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New improved reporting index of corporate social reporting for shariah-compliant companies

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Abstract

The purpose of this paper is to construct a new modified reporting index for shariah-compliant companies. This new reporting index adheres to the Islamic Advisory Council’s guidelines and is validated by the principal component analysis, which establishes a link between internal reporting of shariah-compliant companies and external reporting needs of the community and the public. Overall reporting index quality for shariah-compliant companies is found to be more of standard when variable selection method of t-statistic algorithm under the principal component analysis suggests that the strongest themes for the items of information in the index comprise two themes, which include Finance and Investment, and the Society.

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1. Introduction

The increasing trend of corporate social reporting (CSR) has often been perceptible integrated with the rise of social and environmental challenges all over the world (Dalilawati, Norhayah and Zakiah, 2013). The importance and relevance of CSR towards the stakeholders has also been recognised by the Association of Chartered Certified

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Accountants acknowledges (ACCA, 2010). ACCA Malaysia has conducted a survey in 2002 and it was revealed that the number of reporting on environmental and social responsibilities had increased gradually. Despite the increase in the number of reporting, quite a number of researchers have expressed their opinion on the low level of CSR reporting among Malaysian firms. Perhaps, some argued that the reporting is still at an infancy stage (Puzlah, Ruhaya and Saunah, 2007; Suaini, Faizah and Roshayani, 2011). There is an increasing demand from stakeholders, particularly Muslim stakeholders who expect various disclosure dimensions of CSR based on shariah principles. In meeting the demand of these stakeholders, organisations need to report social information from the Islamic perspectives. In addition, with high demand from Muslim stakeholders, shariah-compliant companies, in particular, are expected to incorporate a religious perspective into their social reporting disclosure.

CSR is defined as denoting corporate activities beyond making profits, such as protecting the environment, caring for employees, being ethical in trading, and getting involved in community activities (Dusuki and Abdullah, 2007, p. 27). This is further asserted by Haniffa and Hudaib (2002) who emphasised the foundation of Islamic CSR as follows: “To assist in achieving socio-economic justice (al-falah) and recognise the fulfilment of obligation to Allah, society and individuals concerned, by parties involved in the economic activities viz. accountants, auditors, managers, owner, government, etc as a form of worship.” Thus, the Islamic CSR foundation is compared to those based on conventional CSR. CSR can actually improve companies’ reputation and the perception that stakeholders have on their interaction with the company. CSR is not a philanthropy concept; rather it is a concept of beyond making money by satisfying the requirement of the various stakeholders.

The purpose of this paper is twofold: (i) to improve the reporting index for shariah-compliant companies by modifying it through focus group and validate the index using the principal component analysis and (ii) to apply the modified index into consumer products sector of shariah-compliant companies. The new improved reporting index acknowledges the requirements from the Islamic Advisory Council that delineates the stakeholders’ needs. The paper is organised as follows: Section 2 provides the review of literature, Section 3 gives a brief overview of the research methodology, Section 4 draws attention on the analysis of results companies and finally section 5 concludes the paper.

2. Review of literature

CSR awareness in Malaysia started in 1997, following the East Asian financial crisis, pioneered by the non-governmental organisations and professional accounting bodies (Fathilatul Zakimi, Faudziah Hanim, Mohd Sharofi and Syed Soffian, 2007). Subsequently, in the middle of 2001, the Malaysian Securities Commission has presented CSR to the Malaysian Public Listed Company through the introduction of Corporate Governance Code. This is because the Commission views CSR as part of Corporate Governance which will reinforce for comprehensiveness of stakeholders’ concern rather than merely the governance part for the stakