the resources could be better spent on other activities. Hence, the use of CEA can help to resolve such negativity.

#### 6.3 Cost Effectiveness of NSEP

The study conducted by Lei Zhang (2011) in China reported that approximately 16% to 20% of the expected HIV cases were averted and led to gains of 1,300 to 1,900 DALYs. This amounted to an estimated cost savings of US\$1.38 to US\$1.97 million on prevention costs and associated costs of care and management. Bayouni and Zaric (2008) found that supervised injection was successful in decreasing needle sharing among IDUs that led to savings of US\$18 million and 920 life gained years. When they included improved health into the test there was an increase in incremental net savings to more than \$20 million and the number of life- year gained to 1070.

Apart from preventing the spread of HIV, harm reduction strategies also aim to raise awareness and provide education within the IDU community about HIV and other diseases (Habib, 2001).

# 7. COST EFFECTIVENESS ANALYSIS (CEA) OF HARM REDUCTION PROGRAMMES

A literature search reveals that cost effectiveness on harm reduction programmes reveals very minimal involvement of management accountants, and the majority of these studies do not differentiate costs. The lack of a standard CEA model renders it difficult to make comparisons of the cost effectiveness of harm reduction programmes across nations.

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#### 8. COST EFFECTIVENESS ANALYSIS (CEA)

Management accountants understand the concept of cost-benefit analysis as the exercise in evaluating an action's consequences by weighing the benefits against the costs. It is the fundamental assessment behind virtually every business decision due to the simple fact that business managers do not want to spend money unless the resulting benefits are expected to exceed the costs. As companies increasingly seek to cut costs and improve productivity, cost-benefit analysis has become a valuable tool for evaluating a wide range of business opportunities, such as major purchases, organisational changes, and expansions.

Some examples of the types of business decisions that may be facilitated by cost-benefit analysis include whether or not to add employees, introducing a new technology, purchasing equipment, changing vendors, implementing new procedures, and remodelling or relocating facilities. In evaluating such opportunities, managers can justify their decisions by applying cost-benefit analysis. This type of analysis can identify the hard ringgit savings (actual, quantitative savings), soft ringgit savings (less tangible, qualitative savings, as in management time or facility space), and cost avoidance (the elimination of a future cost, like overtime or equipment leasing) associated with the opportunity.

Although its name seems simple, there is often a degree of complexity, and subjectivity, to the actual implementation of cost-benefit analysis. This is because not all costs or benefits are obvious at first. Take, for example, a situation in which a company is trying to decide if it should make or buy a certain subcomponent of a larger assembly it manufactures. A quick review of the accounting numbers may suggest that the cost to manufacture the component, at RM5 per piece, can easily be beaten by an outside vendor who will sell it to the company for only RM4.

But there are several other factors that need to be considered and quantified (if possible):

1. When production of a subcomponent is contracted to an outside vendor, the company's own factory will become less utilised, and therefore its fixed overhead costs have less components over which to be spread out. As a result, other parts it continues to manufacture may show an increase in costs, consuming some or possibly all of the apparent gain.

- 2. The labor force may be concerned about outsourcing of work to which they feel an entitlement. Resulting morale problems and labor unrest could quickly cost the company far more than it expected to save.
- 3. The consequences of a loss of control over the subcomponent must be weighed. Once the part is outsourced, the company no longer has direct control over the quality, timeliness, or reliability of the product delivered.
- 4. Unforeseen benefits may be attained. For example, the newly freed factory space may be deployed in a more productive manner, enabling the company to make more of the main assembly or even another product altogether.

This list is not meant to be comprehensive, but rather illustrative of the ripple effect that occurs in real business decision settings. The cost-benefit analyst needs to be cognizant of the subtle interactions of other events with the action under consideration in order to fully evaluate its impact.

A formal cost-benefit analysis is a multi-step process which includes a preliminary survey, a feasibility study, and a final report. At the conclusion of each step, the party responsible for performing the analysis can decide whether continuing on to the next step is warranted. The preliminary survey is an initial evaluation that involves gathering information on both the opportunity and the existing situation. The feasibility study involves completing the information gathering as needed and evaluating the data to gauge the short and long term impact of the opportunity. Finally, the formal cost-benefit analysis report should provide decision makers with all the pertinent information they need to take appropriate action on the opportunity. It should include an executive summary and introduction; information about the scope, purpose, and methodology of the study; recommendations, along with factual justification; and factors concerning implementation.

In the field of health services, where it may be inappropriate to monetise health effects, cost benefit analysis is conducted but it is more commonly known as cost effectiveness analysis (CEA) in medical science journals. Typically, CEA is expressed in terms of a ratio where the denominator is a gain in health from a measure (years of life, premature births averted, sight-years gained) and the numerator is the cost associated with the health gain. The most commonly used outcome measure is quality-adjusted life years (QALY). Figure 1 below shows the proposed CEA model.

#### FIGURE 1: COST-EFFICIENCY ANALYSIS MODEL

#### **COST INPUT**

- 1. Financial
  - a. Initial Outlay
  - b. Recurring costs
- 2. Economic
- 3. Productivity
  - a. Financial
  - b. Non-financial (e.g. lost productivity due to imprisonment)
- 4. Social
  - a. Family breakups
  - b. Rehabilitation
  - c. Crime

# INTERVENTION FOCUSED ON GROUPS HIGH-RISK GROUPS (E.G. NEEDLE-SHARING BEHAVIOUR)

- 1. Free needles
- 2. Methadone maintenance (MM) (Wilson et al, 2005)
- 3. Counselling
- 4. Female Condoms
  - 5. Street outreach (SO) (Wilson et al, 2005)

# OUTPUT (BENEFITS)

- 1. Estimated HIVs averted
- 2. Disability-adjusted life-year (DALY)
- 3. Life years of survival
- 4. Quality adjusted life year (QALY)

#### 9. COST INPUT

Drug dependence can bring about a wide array of social, economic and health problems. It also drains the nation's budget not only due to loss of workforce, but also due to the cost of carrying out rehabilitation programmes, medical costs, legal costs and loss due to crimes.

The costs on any harm reduction activities for injecting drug use can be classified into financial cost, economic costs, productivity costs and social costs.

#### 9.1 Financial Costs

Financial costs represent actual expenditure on goods and services incurred in harm reduction activities, and they can be further classified into initial outlay costs such as the purchase of dosing equipment and recurrent costs such as the supply of methadone or syringes. Other capital costs include initial cost on buildings, equipment and starting up training. Recurrent costs also relate to continuous costs incurred in running specifically identified projects. These include staffing, training, building maintenance and mass media cost.

#### 9.2 Economic Costs

Economic costs include the estimated value of goods or services for which there is no financial transaction or the price of the good does not reflect the cost of using it elsewhere. These are opportunity costs or notional costs of the input. These costs include 'free of charge' buildings or area used for harm reduction activities. The economic cost of this space can be calculated based on the square footage used and the prevailing market rental rates for the space. The economic costs for volunteer staff should be reflected in the full notional salaries. Economic costs also include a valuation of donated items such as condoms, syringes and disinfectants based on market prices. Economic costs for free educational radio air time in transmitting mass media messages also need to be identified.

In summary, the difference between financial and economic costs is explained by Vickerman (2006, p. 94) as

"The major difference between financial and economic costs was the inclusion of the full cost of employed staff, the market value for donated and discounted items such as syringes and condoms, and the rental value for donated building space. The financial cost includes only honoria payments for many staff, which the NGO made. The economic costs include a valuation of the staff time actually put into the project by these honoria staff and is the reason why their personnel economic costs are 6-fold higher"

# 9.3 Productivity Costs

The term productivity costs has been defined by the US Panel on Cost-Effectiveness Health and Medicine as

"the costs associated with lost or impaired ability to work or engage in leisure activities due to morbidity and lost economic productivity due to death"

The productivity cost also consists of both financial and non-financial. Mortality costs include lost economic productivity such as premature death and other indirect costs (Sendi, 2004).

#### 9.4 Social Costs

Some of the indirect costs that lead to losses in economic productivity include costs relating to rehabilitation centres, jurisdiction process, potential corruption, imprisonment in prison centres and increase in security costs.

The above four categories of cost represent cost input that have been identified as related to drug dependency, some of which are quantifiable and measurable but some are harder to quantify.

#### 10. COST OUPUT

Cost output is necessary to complete the cost effectiveness analysis. A search in the literature reveals four different measures:

- 1. Estimated HIVs averted
- 2. Disability-adjusted life-year (DALY)
- 3. Life years of survival
- 4. Quality adjusted life year (QALY)

The most commonly used is QALY, which is also used by WHO.

In order to further refine the categorisation of cost input, a greater understanding of harm reduction programmes such as MMT and NSEP is required.

#### 11. 4Cs

The 4Cs concept is developed based on ideas adapted from the TQM model. A preliminary round of interviews with medical staff involved with various harm reduction programmes and visits to harm reduction programmes provided the basis for the development of the 4Cs model. The following table provides a brief description of 4Cs.

# FIGURE 2: CATEGORIES OF 4Cs

Creating Awareness	Costs of creating awareness and public consciousness of HIVs, creating awareness of availability of harm reduction programmes through advertising, educational talks, radio talk shows.		
Continuous Assessment	Examining, locating and monitoring cost on patients over a period of time  • Interviews • Lab costs outsourced for Blood screening (HIV, Hepatitis, Lung) • Medical physical check-up • Review • Clerical work- updating patients file		
Internal Consequences	Costs incurred as a result of the affected disease e.g. cost of outlay of treatment, alternative drugs, rehabilitation, imprisonment etc.  Direct Costs:  Monitoring costs Counselling MMT/NSEP Rehabilitation Dosing equipment Staffing Cost of space		
	Indirect costs:		
External Consequences	The extra costs of affected careers and others; influences on family members, follow-up crimes, injuries to third parties and society  • MC/Absent from job • Prison costs • Loss of earnings due to imprisonment		

The financial statement of a NGO was obtained and the concept of 4Cs was applied and run on the financial data as illustrated below. The total figures are actual figures.

FIGURE 3: APPLICATION OF 4Cs

	Prevention	Continuous assessment	Internal consequences	External consequences
Costs	RM	RM	RM	RM
Communication		X		
Documentations		X		
Electricity		X		
EPF		X		
Insurance - Staff		X		
Medical for Clients			X	
Medical for Staff		X		
Office Rental		X		
Refreshment	X			
Salary		X		
Socso		X		
Transportation				
- Work Related		X		
- Outreach	X			
- Clients	X			
Up keeping Expenses		X		
Volunteer Allowances	X			
Wear and Tear Expenses		X		
Rehabilitation Costs*			X	
Lost Earnings*				x
TOTAL (RM)	15,000	265,000	154,000	6,900

<sup>\*</sup>Estimated figures based on national figures.

## 12. CONCLUSION

Ample literature points to the benefits of harm reduction programmes, suggesting that MMT and NSEP are effective and beneficial to individuals, yet the amount spent on treatment remains relatively low in Malaysia. No real policy can occur without a shift in public opinion toward substance abuse, without research translated into effective practice. Particular attention must be paid to the methods used to measure the costs of harm reduction interventions and the benefits of these interventions for individuals and for society.

This study intends to use both quantitative and qualitative data to build a cost-effectiveness model of harm reduction programmes. Very few Malaysian studies on the cost effectiveness of MMT have been published. The cost effectiveness data will go towards building the nation's data bank and provide a benchmark for all harm reduction programmes within the nation. More importantly, the data can be used by policy makers to make objective decisions in evaluating the feasibility of applying 4Cs to harm reduction programmes to substance abuse treatment on a wider scale. The cost effectiveness of each centre may vary and the study intends to evaluate appropriate threshold figures. The findings have the potential to positively impact the nation's policy makers on health care, in particular on using MMT and NSEP as a means of reducing HIVs, crime, health costs, and other social costs.

The importance of such findings in harm reduction treatment is increasing as the demand for evidence-based practices grows to provide a more solid foundation for policy makers.

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# **CONSOLATION PRIZE**

Disclosure, Risk and Performance in Islamic Banking: A Panel Data Analysis

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# DISCLOSURE, RISK AND PERFORMANCE IN ISLAMIC BANKING: A PANEL DATA ANALYSIS

#### **ABSTRACT**

This study provides a panel data analysis of the interrelationship among disclosure, risk and performance and also discusses the possibility of endogeneity and exogeneity of dependent variables. In order to find the interrelations among these variables, eleven samples of full-fledged Islamic banks and Islamic windows between the years 2002 to 2006 were used. The estimated results are as follows. All equations do not fit since all variables cannot explain the dependent variables significantly. Since there are three equations, these equations were estimated using the simultaneous equations approach. The results indicate that all equations are almost efficient and the findings suggest that LEVERAGE and PROFIT are statistically significant in determining DISCLOSURE. Meanwhile, the results also suggest that DISCLOSURE and PROFIT are significant in explaining LEVERAGE. The last equation which treats PROFIT as an endogenous variable shows that DISCLOSURE is significant in explaining PROFIT among samples of Islamic banks. Furthermore, the Granger-Causality test was conducted to check the endogeneity and exogeneity among the variables. The Granger-Causality results suggest that, DISCLOSURE has a possibility to be a dependent variable compared to LEVERAGE and PROFIT. Therefore, the regulatory authority should develop a policy in order to enhance the quality of disclosure in the Islamic banking system.

#### 1. INTRODUCTION

In recent years, many studies were conducted on the topic of financial disclosure in the banking industry. Financial disclosure is particularly important because banks are generally viewed as being unclear to individuals. Moreover, its importance in enabling investors and parties to assess risks and returns of investing in, or dealing with a particular institution has grown due to their circumstances. Thus, the banking sector has been encouraged to disclose information particularly on its current condition and future prospects to avoid any doubt and argument in banking operations. In this sense, Berthelot et al. (2003) argue that environmental disclosure is the set of information items that relate to a company's past, current and future environmental management activities and performances and information about the past, current and future financial implications resulting from a company's environmental management decisions or actions.

In fact, more guidelines have been used to ensure that all disclosed information meets the criteria that have been stated. These guidelines act as a guide to the banks formally or informally and at the same time expose their business information. Ever since Islamic banking was introduced, there has been a major reformation in accounting, auditing, ethics, governance, and Shariah standards. In this perspective, the Accounting and Auditing Organisation of Islamic Financial Institutions (AAOIFI) is responsible for preparing accounting and auditing standards. Amongst the standards are the objectives, concepts and general presentation and disclosures in financial statements of Islamic banks and financial institutions<sup>6</sup>.

In Malaysia, Financial Reporting Standard i-1 or FRSi-1 is the national standard issued by the Malaysian Accounting Standards Board (MASB) which lays down the basis for the presentation and disclosure of financial statements of Islamic financial institutions that conduct Islamic banking activities has been laid down in order to ensure comparability of these statements with those in previous periods and with those of other Islamic financial institutions. Furthermore, Bank Negara Malaysia (BNM) as a regulatory agency for financial institutions in Malaysia also issues its own guideline for Islamic banks disclosures, i.e., "Guidelines on the Specimen Financial Statements for Licensed Islamic Banks" (GP8-i). This guideline provides a standard format of financial reports for Licensed Islamic banks including disclosure requirements and has been effective for Islamic banks financial statements since year 2004 (Abdul Majid and Ismail, 2007).

In order to promote Islamic banking systems, financial information is essential to the shareholder or depositors in making their investment decisions. A bank's financial disclosure should avoid the informational asymmetry problem between the bank's managers and investors. In general, financial disclosure is important to the shareholders, stakeholders, and depositors because they could retrieve the current information of the bank's condition. In theory, Hirtle (2007) proposes that greater disclosure provides more information on which investors and creditors can make their assessments of a company's condition, which in turn makes a significant market reaction to an adverse change in condition and subsequent management response more likely and immediate.

<sup>&</sup>lt;sup>6</sup> Example of Studies on Islamic banks disclosure: presented by Abdul Majid and Ismail (2007) at Accounting International Conference ASIC' 07 on 30 October 2007 at Kuala Lumpur.

Most researchers agree that disclosure of information would influence a bank's behaviour in terms of banking performance and bank risk-taking. In fact, the role of disclosure to banking activities is unclear to outsiders. However, based on economic theory, the economist provides the predictions about the two benefits of greater disclosure. Firstly, 'Disclosure-Stability' hypothesis holds that great disclosure and subsequent transparency will assist efficient allocation of resources by improving market discipline. Therefore, increase in transparency will allow greater market discipline.

This situation will affect banking systems whereby the stronger banks are rewarded for their risk management and performance and the weaker banks are punished with higher cost of raising capital. This indirectly will cause the market discipline to provide incentives for banks to manage risk-taking carefully and operate their management efficiently to decrease bank failure problems.

Secondly, the 'Disclosure-Fragility' hypothesis posits that disclosure may lead to interpretation of specific information about the banks' financial condition unjustifiably as an indicator of widespread problems in the banking system, thereby leading to bank runs or stock market collapse (Calomiris and Mason, 1997; Gilbert and Vaughan, 1998; Kaufman, 1994)<sup>7</sup>. Directly, if banks have a disclosure of financial problems, it may lead to the bank's failure in their operations. At the same time, it also leads to an overreaction in the financial markets whereby this impact will be risky for banks to raise their capital. Consequently, outsiders particularly the investors, feel a lack of confidence about the bank's system. This condition may lead to the failure of systemic banking and eventual collapse.

Disclosure is always associated with risk and performance because when there is an increase in disclosure, trading will become more effective and overall risk-return tradeoffs will be enhanced as well. These are the facts that will attract more studies to be done on the relationship between disclosure, risk and performance in the banking systems. Generally, there are several studies that identify this relationship such as Collins and Simonds (1979), Knight and Affleck-Graves (1986), Baumann and Nier (2003), Spiegel and Yamori (2003) which focused and studied the relationship between disclosure and risk-taking. On the other hand, there are also a lot of empirical studies about the relationship between disclosure and performance. The analysis in this study is complementary

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<sup>&</sup>lt;sup>7</sup> See Also Tadesse (2005), page 2

to that of Ingram and Fraizer (1980), Wiseman (1982), Bewley and Li (2000), Pattern (2002), Al-Tuwaijiri et al. (2004) and Clarkson et al. (2007).

Therefore, the aim in the following discussion is to discuss the relationship between disclosure, risk and performance within Islamic banking and to test the endogeneity or exogeneity of those variables.

There are two issues in this study which are the endogeneity and exogeneity problems and the presentation of voluntary disclosure among banks. Endogeneity and exogeneity issues among this relationship will affect the operation of banking systems. For example, when these issues are allowed, banking crises will occur among the banks because the policy makers are confused in determining this relationship. Hence, it is important to know the possible endogeneity and exogeneity of these three factors. Another issue is to find the effect of voluntary disclosure among Islamic banks.

Until now, there are no studies that look into these three factors among Islamic banks in Malaysia using panel data. Therefore, this study will reveal that disclosure, risk and performance are interrelated and will prove the endogeneity or exogeneity of these variables.

# 2. RELATED RESEARCH

#### 2.1. The Relationship between Disclosure and Performance

Previous studies on the relationship between disclosure and performance have reported mixed results. There are two opinions from the discussions on this relationship: voluntary disclosure theory and socio-political theories. Voluntary disclosure theory views disclosure as an important source of information about a company's performance. Based on the economic-based voluntary disclosure theory, it is concluded that there is a positive association between performance and the level of disclosure.

The socio-political theories consist of political economics theory, legitimacy theory, and stakeholder theory. Legitimacy theory is based on the idea of operating successfully, in which corporations must act within the bounds of what society identifies as socially acceptable behaviour.

In addition, findings indicated that legitimacy theory is an explanatory factor for disclosure. On the other hand, in stakeholder theory, the stakeholders have a direct effect on management decisions about a corporation's activities and disclosures. Based on previous studies, such as Clarkson et al. (2007) proposed that poor environmental performers face more political and social pressure and threaten legitimacy. Hence, they proposed to increase disclosure to change stakeholders' perception about their actual performance. Indirectly, this theory predicted a negative association between performance and the level of discretionary disclosure.

An unresolved research issue such as the different prediction about this relationship has evoked a need for a discussion from another point of view, namely the current study. In a previous study, Ingram and Frazier (1980) compared content analysis of a company's annual reports between rating of disclosures and Council on Economic Priorities (CEP) performance rating which appeared in corporate annual reports. These indexes were selected because they were available for a sizeable cross-section of widely traded companies (50) and were derived from independent assessments of the air and water emissions of the companies' plants. The CEP index covered 50 companies in four industries (electric utilities, iron and steel, petroleum refining, and pulp and paper) whereby each company was evaluated in one out of the four years, 1970 to 1974. In this study, the companies constructed a score for disclosure with 20 content analysis items in four categories including evidence, time, specificity, and theme<sup>8</sup>.

To calculate the score, it required the judges to read each sentence and then place a check mark on the worksheet to the appropriate category in each item. The numbers of the check marks were summed up to compute the total score for each category for each company. Scores were standardised for companies in each industry by dividing the differences between the company's score and its industry mean for each category by that category's standard deviation. Regression results indicated that there was no significant association between disclosure and performance.

Wiseman (1982) examined the extent of voluntary environmental disclosures by corporations in their annual reports. He used Ingram and Frazier's method in the research design but in this research Wiseman only focused on the 26 largest US companies that were monitored by CEP for the 1972-1976 period. For voluntary disclosures scores, Wiseman only used a small index compared to the

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<sup>&</sup>lt;sup>8</sup> See Appendix A

previous study. He constructed a disclosure index whereby 18 items in four categories were selected. The items consisted of economic factors (5 items), environmental litigation (2 items), pollution abatement activities (5 items), environmental disclosure that excluded from the other three (6 items). Wiseman again found no significant association between disclosure and performance by using the Spearman Rank Order Correlation.

Wiseman concluded that the results are still the same whether the score items were increased or decreased whereby the result is still not significant.

By contrast, Cormier and Magnan (1997) studied about the determinant, benefit and cost in disclosure. In this study, they used 212 firm-year observations by the Canadian, Ontario, and Quebec departments from 1986 to 1993 in which all the companies with publicly traded securities were selected. In this study, the authors used level disclosure contained in a company's annual report to proxy for its voluntary disclosure strategy. For scoring disclosure, Cormier and Magnan used the coding instrument developed by Wisemen (1982). The disclosure on 18 items grouped into four categories, i.e. economic factors, environmental litigation, pollution abatement, and other environmental matters were measured. The rating is based on a score of one to three for describing monetary or quantitative terms, two when an item is described specifically, one for an item discussed in general. The study found that there is a positive relationship between disclosure and performance. In spite of using the same index, this study is different compared to Wiseman's study. The different results happened from its disclosure policies whereby Canadian based companies whose disclosure is directly or indirectly under SEC's jurisdiction tend to formally disclose less information than companies only to Canadian securities regulations. Another reason found is that in this study both company size and industry classification was used which are strong factors in influencing the level of information disclosed in financial reports.

In addition to these archived studies, Bewley and Li (2000) examined factors associated with the disclosure in Canada. Bewley and Li applied the voluntary disclosure theory to design their research. They selected 188 Canadian manufacturing companies which in their 1993 annual reports used the Wiseman index. In this research, performance measures were not based on CEP-based analyses as the previous studies, but on the companies' pollution propensity in which the companies

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<sup>&</sup>lt;sup>9</sup> See Appendix B

are required to go through industry membership and report to the Ministry of Environment under the National Pollution Release Inventory program, The results found a negative association between disclosure and performance, The results are inconsistent with the theories.

From the previous studies, this study failed to identify the relationship between disclosure and performance, This study found similar discoveries with the Pattern (2002) study who had identified these problems in their findings, Pattern stated that the problem with the previous studies of disclosure-performance relationship centers on the measures of performance that are used, In addition, he had identified three major issues in the previous studies such as failure to control other factors, inadequate sample selection, and inadequate measures of performance.

Based on the facts, a strong body of evidence shows that both company size and industry classification are factors that appear to influence the level of information disclosed in financial reports. However, Pattern (2002) found that none of the previous studies on the relationship between performance and disclosure was controlled by the impact of company size. Nevertheless, the studies only covered the industry classification, usually categorised as the petroleum, chemical, metal, and paper industries, Consequently, the results become problematic due to the failure to control the other factors. The second problem with the previous studies centres on the sample selection. The studies based on the CEP were limited because these companies are from only four industries hence the resulting samples were not very diversified. In addition, the previous studies made comparisons only within the industry whereby the sample size for analyses was quite small. The last problem is about the measures of performance used. The CEP did not use the same criteria and consistent methodology to assess performance in different industries. Ingram and Frazier tried to assess performance by standardising company scores on industry averages but Wiseman performed the analyses only within the industry.

Consequently, Pattern (2002) changed the research design structure to overcome the issues in the previous studies, Pattern used the indicator Toxic Release Index (TRI) usually by sales, to proxy for performance<sup>10</sup>. He used a sample of 131 US companies from 24 different industries, Pattern also modified the Wiseman index measure and line count of disclosure in the 1990 annual reports<sup>11</sup>. Indirectly, Pattern found that TRI sales are positively associated with both measures of disclosures. This result implies that there is a negative relationship between disclosure and performance.

A positive association between environmental performance and environmental disclosure appears in the research conducted by Al-Tuwaijiri et al. (2003). The research proposed to examine collectively the relationship between disclosure, performance, and economic performance using a simultaneous equations approach. Three multivariate equations were constructed in which at least one of these functions is an explanatory variable of another. Al-Tuwaijiri et al. also used TRI-based data to assess environmental performance. In this study, measures of environmental disclosure were constructed into two general groups. The first group includes measures that quantify the level of disclosure in annual reports, such as the number of pages, sentences and words. The second measurement used a disclosure-scoring measure derived from content analysis 12. Prior literature had mixed results in describing the relationship because the researchers have not considered these functions to be jointly determined, After endogenizing these three variables, the results found a positive association between performance and disclosure.

More recently, Lu, C. et al. (2007) examined the relationship between ownership structure, information disclosure and performance. Lu, C. et al tested the mutual impact among managers' ownership, information disclosure and company value, considering the possible endogeneity and doing a simultaneous estimation of all test interrelationships. They used Taiwan Economic Journal (TEJ) Database from January to December of 2005 to get data of shareholders and financial reports. Lu et al. used a sample of 638 companies which are more diversified across industry categories and combined data from 21 industries. The companies in the samples consisted of medium-to-large companies relative to the average Taiwan company size either in terms of sales or assets. The results found a positive relation between information disclosure and performance.

<sup>&</sup>lt;sup>10</sup> Toxic release data is from the 1988 Top 500 Releasing Companies listing provided by the Environmental Protection Agency.(EPA, 1990).

<sup>11</sup> See Appendix C.
12 See Appendix D.

Clarkson, et al. (2007) revisited the relationship between performance and disclosure by testing competing predictions from based and socio-political theories. In this research, they improved the previous literature by focusing on discretionary disclosures and developing the analysis index Global Reporting Initiative (GRI) to assess the extent of discretionary disclosure in environmental and social responsibility reports. A sample of 191 companies from the five most polluting industries in the US was used. The findings imply a positive association between environmental performance and the level of discretionary environmental disclosure. This result is consistent with the economics theory but inconsistent with the negative association predicted by social-political theories. Indirectly, this result indicates that the socio-political theories are not robust in predicting the level of discretionary environmental disclosures.

In summary, the results show that there are more findings on the relationship between disclosure and performance. Based on Clarkson et al.'s (2007) opinion, one reason for the inconclusive finding is due to the choice of non-discretionary disclosure and use of the Wiseman (1982) index. In the Wiseman index, high weight is applied on disclosures about the financial consequences of environmental activities, whereas Clarkson et al.'s index places more weight on disclosure that reveal true (but unobservable) performance.

More recently, Fraas and Dawkins (2010) also revisited the relationship between environmental performance and the level of voluntary environmental disclosure by using ordinal regression and Ceres, Kinder, Lydenberg, and Domini (KLD) and Trucost ratings of Standard & Poor's (S&P) 500 companies. The findings show that environmental performance responses to environmental disclosure are significantly positive.

#### 2.2. The Relationship between Disclosure and Risk

When financial crises happened and the corporate scandals that came along, a public debate is needed in order to enhance greater disclosure and transparency of the market. It is because the increase of transparency in dealings may lead to better disclosure and the current information about banks may enhance the market discipline. Indirectly, when market discipline is strengthened, it may avoid the problems of financial and economic crises.

Since disclosure enhances market discipline, regulatory authorities have constructed an accounting standard to enhance the level of disclosure. Usually, the levels of disclosure are associated by risk-profile of the corporations. Increased risk disclosure will give more benefits especially in the monitoring of their risk position.

As mentioned above, it is complementary to the prior empirical research which shows that greater disclosure and enhanced market discipline will lead to reduction in corporation risks. In addition, firms that disclose greater amount of useful risk information should benefit from a reduction in their cost of finance as the providers of funds will be better positioned to judge the firm's risk level and this will remove the need for them to incorporate a risk premium within the cost of capital. Nevertheless, companies that are reluctant to disclose risk information may not only find funds more expensive but also that they are more difficult to access (Linsley and Shrives, 2005).

There are a number of papers which have examined the relationship between disclosure and risk taking in corporation and banking. For example, Prodhan (1986) examined the relationship between segmental geographical disclosure<sup>13</sup> and systematic risk profile of multinational enterprises. The author used a sample of 36 companies selected from 'Times 1000 Largest UK Industrial Companies listings for the ordinary shares on the London Stock Exchange (for financial year end 1981/82) by Turnover'. In his study, Prodhan used the Cumulative Average Residuals (CAR) method test underlying characteristics of data for testing the differences between the treatment and control group. This method consists of estimating the parameter of the market model based in a time period prior and analysing the residuals derived from applying model to a time period. The results show that segmental geographical disclosure practices and systematic risk are positively associated. This implies that when changes in systematic risk have been found to be abrupt, it means that the London stock market was likely to have been efficient as it quickly responds to the public information regarding segmental geographical disclosure.

<sup>&</sup>lt;sup>13</sup> Firms reporting on a geographic basis are likely to be in the same industries both the foreign and domestic markets and thus have a smaller incidence of covariance ratio less than one due to worldwide industry effects ( Prodhan and Harris (1989)).

In another study, Prodhan and Harris (1989) investigated the impact of geographical segment disclosure on the systematic risk of a group of US multinational companies quoted in the New York Stock Exchange during the period 1968-1984. The method in this study is complementary to that of Prodhan (1986). But the differences can be seen in terms of the area of line of business, and to the exclusion of geographical segments. The results show that geographical segmental disclosure, (which is similar to line of business disclosure), does appear to have information content which affects market risk assessments.

Yousef Jahmani (2003) examined the impact of Line of Business (LOB) and geographical segmental reporting on companies' perceived risks which were disclosed for the first time without prior segmental information. The authors used a sample selection consisting of the following characteristics of companies such as (1) companies that disclosed analysis of their sales or sales and profit by LOB for the first time, (2) companies which disclosed analysis of their sales or sales and profit by geographical area for the first time, as a first segmental analysis, (3) companies must be quoted on the Stock Exchange during the period under consideration so those share prices can be utilised to measure risk changes which is similar to the previous studies, and (4) companies should not have any segment, which has more than 90 percent of total sales. British data for both treatment and control groups 14 were utilised and a dummy variable technique was employed in the study. The dummy variable measures the differential effect of segmental reporting disclosure. The advantage of the dummy variable is that, since pooling increases the degree of freedom, it may improve the relative precision of the estimated coefficient. The results show that the dummy variable in the treatment groups (line of business and geographical segments) were significant but insignificant in the control group. This result implies that the disclosure of line of business and geographical segment information does have an impact on a company's perceived risk.

On the other hand, several papers have examined the impact of disclosure on risk-taking among banking systems. Nier and Baumann (2003) examined the effectiveness of market discipline in limiting excessive risk-taking by banks. They constructed a large cross-country panel data set consisting of observations on 729 individual banks from 32 different countries over the years 1993

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<sup>&</sup>lt;sup>14</sup> Both treatment and control group are used to test the hypotheses in this study. The companies that did not close any type of segmental information called treatment groups and the latest group serves as control group.

to 2000. Panel data estimation techniques were applied to both capital regressions which aim to explain the banks' choice of capital buffers, and risk regressions which aim to explain bank risks. Risk regressions are a complement to capital regressions. In risk regressions, the results indicate that there is a negative relationship among risk and market discipline using disclosure as a proxy for market discipline. This implies that when bank discloses its risk-profile to the market discipline, they will be penalised by investors for choosing the higher risk. The authors concluded that this effect is absent if investors do not know the risk-profile of the bank and weaker if the amount of information available to investors is limited.

Hirtle (2007) examined the relationship between the amount of information disclosed by banks and its subsequent effect on risk and performance. The author used data from the annual reports of Bank Holding Companies (BHCs) with large trading operations. The analysis in this study is complementary to that of Baumann and Nier (2004). Similar to their study, Hirtle's study examined the link between the amount of information disclosed by the banks and subsequent equity price volatility. In the research, they constructed an index of publicly disclosed information about the BHCs forward-looking estimates of market risk exposure in their trading and market-making activities. The main finding shows that more disclosure is associated with lower risk and in turn with higher risk adjusted returns. The results suggest that greater disclosure is associated with more efficient risk taking and thus improves risk-return tradeoffs.

In summary, the results of all research show that risks are associated with information disclosed.

#### 3. MODEL

The most important goal of this study is to explore the relationship between disclosure, risk and performance in Islamic banking. In this study, it is also tested whether one's variable is endogenous or exogenous, whereby the three variables will be influenced simultaneously. The methodology strategies are based on Hashem Dezhbakhsh and Rubin (2003) but the modeling strategies are drawn on AI-Tuwaijiri et. Al's (2003) which are constructed by the equations of the estimation of their relationship using Simultaneous Equations Model (SEM). Hashem Dezhbakhsh and Rubin proposed to use panel data and a system of simultaneous equations. They used the time dimension of data to estimate country fixed effects and condition the two-stage estimation on these effects.

However, this study attempted to develop knowledge about the mutual relationship between disclosure, performance and risk by using panel data using simultaneous equations approach. The reason behind this is to find out the possible endogeneity or exogeneity of these factors because these factors may have a causality effect.

The following discussion will specify the empirical model in determining the relationship among equations. The discussion consists of an empirical model, sample collection and data description, endogenous variables, exogenous variables and lastly the estimation method.

# 3.1. The Empirical Model

In this study, the two-stage method is used as an empirical test to find the effect of each variable. Therefore, the two systems equations as an empirical model to test the study's hypotheses are used:

$$DISC_{it} = \beta_1 + \beta_2 PROFIT_{it} + \beta_3 LEV_{it} + \beta_4 FIN_{it} + \beta_5 SIZE_{it} + \epsilon_{it}$$
(Model I)

$$LEV_{2it} = \alpha_I + \alpha_2 DISC_{2it} + \alpha_3 PROFIT_{2it}, + \alpha_4 FIN_{2it} + \alpha_5 NPF_{2it} + \varepsilon_{2it}$$
 (Model 2)

$$PROFIT_{3it} = \delta_1 + \delta_2 DISC_{3it}, + \delta_3 LEV_{3it}, + \delta_4 SIZE_{3it}, + \delta_5 NPF_{3it} + \epsilon_{3it}$$
 (Model 3)

Where, DISC is information disclosure, PROFIT is profitability (banks profitability), LEV is ratios of total Islamic banking liabilities to total assets of Islamic banking operation, SIZE is a log of total assets (ratio of assets in Islamic banking operation over total assets of banks), FIN is a log of total of financing, advances and other loans of Islamic banking operation, NPF is non performing financing,  $\alpha_i$  i=( I,2, ...5) parameters to be estimated,  $\varepsilon_{it}$  is error terms, I refers to Islamic bank and t refers to year.

The equation is formulated based on previous studies conducted regarding disclosure, risk and performance. These equations are derived because of the endogeneity among these variable as discussed earlier. Previous studies on the relationship between disclosure, risk and performance, in general considered the association between two of these three factors and at the same time, did not examine the three variables as an equation. For example, equation 1 describes the determination of disclosure at time *t*. Prior empirical research, like Tuwaijiri (2003), Pattern (2007), and Clarkson (2007) has examined the relationship between disclosure and profit. But in this study, risk, size and financing is put as an exogenous variable. The existence of exogenous variables in equation 1 is in order to derive the endogeneity and exogeneity problem.

Equation 2 is derived based on the prior studies which examined the relationship between disclosure and risk. This equation is derived from previous studies like Prodhan (1989), Yousef Jahmani (2003), Nier and Baumann (2003) and Hirtle (2007). Equation 2, attempted to examine the effect from the exogenous variables in determining the level of LEV among the selected banks. The exogenous variables such as DISC, PROFIT, LNFIN, and NPF are used in order to find the effect in LEV. Lastly equation 3 is derived based on equation I and 2 which are caused by endogeneity and exogeneity problems. In this equation, DISC and LEV variables are used in order to see the effects in determining PROFIT among Islamic banking.

# 3.2. Sample Collection and Data Description

The data is collected from the annual reports of eleven banks published between 2002 and 2006. The sample selection consists of Islamic commercial banks and commercial banks that operate the Islamic banking scheme (SPI). Since data for Standard Chartered Bank in 2002, Bank Islam Malaysia Berhad (2006), Public Bank (2004) and Affin Bank (2006) is not available, the data in this study consist of 51 samples.

# 3.2.1. Endogenous Variables

#### 3.2.1.1. **Disclosure Index (DISC)**

In developing the scoring disclosure index, the approach by Cooke (1989) which uses criterion based on the presentation of information and builds an item scoring such as 1 if disclosed and 0 if it is undisclosed was applied. This scoring is almost similar with the Wiseman Index which measures the quantity level of disclosure in the annual report such as the sentences.

In this study, the disclosure index was constructed to measure the information that is disclosed by banks. Usually, disclosure index consists of a list of items of information that is shown in the banks' annual report. To analyse this index, two weightage were applied such as weighted index and unweighted index. In weighted index, there are selected accounting officers in the supervision department of Central Bank of Malaysia (Bank Negara Malaysia), legal officers and accountants. Almost all of these selected items are included in accounting and auditing procedures of banks. The items and scores were gathered from them for each item based on the level of importance of such items. Meanwhile, for the un-weighted items, these scores can be calculated directly based on annual report procedures.

Maximum score (MS) and total disclosure (TD) have to be calculated first in order to obtain the disclosure index. Both un-weighted and weighted index (weighted index used weighted item and un-weighted index used un-weighted items) will be calculated as:

$$MS = \sum_{i=1}^{n} D_{i}$$

$$TD$$

$$_{i=1}^{m} \sum_{i=1}^{n} d_{i}$$

$$(Model 4)$$

$$(Model 5)$$

Where d is 1 if disclosed or 0 if not disclosed, if the items are not supposed to be disclosed it is called 'inappropriate items', it must be multiplied by -I, n is the number of items which the company is expected to disclose and m refers to the number of items disclosed (including prohibited items). So, from that calculation, the amount of disclosure will be obtained as follows:

$$DISC_{it}=TD_{it}/MS_{it} \qquad \qquad (Model 6)$$

Equation (6) indicates that the amount of disclosure DISC which is made proxy for quality items by each company was measured. Scores were obtained by dividing between total disclosure (TD) and maximum score (MS).

#### **3.2.1.2. Profitability (PROFIT)**

Profit in banking means the difference between the level of interest it pays for deposits and other sources of fund, and the interest it charges in its lending activities. In this study, return on assets is used as proxy for the performance variable which has similarity with a previous study by Clarkson et. al (2007). Return on assets indicates how profitable a company's assets are in generating revenue. Therefore, if the banks have more profit, they tend to disclose more information in the annual report in order to obtain personal advantage. According to Barako (2007), the management of a profitable enterprise will voluntarily disclose more to the market in order to enhance the value of the company. The profit variable has a positive impact on the extent of disclosure in annual reports.

#### **3.2.1.3.** Leverage (LEV)

Leverage is an important variable which can be used to identify the level of risk. According to Investopedia the higher a company's degree of leverage, the more the company is considered as risky. In other words, a company with higher leverage has more possibility to collapse because that company must continue to run in debt without regarding how bad its sales are. Generally, this situation illustrates the bank's risk-taking nature.

### 3.2.2. Exogenous Variables

#### 3.2.2.1. Size

In this study size is used as a control variable for bank size. The size of banks means that the bigger the bank size is, the higher the total assets it has. It is a known fact that size has a positive effect on a bank's disclosure activity. In the research conducted by Spiegel and Nobuyoshi Yamori (2003), it is found that size has a positive and significant effect to the disclosure on bank systems. They imply two reasons: first, the larger banks need to raise capital in the market more frequently which means that they are under greater pressure from shareholders and market analysts for increased disclosure. Secondly, this positive relationship is related to economics of scale. This situation concludes that a bank's size must consistently be a very significant predictor of information disclosure especially in the annual report.

#### **3.2.2.2.** Financing

In this study, financing is used in the disclosure study as a predetermined variable which is supported by previous studies like Clarkson et. al (2007). The authors used financing as a factor to measure voluntary disclosure because companies that increase financing in debt and equity markets have a higher propensity for disclosure in voluntary channel to lower their cost of capital. Financing has a positive relationship with voluntary disclosure.

#### 3.2.2.3 Non-Performing Financing (NPF)

Non-performing financing is used as a predetermined variable in determining the leverage and profit. This variable is used to determine whether it has an effect on equation.

#### 4. RESULTS AND DISCUSSION

This section will discuss the regression results in determining the relationship among variables. Hence, panel data estimations are accurate in explaining these three equations among Islamic banking in Malaysia. The two stage least squares method are also utilised to regress all equations jointly.

#### 4.1. Panel Estimation

In order to test the relationship among the variables, two effects have been considered which are none effect and fixed effect. Tables 1 and 2 provide panel estimation results which consist of fixed effect (Panel A) and none effect (Panel B). The results of fixed effect show better estimations where it has a significance of estimation for each model and the value of R-square is higher than none effect. This indicates that the fixed effect model is significant to estimate the relationship.

At the same time, testing was done on the best model between the fixed and random effects, and the Hausman test was used through the random effect equations. Table 3 suggests that all equations are not significant, where the null hypothesis for random effects equations was rejected because P> 0.1 %. This result shows that the panel data estimations with fixed effects can better explain compared to random effects. So the discussion only focuses on the fixed effects result.

Based on the result, it is concluded that equation 1 which represents the determination of the disclosure in Islamic banking is the appropriate equation in explaining the variables. However, the findings show that there is no accurate or suitable significant estimation of all the three equations. To solve this problem, the two-stage least squares is used in order to obtain an efficient result.

**Panel A Table 1: Panel Data Estimation Results** 

	EQUATION 1	EQUATION 2	EQUATION 3
С	1.1911 (9.0404)*	912.2350 (1.7815)**	0.0408 (0.6189)
DISC		-461.8987 (1.8583)**	0.0061 (0.2300)
PROFIT	0.1387 (0.2532)	-405.3121 (0.5305)	
LEV	-0.0002 (2.9150)*		-2.07E-05 (2.3801)*
LNFIN	0.0157 (2.3090)*	-28.9162 (1.6126)	
LNSIZE	-0.0310 (3.2627)*		-0.0019 (0.6213)
NPF		-3.6202 (1.4308)	-0.0007 (1.3573)
$\mathbb{R}^2$	0.4931	0.3368	0.3865
F	2.5017	1.3056	1.6202
P	0.0135	0.2518	0.1207
DW	2.815	2.0055	2.6544

Number in parentheses is the t test
\* Significant at 5%
\*\*Significant at 10%

F-F-test

P-Prob (F-Test)

**Panel B Table 2: Panel Data Estimation Results** 

	EQUATION 1	EQUATION 2	EQUATION 3
С	0.9046 (6.2953)	407.6116 (2.0510)	0.0177 (0.4233)
DISC		-259.6134 (1.3730)	0.0178 (0.6000)
PROFIT	0.3140 (0.4111)	463.7290 (0.5048)	
LEV	-0.0001 (1.3088)		-2.23E-05 (0.9231)
LNFIN	0.0024 (0.2783)	-7.9958 (1.0524)	
LNSIZE	0.0007 (0.0532)		-0.0013 (0.6425)
NPF		-1.4616 (0.7674)	-0.0002 (0.4763)
$\mathbb{R}^2$	0.0578	0.0949	0.0392
F	0.7057	1.2058	0.4704
P	0.5922	0.3212	0.7572
DW	1.5209	1.4326	1.7235

**Table 3: Hausman Test of the Random Effects Equations** 

	Chi-Sq. Statistic	Probability
Equation 1	3.8222	0.4306
Equation 2	4.7550	0.3134
Equation 3	2.3654	0.6689

### 4.2 Two-Stage Least Square (2SLS)

Table 4: Two-Stage Least Squares Regression Result for DISC, LEV, and PROFIT Variables DISC LEV PROFIT

Variables	DISC	LEV	PROFIT
Intercept	0.3796 (0.6005)	-63.0156 (0.2969)	0.1328 (1.0071)
DIS		351.6514 (2.7902)*	-0.1693 (1.3772)***
LEV	0.0028 (2.3394)*		0.0016 (0.1743)
PROFIT	-5.2066 (1.5709)***	2194.6080 (1.6861)**	
LNASSET	0.0112 (0.3368)		0.0008 (0.2939)
LNFIN	0.0255 (0.6184)	-18.5042 ( 1.0008)	
NPF		3.210383 (0.7620)	0.0005 (1.5557)***
$\mathbb{R}^2$	0.8459	0.8215	0.6848
Adjusted R <sup>2</sup>	0.5376	0.4646	0.0545

Number in parentheses is the t-test

From Table 4, the results show that the value of R<sup>2</sup> for each equation increased than the result in panel estimation. The results presented in Table 4 for Equation 1 suggest that LEV is a positive significant determinant of DISC. These results are not consistent with the results in panel estimation but consistent with the economic predictions. In other words it suggests that banks with high LEV will adopt DISC to provide more timely information so as to reduce the long-term creditors' suspicion about the ability of the company to pay its obligations. Furthermore, the bank's PROFIT is negatively significant to DISC at level 20 percent, which is consistent with the social-political theories. It is because, as mentioned before, social-political theories posit that banks will attempt to

<sup>\*</sup>Significant at level 5%

<sup>\*\*</sup>Significant at level 10%

<sup>\*\*\*</sup>Significant at level 20%

increase disclosure to change stakeholders' perceptions about their actual performance (Clarkson et al. (2007)). In addition, the coefficients for both LNASSET and LNFIN are positively not significant. This result is consistent with the economic predictions but both variables are not the strong variables in determining disclosure. This situation exists since Islamic banking systems are not similar compared to conventional banks.

The 2SLS results for Equation 2 suggest that both DISC and PROFIT are significantly positive to LEV. These results are consistent with the economic predictions which suggest that a bank's profit increase will lead LEV to increase. The LNFIN and NPF are not statistically significant in determining the level of LEV. These results are similar to panel estimations in Table 1. These results suggest that both variables are not good factors in explaining LEV in Islamic banking. These variables are not significant with LEV and it may be due to the sample selections that are not sufficient in explaining the level of LEV.

The coefficients for the explanatory variables in Equation 3, which specifies the determinants of PROFIT, suggest a positive relationship between DISC and PROFIT. This positive relationship is consistent with social-political theories. This result is similar as predicted in Equation 1. In further examining Equation 3, it is found that both variables, LEV and LNASSET are positively not significant with PROFIT. These relationships are consistent with the economic prediction which says that LEV and LNASSET have a positive association with PROFIT. However, these associations are not significant in explaining the dependent variable. It is also found that NPF is positively associated with PROFIT, and the relationship is significant at level 20%.

In summary, the 2SLS results suggest three significant relationships between the dependent variables. First, LEV is positively related to DISC, suggesting the banks with higher level of LEV tend to reveal a lot of information. Second, DISC is positively related to LEV, suggesting banks are likely to disclose more information in order to maximise the welfare. Lastly, PROFIT is positively related to LEV, suggesting that Islamic banks use profit loss sharing scheme to overcome interest rate schemes. After testing 2SLS, it is found that there is a possibility of endogeneity and exogeneity problems in the equations. So, to solve this problem, the Granger-Causality Test was used to ensure the existential probability of endogeneity and exogeneity.

### 4.3. Granger-Causality Test

**Table 5**: Granger-Causality Test Result

Null Hypothesis	F-statistic	p
LEV does not Granger Cause DISC	6.4858	0.0061*
DISC does not Granger Cause LEV	3.6577	0.0425**
PROFIT does not Granger Cause DISC	3.1357	0.0634***
DISC does not Granger Cause PROFIT	0.5486	0.5855
PROFIT does not Granger Cause LEV	0.8074	0.4588
LEV does not Granger Cause PROFIT	0.4667	0.6330

<sup>\*</sup>Significant at level 1%

Table 5 reveals the Granger-Causality test result for the equations. The result for DISC and LEV shows that when DISC is used as a dependent variable there is Granger-Causality. However, when LEV is used as a dependent variable there is also a Granger-Causality. This result indicates that DISC and LEV are more likely to be endogenous variables. Another test between PROFIT and DISC presents that there is only one which has Granger-Causality that is when DISC is used as a dependent variable. Lastly, the test between PROFIT and LEV shows that there is no Granger-Causality either when using PROFIT or LEV as a dependent variable.

In summary, the Granger-Causality results conclude that DISC and LEV can be used as endogenous variables within these three equations. However, DISC variable has a strong relationship to become a dependent variable among these variables. This result can be proven by looking at the value of adjusted  $R^2$  in 2SLS result. In Equation 1, value of adjusted  $R^2$  is higher than the 2 equations. This value implies that all explanatory variables can explain the endogenous efficiently.

<sup>\*\*</sup> Significant at level 5%

<sup>\*\*\*</sup> Significant at level 10%

### 5. CONCLUSION

Based on previous studies, the relationship between disclosure, risk and performance is important since depositors and stakeholders can assess actual performance and risk-taking among the banks. As known, almost all the banks' activities were associated with the variety of risks especially in interest rate and credit risk. Hence, information disclosure is necessary in financial institutions to ensure that all information disclosed is transparent among banks.

Therefore, to completely avoid interest and risk among banks, Islamic banking systems have developed a new mode of transactions called profit-loss-sharing (PLS) mode. Usually, PLS modes are to avoid debt-financing and use partnership and equity-financing, which is similar to the capitalism scheme. Based on previous studies mentioned earlier, profit is positively related with disclosure. The findings show that when the banks' profit increases, the banks tend to increase disclosure in annual reports particularly. But in this study, referring to 2SLS results, profit has a negative significance with disclosure. Usually, decrease in profit is not allowed in financial institutions because it will cause banks to collapse. Hence to overcome this problem, the policy makers should create new profit allocation models especially in allowing banks to specify the rules for splitting profits especially in contracting. For example, banks must choose the qualified shareholders in order to obtain more profits.

The findings also show that the level of leverage among banks is positively significant with the disclosure. This situation should occur in banking operations since disclosure of level of leverage may be positively related to disclosure if they indicated that management intends to address a bank's leverage. Indirectly, this situation will burden the banking systems more. Therefore, banks must reduce their risk-taking to ensure that their level of leverage becomes low. So, as relative to risk taking, banks must create more modes and instruments in order to obtain more results.

### 6. Appendix

- A. Twenty content categories were selected representing the four table dimensions (Ingram & Fraizer scale):
  - Evidence

Monetary, non-monetary, qualitative and none.

• Time

Past, present and future.

• Specificity

Specific and general

• Theme

Public interest, economic consequences, irrational activities, government regulation, litigation, regulatory compliance, actual accomplishments, environmental control and others.

- B. Environmental Disclosure Rating (Wiseman Scale, 1982)
  - Economic factors
    - Past and current expenditures for pollution control equipment and facilities.
    - Past and current operating costs of pollution control equipment and facilities.
    - Future estimates of expenditures for pollution control equipment and facilities.
    - Future estimates of operating costs pollution control equipment and facilities.
    - Financing for pollution control equipment or facilities.
    - Provisions for site restoration (added to Wiseman rating for the current study).
  - Litigation
    - Present litigation
    - Potential litigation
  - Pollution abatement
    - > Air emission information.
    - ➤ Water discharge information.
    - Solid waste disposal information.
    - ➤ Control, installations, facilities, or processes described.
    - Compliance status of facilities.

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# **CONSOLATION PRIZE**

How Far the Shariah Compliant Requirement Affects Accounting Practices and The Accountancy Profession in Malaysia? The Issues and Challenges of Shariah Compliance Acceptability

Ms Rahayati Ahmad

Ms Syahiza Arsad

# How Far the Shariah Compliant Requirement Affects Accounting Practices and The Accountancy Profession in Malaysia?

## The Issues and challenges of Shariah Compliance Acceptability

#### ABSTRACT

Based on library work, literature and some primary surveys of opinion data, this article is written focusing on how far the Shariah Compliant requirements affect accounting practices and the accountancy profession in Malaysia. This article also identified several issues and challenges faced by accountants when their company has been classified as a Shariah Approved Company (ShAC) by Bursa Malaysia. In this article, several basic Shariah principles and voluntary disclosure by ShAC are highlighted to justify the information needed by the users. The main issue in this article is mostly related to the role of accountants in preparing financial reporting to be more Islamic, effective, complete and fair to the users.

### 1. INTRODUCTION

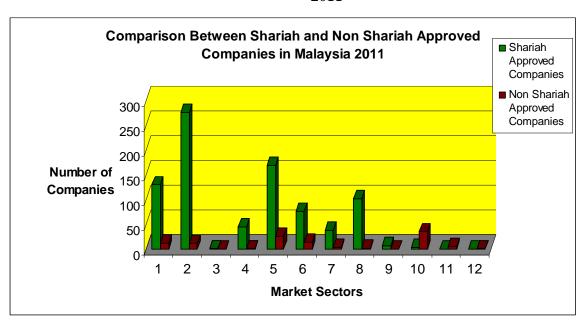
The existence of the Shariah Approved Companies status introduced by Bursa Malaysia in June 1997 and the Shariah Advisory Council (SAC) of Securities Commission Malaysia (SC) has created a new wave of drastic changes in the accounting world from Conventional Accounting Practices to Islamic Accounting Practices. The companies listed under the Shariah Approved Companies are bound by the Shariah principles which prevent them from not being extensively involved in non permissible business activities and investment activities such as financial services based on riba (interest), gambling, manufacturing of non-halal products (e.g. pork, liquor etc), conventional insurance, entertainment, manufacture or sale of tobacco-based products or related products, stock broking or share trading in non-compliant securities and other activities deemed non-permissible. (Bursa Malaysia, 2011)

The SC released an updated list of Shariah Approved Companies approved by its Shariah Advisory Council on 28 May 2011 featuring a total of 847 Shariah Approved Companies which constitutes 89% of the total 957 listed companies on Bursa Malaysia. The list includes 24 newly classified *ShAC*. It also indicates that *ShAC* are well represented in all sectors of industry (see Table 1). (Bursa Malaysia, 2011)

Table 1: Shariah Approved Companies on Bursa Malaysia, March 2011

Market Sector	Shariah Approved Companies	Non Shariah Approved Companies	Total Companies	Percentage (%) of Shariah Approved Companies
Consumer Products	130	12	142	92
Industrial Products	276	11	287	96
Mining	1	-	1	100
Construction	45	1	46	98
Trading / Services	169	26	195	87
Properties	76	14	90	84
Plantation	38	3	41	93
Technology	102	2	104	98
Infrastructure (IPC)	7	-	7	100
Finance	3	35	38	8
Hotels	Nil	5	5	Nil
Closed End Fund	Nil	1	1	Nil
TOTAL	847	110	957	89

Figure 1: Comparison Between Shariah and Non Shariah Approved Companies in Malaysia 2011



From Table 1 and Figure 1 above, a range of 84% to 100% of the companies in the market sectors have been classified as Shariah Approved Companies except for Hotels and Closed End Fund sectors. However there is a poor percentage shown by the Finance market sector from 38 companies only 8 companies (7%) are classified under *ShAC* listed in Bursa Malaysia in the year 2011. However the total figure of market sectors listed under *ShAC* is still high and maintains at a certain level which makes Malaysia as one of the best Islamic Capital Markets in Asia. From the statistics above, it can be seen that the number of *ShAC* listed in Bursa Malaysia represent various sectors. Based on the above statistics, a question arises if the accountants are ready to adopt the rules of Shariah principles when their companies are classified as Shariah Approved Companies.

The do's and don'ts of Shariah principles require the accountants to be selective and careful in segregating the business income activities from permissible and non permissible activities to be disclosed in the company's financial statements. To Islamise the conventional accounting practice is not an easy task. It requires a massive change and support from everyone who is involved in the accounting field, from the accounting regulatory bodies to the practitioners of accounting.

The issues now are how far the changes have been made and how well these issues have been taken seriously. Non-Muslim accountants who lack Islamic background find it hard to understand the concept of Shariah principles stated by Bursa Malaysia. First and foremost, they must understand the meaning of Shariah principles. Generally, Shariah principles are the code of conduct or rules and laws derived from three sources: Quran, Hadith and Ijtihad (Ulrich Derigs and Shehab Marzban, 2008). Hadith is the example set by the Islamic prophet Muhammad in the Sunnah and Ijtihad is an interpretation by a Shariah scholar. This shows that a number of Islamic rules and laws need to be adhered to by every accountant in the Shariah Approved Companies. They have to comply with them and must make sure that all the transactions and activities are based on Shariah principles and free from non-permissible elements.

Furthermore, on 16 May 1996, the Securities Commission established the Shariah Advisory Council to formulate the set of Shariah guidelines for all accountants to understand the Shariah principles and guide them in preparing the financial statement following the requirements of Shariah principles. From the Shariah Islamic perspective, the companies involved in riba (interest), trading of money for money and debt transaction are not permissible, but it is almost impossible to

find any company that is not involved in any of these transactions because most of the companies are cooperating with banks and this relationship definitely will generate interest. However there is a certain acceptable level of non-permissible activities set by SC.

Are the accountants very familiar with the measurement of non-permissible activities stated by the Shariah Council?

To answer the above question qualified Shariah scholars set a benchmark of the acceptable level of mixed transactions of income and expenses from permissible and non-permissible activities (SC, 2004). If the transactions from non-permissible activities exceed the benchmark, the securities of the company will be classified as Shariah Non-Approved Companies (*Sh*NAC). To quantify to what extent companies are involved in non-compliant activities such as riba, Shariah screening process through financial analysis has to be carried out using the financial statement (Ulrich Derigs and Sheha Marzban, 2008).

Table 2 shows the different types of screens that can provide guidelines to every accountant to quantify non compliant company's activities (Bursa Malaysia, 2010).

Table 2: Benchmarks Determine the Acceptable, Permissible and Non-Permissible Activities in Shariah Approved Companies

Benchmarks	Details	Example
5-percent	Used to assess the level of mixed contributions from activities that are evidently prohibited.	Riba (interest-based companies like conventional banks), gambling, liquor and pork.
10-percent	Used to assess the level of mixed contributions from activities that involves the element of `umum balwa', a prohibited element which is difficult to avoid and affects most people. It is also used for tobacco-related activities.	Interest income from fixed deposits in conventional banks.
20-percent	Used to assess the level of contribution of mixed rental payment from Shariah non-compliant activities.	Rental payments from premises used for gambling and sale of liquor.
25-percent	Used to assess the level of mixed contributions from activities that are generally permissible and have an element of maslahah (public interest), but there are other elements that may affect the Shariah status of these activities.	Hotel and resort operations, share trading, and stock broking as these activities may also involve other activities that are deemed non-permissible according to the Shariah.

The benchmarks above are not mentioned and quantified explicitly in the holy Quran or Hadith. The reasoning behind rule used for interest and debt (Obaidullah,2005) is most probably based on the:

- Hadith: The Prophet advised Abu Bakr not to donate more than one-third of his wealth, and commented that "One third is too much".
- Fighy rule: "Whether a commodity that is part gold and part brass qualifies as gold for purposes of applying the rules of riba is resolved by the percentage of gold in the commodity, i.e. if greater than a third, it is gold".

The rule that states 10 percent as the threshold level for non-compliant income or interest income has no real foundation in the holy Quran or Hadith. It is mainly founded on pure Ijtihad of the Shariah scholars and is based on the fact that the individual Islamic investor has no control over the whole business practices of companies that are managed in a non-Islamic manner (Ulrich Derigs and Shehab Marzban, 2008). Since conventional companies usually have cash deposits or short term investment that generate interest income whereas their core business is completely halal, some of the Shariah scholars agree to consider this non-compliant income as negligible if it does not exceed 10 percent of the total revenue generated.

### 2. ISLAMIC ACCOUNTING PERSPECTIVES

According to Dr Shahul Hameed (2011), accounting in Islamic perspectives can be defined as "accounting process" which provides appropriate information (not necessarily limited to financial data) to stakeholders of an entity which will enable them to ensure that the entity is continuously operating within the bounds of the Islamic Shariah and delivering on its socioeconomic objectives.

Sulaiman (2001) also states that accounting in Islamic perspectives is more on the disclosure of financial activities rather than the measurement techniques used. According to Ousama and Fatima (2010), there are three general requirements of Islamic accounting: the concept of the unity of God, the concept of social accountability and the concept of full disclosure.

The concept of the unity of God is related to the belief of only one ultimate creator that leads to the notion that He has absolute ownership and humans are merely trustees in the world owned by Him. This concept is further explained by the second concept of Islamic accounting as mentioned by Ousama and Fatima (2010) whereby since we are the trustees appointed by God, we are accountable not only to God but also to the society as a whole. The concept of social accountability serves as a bridge between companies and the users of financial statements of which the community has the right to know about the effect of the companies' activities. The concept of full disclosure will assist external users in making both economic and religious decisions and assists management in fulfilling their accountability to God and Society. Accountants need to realise the importance of these three concepts when preparing the financial reports of the company and that the users nowadays are more concerned about the Islamic concept. The users expect the following information to be disclosed in the financial reports:

### 1. Information about Shariah compliance and prohibited transactions/activities.

Shariah Approved Companies have the responsibility to disclose the information about prohibited activities that the companies are minimally involved in as allowed by the SAC. The users will know the amount of non-permissible elements generated from the business activities and this information also will help the company to monitor and control these activities in future.

### 2. Information about Zakat

Zakat is a religious obligation for all Muslims. The Islamic Fiqh Academy has concluded that companies are not required to pay zakat, except when there is a requirement made by law or agreed by the shareholders of the company (Maali *et al.*, 2006). For Shariah Approved Companies, even though there is no requirement by law for companies to pay zakat, the companies are expected to disclose information to assist the individual shareholders in calculating the amount of zakat they have to pay. (Ousama and Fatima, 2010).

### 3. Information on product or service

The companies are expected to disclose information about the quality, usefulness and safety of their products and services since the Shariah Approved Companies are not offering something prohibited by the Shariah. This disclosure is a way to demonstrate their accountability and transparency to society (Haniffa, 2002).

#### 4. Information on environment

Based on the concept of social accountability and full disclosure, Shariah Approved Companies are expected to disclose information about activities undertaken which could be unfriendly to the environment, in addition to their environmental protection programmes which cultivate the environment (Ousama and Fatima, 2010).

### 5. Information on social activities

Maali et al, 2006 - companies are encouraged to engage in charitable activities to help the poor and needy in order to enhance the well being of the community. Therefore, this information is expected to be disclosed to let society know about these activities.

### 6. Information on employees and debtors

In Islam, employees should be treated justly (Maali et al,2006). Shariah Approved Companies should disclose information regarding the employees such as their corporate policy on wages, allowances and equal opportunities in order to demonstrate their responsibility towards their employees. According to Haniffa and Hudaib (2002), other information about employees that should be disclosed includes education and training, benevolent loans given to the employees, safety and the working environment.

Moreover, Yusuf Ali (2000) states that companies are also assumed to disclose their business relationship with their debtors, particularly about debts written off as charity.

### 7. Value added information and current value balance sheet

The disclosure of the value added statement (VAS) and current value balance sheet (CVBS) is based on the concept of social accountability and full disclosure (Baydoun and Willet, 2000). From the community perspective VAS reflects the company's performance (Sulaiman, 2001) and CVBS is prepared using current market value, which is more reflective of the company's wealth, thus making it more useful to users such as in computing zakat (Baydoun and Willet, 2000).

All the seven important items of information mentioned above need to be considered seriously by accountants in preparing annual reports because all the information disclosed will influence the users in their economics decision making. There should be no reason for the company to hide the important information from them. Furthermore, most of the information mentioned above is part of voluntary disclosure approved by the Securities Commissions and Bursa Malaysia.

### 3. ISSUES OF PRESENTATION ON DISCLOSURE OF FINANCIAL REPORTING

Ousama and Fatima (2010) in their study on "Voluntary Disclosure by Shariah Approved Companies: An Exploratory Study" of 50 largest Shariah Approved Companies in Malaysia found that voluntary disclosure by most ShAC is more on conventional items rather than Islamic items in their annual reports. They also found that the new listing status companies under Shariah Approved Companies also have not properly incorporated Islamic Information reporting in their annual reports. Surprisingly, although the sample comprises ShAC only 1 of the 50 companies in the sample disclosed the activities in accordance to Shariah principles. Although the study includes a small number of ShAC, it provides a true picture where there are still Shariah Approved Companies who fail to follow the standard requirements stated by the Securities Commission and Bursa Malaysia when preparing the annual reports.

Malaysian Accounting Standard Board (MASB) as a body responsible to develop and issue accounting and financial reporting standards in Malaysia has issued a Statement of Principles i-1 (SOP i-1), Financial Reporting from an Islamic Perspective, an approved accounting standard to apply, unless there is a clear Shariah prohibition and other Technical Releases such as Tr i – 1 Accounting for Zakat, Tr i – 2 Ijarah and Tr i – 3, Presentation of Financial Statement Islamic Financial Institutions and Tr i – 4 Shariah Compliant Sale Contracts as a reference for all the Shariah Approved Companies when preparing the financial statement. Although the standards are issued in the form of technical pronouncement (Habhajan, 2009), accountants in ShAC should take them seriously and always be prepared for the changes made by the MASB in implementing the requirements required by the standards although it is only a voluntary disclosure. If the accountants do not comply with the Shariah principles, the financial reporting of the company will not show the image of a Shariah Approved Company

### 4. CONCLUSION

The existence of Shariah Approved Companies has a big impact on accounting practices and the accountancy profession in Malaysia. There are a lot of issues and challenges faced by accountants in complying with shariah principles in preparing financial reports because the number of *ShAC* is increasing year by year. Therefore, they should be updated with changes required by SAC and MASB especially on the benchmark to determine the acceptable permissible and non permissible activities, the voluntary disclosure information to users and other pronouncements. Accountants should continuously seek improvement in presenting the financial reports to increase the standard as a Shariah Approved Company. At the same time, regulatory bodies, professional bodies and professional accountants must work together and play their role to create a strong Shariah compliance framework as a guideline for accountants in preparing financial reports in the future.

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# **CONSOLATION PRIZE**

Beyond Tangibles: A Framework for Non-Profit Organisations Effectiveness

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# BEYOND TANGIBLES: A FRAMEWORK FOR NON-PROFIT ORGANISATIONS EFFECTIVENESS

### **ABSTRACT**

Non-profit organisations (NPOs) effectiveness remains a prominent concern for scholars and practitioners. Although there is no consensus as to the best way to measure the effectiveness in NPOs, it is becoming a norm to select financial and non-financial reporting data in evaluating the effectiveness. Proliferation of effectiveness indicators that cannot be linked to input, output and outcome measures in NPOs, has enhanced the importance of the effectiveness measures for NPOs. These measures help to translate organisational strategy into tangible results, and when externally reported, exhibits accountability to stakeholders.

Many performance indicators for business effectiveness are inappropriate to be applied to non-profits. This is due to the difficulty in measuring output and the insufficiency of the bottom line motive. Movement towards performance or effectiveness evaluation has gained momentum particularly in NPOs following a strong demand for accountability and transparency.

This study presents a comprehensive interdisciplinary review of literature on NPOs effectiveness. The review includes various models, approaches and dimensions of NPOs effectiveness. This study could assist non-profit regulators in developing a useful framework to measure effectiveness of NPOs. The framework can therefore act as a basis for NPOs' reporting in Malaysia. Applying these measures, the reporting would be much more comprehensive, transparent and accountable as desired by the stakeholders.

### 1. INTRODUCTION

For decades, effectiveness as a measure of organisational success has attracted scholarly attention across the social sciences. In recent years, the issue of effectiveness has taken on additional urgency among practitioners due to more explicit demands for accountability, transparency and financial responsibility (Ebrahim & Rangan, 2010; O' Dwyer & Unerman, 2006). Self-appointed watchdogs, such as Charity Navigator (USA), American Institute of Philanthropy (USA) and the National Volunteer and Philanthropy Centre (Singapore), have emerged as important institutions of assessment. They act as supervisory bodies to evaluate the performance of NPOs.

The study of NPOs effectiveness originally emerged as a subfield of organisational effectiveness. Over the years, it has become fragmented and spread across disciplines, including non-profit studies. Concerns on the effectiveness measurement in NPOs emerge as they are different, to a certain extent from their profit orientated counterparts - they operate for purposes other than earning a profit; their efficiency and effectiveness cannot be determined by means of income measures; and they may receive large amounts of resources from donors who do not expect monetary benefits in return (Razek, Hosch, & Ives, 2000).

The topic of accountability and performance measurement has become a vital issue in NPOs. The difficulty in defining the attributes for performance, is not only confined to the NPOs but to the organisational level as a whole. In the final chapter of the book entitled "Organisational Effectiveness: A Comparison of Multiple Models", Cameron and Whetten (1983) offer two conclusions about organisational effectiveness: (1) "There cannot be one universal model of organisational effectiveness" (pp. 262-267); and (2) "It is more worthwhile to develop frameworks for assessing effectiveness than to try to develop theories of effectiveness" (pp. 267-269). In the context of international NGOs relations, studies on effectiveness are often within the context of advocacy networks, defining effectiveness as the ability to mobilize resources and public opinion to influence policy at the national or international level." (Lecy, Schmitz, & Swedlund, 2011, p. 4). At the same time, the effectiveness studies have developed and grown with an emphasis on economic growth, tools of impact evaluation (IE), and monitoring and evaluation (M & E) prevails. In response to this, within the context of NPOs literature, a well-established research agenda on effectiveness mirroring the broader research on organisational effectiveness exists.

### 2. MOTIVATIONS OF THE STUDY

There are two important factors that motivate this study. Firstly, most accounting research revolves around the private sector and the public sector but less on the third sector or the NPOs. The third sector has played an important role in the economic and social development of Malaysia. In Malaysia, statistics on economic growth of NPOs are limited, whilst report on philanthropy in America revealed that independent, voluntary or third sector generated 5.2 per cent of the US gross domestic product in 2008 (www.philanthropyjournal.com).

Secondly, this study is also motivated by the little information provided by NPOs in Malaysia despite their increasing sources of funds. The NPOs continuously receive financial support in the form of funds received through grants from either the local funder or international funder. The local funder is usually the Welfare Department under the Ministry of Women, Family and Community Development. The statistics from the Welfare Department shows that RM13,481,428 grants were disbursed in the year 2004, a slight increase of 2% in 2005 resulting in RM14,853,511 and further increased to RM17,343,352 in 2006 (Jabatan Kebajikan Masyarakat, 2007). This has prompted questions in terms of efficiency as to how the NGOs utilise these resources received from the government, as a local funder when the fund should be used for charity programme activities.

The literature review revealed many unresolved questions in the academic field of study on NPOs effectiveness. However, a major question that is of real concern is:

What is the suitable effectiveness framework of best practices for non-profit organisations?

### 3. OBJECTIVES AND SIGNIFICANCE OF THE STUDY

The objective of this study is to establish an effectiveness framework for NPOs capturing both dimensions of tangibles and intangibles measures of effectiveness. The proposed framework could be very useful to the Government (the Welfare Department) and to the regulatory body (the Registry of Societies) to further enhance the NPOs current reporting from mere reporting of annual reports to performance reporting. The framework could be used to justify allocation of resources

(grants disbursement) to deserving qualified and performing NPOs. Therefore, the resources are not wasted and will be properly utilised to meet the vision and objectives of the organisations.

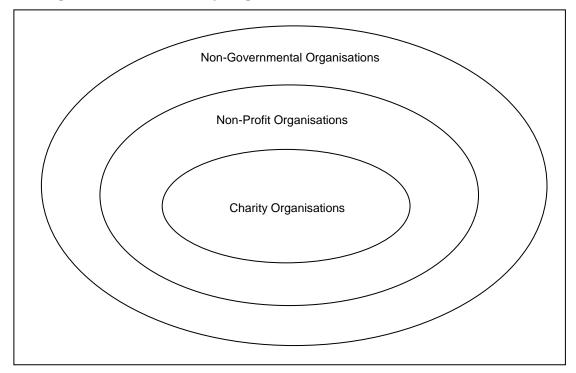
### 4. TERMINOLOGIES

For better understanding of the institutional context of the study, it is important to provide a brief explanation of the various terms used throughout this study.

In Malaysia, the term NGOs is more popular in describing the non-profit organisations. Other terms used in the academic and literature to describe NGOs are for example, "nonprofits," "not-for-profit (NFP)," "voluntary associations," "community social welfare organisations," "international non-governmental organisations," "charity sector," "citizen sector," or "membership support organisations." The terms "third sector" and "voluntary sector" are commonly used in the United Kingdom and New Zealand. In the United States, the term NGOs has also been used interchangeably with "private voluntary organisations" (PVOs) or "private non-profit organisations" (Kearns, 1994). Appropriate nomenclature to be used is the subject of great ideological debate (Anheier & Salamon, 1998; Salamon & Anheier, 1997).

For the purposes of this study, the terms NGOs, non-profits, charity organisations, charity and non-profit organisations are used interchangeably. The following diagram in Figure 1 provides a graphical representation of the relationship between these types of organisations.

Figure 1: The Relationships between Non-Governmental Organisations, Non-Profit
Organisations and Charity Organisations



Herzlinger (1996) defines a non-profit organisation as a body of individuals who associate for any of the following purposes:

- 1. To perform public tasks delegated to them by the state.
- 2. To perform public tasks for which there is a demand that neither the state nor for-profit organisations are willing to fulfil.
- 3. To influence direction of the policy in the state, the for-profit sector, or other non-profit organisations.

The non-profit organisations operating in Malaysia are governed by the Societies Act 1966 (Act 335) & Regulations under the Registry of Societies (ROS) for registration purposes. The other main statute is the Income Tax Act (ITA) 1967, which grants tax-exempt status for organisations meeting specific guidelines issued by the Inland Revenue Department (IRD).

### 5. NPOS ORGANISATIONAL EFFECTIVENESS HISTORICAL PERSPECTIVE

The study of NPOs effectiveness first came out in business and public administration disciplines. Early reviews of organisational effectiveness in this field distilled important dimensions of effectiveness. For example, Price (1968) reviewed 50 empirical studies on organisational effectiveness and the reviews were grouped into four main categories: economic performance, internal political process, management control structures, and population ecology. This early effort tried to develop a common set of coherent and sound progressive research agenda. However, despite this proposed convergence, scholars split the approaches to effectiveness into three different schools: (i) goal attainment, (ii) resource-control (a system resource perspective), and (iii) social constructivism/reputational perspectives.

Goal attainment approach to effectiveness was first articulated by Etzioni ((1964, p. 3) who wrote, "organisations are deliberately constructed and reconstructed to seek specific goals." Under this approach, the progress of the organisations is towards achieving their stated goals defined (Sheehan, 1996). However, subsequent scholars faced several challenges in their attempt to generalise effectiveness based on the idea of goal-attainment. It is often difficult to track goal-attainment since organisations rarely have a single or a coherent set of goals. In response to these challenges, scholars began to resort to two types of proxies for organisational effectiveness. The first is the system-resource approach where it measures the survival and growth of an organisation whilst the second is the reputational approach where it measures the organisational reputation and good-standing.

The system-resource approach links goal-attainment to organisational survival by assuming that organisations achieving their goals are also likely to receive continuous financial support (Georgopoulos & Tannenbaum, 1957; Siciliano, 1997; Yuchtman & Seashore, 1967). This approach presumes that organisational activities take the form of transactions in which scarce and valued resources are exchanged under competitive conditions. The organisation's success over a period of time in this competition for resources-i.e., its bargaining position in a given environment-is regarded as an expression of its overall effectiveness (Yuchtman and Seashore, 1967, p. 891). By applying a system-resource approach, scholars thwart the challenge of empirically identifying

actual *impact* as a measurement for progress toward specific goals. Instead, focus is placed on the organisational sustainability component of effectiveness.

The reputational approach of organisational effectiveness later evolved. Georgopoulos and Mann's (1962) five-year study on community hospitals in Michigan developed measures of effectiveness from surveys on key experts in the hospital system. This approach is based on subjective performance measures, as reported by key informants or organisational stakeholders. It allows scholars to take into account the viewpoints of multiple stakeholders to solve the problem of conflicting goals by assigning weights to different measures. This allows survey scales to be standardised and be used to compare outcomes across organisations and provide proxy measures for dimensions of effectiveness. The findings of this survey indicate that perception of the organisation is essential in understanding organisational effectiveness. The reputational approach was adapted and expanded by a series of subsequent studies (Jobson & Schneck, 1982; Price, 1971).

By the 1980s, no single perspective on organisational effectiveness had prevailed. The goal-attainment approach continued to face challenges based on the existence of too many and often contradictory goals (Quinn & Cameron, 1983) and the difficulties in measuring results (Herman & Renz, 1999). The system-resource approach was also challenged for its narrow definition of effectiveness that ignores performance; reputational approach ran into issues of how to weigh diverging views of multiple stakeholders to make an organisation effective. In response to all the challenges, the literature moved toward the adoption of more complex models of effectiveness, such as multi-dimensional models (Cameron & Whetten, 1983; Zammuto, 1984), competing values models (Quinn & Cameron, 1983), contingency models (Ebrahim & Rangan, 2010; Lewin & Minton, 1986), and a balanced scorecard approach (Kaplan & Norton, 1992). All these models typically incorporate the aspects of goal, system resource and reputational approach. As scholars recognise that NPOs deal with many constituencies and may have varied or conflicting reputations, research has developed a more complex approach on multiple stakeholders.

Cameron (1986) believes that the fundamental problem in organisational effectiveness are the criteria or indicators problems instead of the theoretical problems. Scholars however continue to develop frameworks or models for the assessment of performance in an attempt to derive measures that encapsulate the construct. For instance, Campbell (1977, p. 18) states:

A better way to think of organisational effectiveness is as a construct that has no necessary and sufficient operational definition but that constitutes a model or theory of what organisational effectiveness is. The functions of such a model would be to identify the kind of variables we should be measuring and to specify how these variables, or components interrelate – or should be interrelated.

This study grapples with the challenge of which constructs should be assessed and how the constructs interrelate in order to form a model for NPOs effectiveness. Table 1 summarises the models of NPOs effectiveness that guided the intangible effectiveness measure in this paper.

**Table 1: Models Used in Organisational Effectiveness** 

Model	Definition	Assessment of Effectiveness	Key Variables/Constructs
Goal Model or Goal Attainment Model	An organisation is effective when	Green and Griesinger (1996)	Performance-reporting practices.
	It accomplishes its stated goals.		
System Resource Model	It acquires needed resources (viability or survival through fundraising).	Siciliano (1997)	Strategic planning practices.
Reputational Model	It is judged effective by the respective self-reported	Smith and Shen (1996)	Nature, governance and formalisation.
	opinions of some set of persons.	Herman and Tulipana (1985)	Board influence.
Emergent Model	Used multiple constituency criteria to evaluate effectiveness.	Herman and Renz (1997)	Constituencies' criteria.
		Tassie, Murray, Cutt and Bragg (1996)	Funders' evaluation.

Bradshaw, Murray and Wolpin (1992)	Board structure and process.
Gainer and Padanyi (2004); Herman (1990)	Captures measures related to external constituencies based on three non-financial performance dimensions (clients' satisfaction, peer reputation and resource attraction).
Sowa, Selden and Sandfort (2004); Lecy et al. (2011)	Captures two dimensions of organisational effectiveness, management effectiveness and program effectiveness.

### 6. PERFORMANCE MEASURES FOR CHARITY ORGANISATIONS

The evaluation literature split performance into efficiency and effectiveness. The term performance often provides a straightforward conceptual depiction of efficiency as "doing things right" and effectiveness as "doing the right things" (Bies, 2003). Cherny et al., (1992) on the other hand, defined effectiveness as the degree of satisfaction of the wants and needs of a firm's beneficiaries and state that service effectiveness is "the principal criterion of agency performance" about satisfying minimally the preferences of its major stakeholders (Zammuto, 1984).

Efficient organisations seek to perform well, particularly in association with financial returns and competent service delivery. In a non-profit setting, there is also a certain degree to which the organisations direct their available resources to its mission (Herzlinger, 1996; Parsons, 2003) and associate with the preferences of important stakeholders. A number of studies on performance measures have examined both the conceptual state and the empirical part. Conceptually, the central focus of discussion in this literature review will be centred on the performance measures criteria. However, the task of assessing performance measures is intricate by the absence of a single measure or shared criterion for performance measures (Kanter & Summers, 1987). Empirically, there is a general lack of empirical research testing on the performance of NPOs, particularly with

regard to the non-financial performance measures. By nature, NPOs are in differentiation with the business organisations. The former has no intention to pursue profit and no bottom line against which performance can be ultimately measured. Furthermore, the challenge to measure performance is complicated by the nature of NPOs establishment. In Malaysia for example the NPOs are not held accountable to any standards or external oversight legal requirements, further undermining performance measurement.

However, despite the absence of the bottom line and freedom from standards and external oversight, the performance measures are necessary in these NPOs for them to demonstrate their capability or competency, to meet legitimacy purposes and attain necessary funding (Barman, 2007). As further concluded by Morgan (2006, p. 11), the three main reasons to continue the study of performance measures on NPOs are:

- 1. The management and donors need to know which organisations will produce the most expenditure for charity from funds collected, while maintaining administrative costs at the very minimum.
- 2. NPO have become a very important user of public funds and governmental spending, and the public is demanding for more accountability as to how these funds are used.
- 3. There is still a lack of empirical research on how to evaluate non-profit performance as practitioners and academics continue to search for better tools to meet funding requirements.

The performance measures can be assessed through objective (tangible) or subjective (intangible) approaches. Objective approach relies on hard measures (total revenues, surplus or deficits, amount of donations, total assets, etc.). Subjective measures, on the other hand, use surveys to determine the perceptions or managers' evaluation of the performance to certain expected outcomes. This study considers the performance measures beyond the tangible measures, i.e. the non-financial or intangible performance measures.

### 7. FRAMEWORK FOR NPOs INTANGIBLE EFFECTIVENESS MEASURES

The subject of performance measures for NPOs is extensive for financial performance but generally inconclusive for non-financial performance (Forbes, 1998). With the lack of profit as bottom line performance measures, a variety of criteria of performance measurement have been employed, in particular, the intangible effectiveness measures. Intangible effectiveness measures appears to be important as an extent to which the NPOs holds responsibility to the provision of social services and accountable with their resources (Cameron, 1986). Effectiveness measurement contributed to a better decision-making by providing the management with information to perform management control functions, fosters accountability and for better improvements in service performance.

However, despite its importance, there is much debate in the literature that is concerned about the appropriate criteria for assessing intangible effectiveness measures which proved to be the most difficult to quantify. Debates on intangible performance criteria can be characterised by the points of agreement and also the points of disagreement. Thus, there is no single consensus to reach the intangible effectiveness measures. Campbell (1977) suggests five themes or consensual propositions for the direction of organisational performance research.

- 1. The construct of organisational effectiveness is central to the organisational sciences and cannot be ignored in theory and research.
- No conceptualisation of an effective organisation is comprehensive. As the metaphor
  describing an organisation changes, so does the definition or appropriate model of
  organisational effectiveness.
- Consensus regarding the best, or sufficient, set of indicators of effectiveness is impossible to
  obtain. Criteria are based on the values and preferences of individuals, and no specifiable
  construct boundaries exist.

- 4. Different models of effectiveness are useful for research in different circumstances. Their usefulness depends on the purposes and constraints placed on the organisational effectiveness investigation.
- 5. Organisational effectiveness is mainly a problem-driven construct rather than a theory-driven construct.

The concern on intangible effectiveness measures is primarily due to the fact that these measures are better indicators in evaluating and motivating managerial performance (Banker, Potter, & Srinivasan, 2000). Furthermore, it is also argued that NPOs effectiveness studies focusing only on tangible measure is not adequate since it can lead to a misconception conclusion (Judge, 1994). Therefore, the multidimensional approach, taking into consideration both the objective (financial/tangible) and the subjective (non-financial/intangible) performance measures must coexist and cannot be separated. The existence of intangible performance measures will complement the limitations of tangible performance measures. This is evidenced ever since from 1980s, where researchers (Cameron, 1981, 1982) advocated the used of multidimensional approaches for measuring non-profits effectiveness.

Traditionally firms have measured performance using tangible measures such as profits, return on investment or costs per unit (Eccles, 1991). However, in recent years, the intangible measures such as employee satisfaction, product quality and productivity, market share has been of greater emphasise as leading indicators of an organisation's performance. Moreover, in the absence of bottom line measures in the non-profit setting, the intangible measures become a compulsory performance measure. This is in line with the purpose of the establishment of the non-profit organisations, by definition, to achieve the desired socially non-financial goals (Todd & Ramanathan, 1994).

Various dimensions have been used to measure the intangible measures of effectiveness in NPOs. With implied non-financial goals or social missions, often the organisational performance is determined by the degree to which goals are accomplished (Espirito, 2001; Joan, 2009; Kanter & Summers, 1987; Kaplan, 2001; Parsons, 2003). In addition, it is suggested by Balabanis, Stables and Phillips (1997), and Kotler and Andreasen (1991) that goals accomplishment should be judged based on two judgemental measures:

- the level non-profits have achieved in their short-term (annual) objectives; and
- the degree to which the organisations have achieved their long-term (five years) objectives.

Measures of goal accomplishment is also agreed by Kaplan (2001) who intensifies that organisational performance evaluation should go beyond tangible measures because the intangible measures provide accountability between the NPOs and its owners, while goals accomplishment provides accountability towards the society. Connolly and Hyndman (2004) focused on the information outside financial accounting, by comparing the Irish and British charities. It was found that the non-financial information and performance reporting are highly relevant and increased over time.

With the aim to include non-financial information in relation to efficiency and effectiveness measures (Drtina, 1984; Trogen & Yavas, 2002) in non-profit setting, particularly on organisational learning practices and by using Yeow's (2009) non-financial performance indicators: (i) clients' satisfaction on programmes or services, (ii) programme and service's efficiency, (iii) increase in clients, (iv) programme and service's quality, and (v) overall programme and service's effectiveness and implementation, this study establishes a framework for NPOs effectiveness as presented in Figure 2 below:

Programmes and Service's Effectiveness

Organisational Structure

Programmes and Service's Efficiency

Organisational Structure

Figure 2: Framework for NPOs Intangible Effectiveness Measures

# 7.1 Organisational Structure

Organisational structure determines the framework within which the organisation arranges its lines of authority and communications. NPOs are traditionally structured according to three functions: governance, administration and programmes. The number of organisational structure from various perspectives including the nature of governance and constitution of the charity provides the analysis for NPOs intangible effectiveness measures. Different types of organisations have different types of constitutions, and thus require different performance evaluation. The structure of the organisation serves as a starting point for assessing and evaluating an organisation performance based on their programmes offered.

### 7.2 Clients' Satisfaction

Ultimately, clients' satisfaction emerges as an important dimension in assessing the non-financial performance measures. The non-financial performance measures based on clients' feedback were mentioned by Drtina (1984) who suggests that management should define program objectives that are measurable, such a number of clients or a percentage of satisfied beneficiaries. The importance of clients as one of the non-profit organisations customers is highlighted by Shapiro (1973, p. 131),

whereby "non-profit organisations must have two sets of product policies, one for donors and the other for clients."

Clients are regarded as an important source of information concerning their perceptions of the programme and services. Inquiring the clients' degree of satisfaction and ensuring efficient and well-manage clients' complaints (Lingle & Schiemann, 1996; Vazquez, Alvarez, & Santos, 2002) would be an objective measure of how well the programme and services served the clients. The measures of customers' satisfaction in the private sector could in turn be a better indicator of future financial performance evaluation (Banker, et al., 2000). However, for non-profits, clients' satisfaction yields to increase in stakeholders' and congregant satisfaction (Ronchetti, 2006).

Clients' satisfaction also becomes one of the important dimension in non-profits performance assessment framework (PAF). In National Health Service (NHS) a publicly-funded healthcare system in England, improving users or clients' satisfaction (patient/carer experience) as one of the non-financial performance dimension which contributed to health improvement (Chang, 2006).

### 7.3 Programmes and Services Efficiency

Efficiency is seen as the degree by which nonprofits direct their available resources to the organisation's mission (Parsons, 2003) and also determined by the amount of time in order for the programmes and services to be delivered to clients (Yeow, 2009). Efficiency characterises the relationship between input and output. As supported by Posavac and Carey (2002), the non-profits' efficiency is associated to the responsiveness of the non-profits to the clients' need. The faster the response the better it is. Responsiveness, or rapid response is also as a means to consider performance by the ability to create new programmes and services efficiently (customisation), and innovation in technology for performance measurement systems (Neely, 1999). From programmes and services efficiency evaluation, the responsiveness towards the community's social needs is addressed and normative actions can be taken immediately.

### 7.4 Increase in Clients

Increase in the number of clients or membership is another indicator of non-financial performance measures. A number of studies (Espirito, 2001; Gainer & Padanyi, 2004; K. Kearns, 1996; Neely, 1999; Yeow, 2009; Smith & Shen, 1996) considered the increase in their clients as a reputation of the programmes conducted and services that they offer. Nevertheless, the relevance of the programmes and services is open to the question of relevancy if the number of clients declines. Further analysis on the increased number of clients also included the number of volunteers as non-financial performance indicators. Balabanis et al., (1997) considered number and changes in number of volunteers as a proxy of non-financial performance indicators in market orientation in the top 200 British charity organisations. The results found a lag effect between donor market orientation and performance. Apart from non-financial performance indicators, increase in the number of clients indicates the relevancy of programmes and services (Gainer & Padanyi, 2004).

# 7.5 Programmes and Services Quality

Programmes and services quality determinants allow the charity organisations to determine their perceived level of performance and quality standards. However, there are no limits to specific service standards (Koornneef, 2006) of service quality which allow individual organisation to determine their perceived level of performance and quality standards. Due to this fact, the measurement of perceived service quality has attracted considerable research interest and attention. Research on service quality was grounded by Parasuraman, Zeithaml and Berry (1988) in the USA led to the well-known service quality instrument, SERVQUAL. The measurement in SERVQUAL is measured based on an expectation-performance gap applied in five dimensions: (1) tangibles; (2) reliability; (3) responsiveness; (4) assurance; and (5) empathy.

# 7.6 Programmes and Services Effectiveness

Assessing the programmes and services effectiveness is a vital area in evaluating the direct outcomes of the programme activities (Buckmaster, 1999). Effectiveness, on the other hand, is defined as the extent to which the wants and needs of non-profit organisations' stakeholders are satisfied (Cameron, 1981; Cherny, et al., 1992). Often, programmes and services effectiveness as well as output measures have been used to complement the limitations of financial performance measures. In order to evaluate non-financial performance indicators, the combination of outcome and output measurement provide a more complete indication of the charity's performance.

Outcome is the intended effects of programmes or services of non-profits, they are the results produced by management and programme activities (Sowa, et al., 2004). Outcomes are the effects of services on people, which require input as resources provided to the programmes.

### 8.0 CONCLUSION

Review of literature on NPOs effectiveness confirms a consensus widely rejecting the unidimensional or solely tangible measure of effectiveness, but also a lack of consensus on appropriate alternative measures. Scholars have offered continuous efforts to set parameters and agendas on effectiveness. This is often done by offering conceptual clarity and developing a better understanding on the dynamics of NPOs' structure. For future study on effectiveness, it is crucial to have at least a conceptual framework on NPOs effectiveness rather than complex measurement of effectiveness. The existence of a conceptual framework will provide a standardised mechanism that allows stakeholders especially the fund providers to have a more transparent and accountable picture on where or how their money is being spent. This will further encourage the NPOs activities that will bring a positive impact on economic and social development in this country.

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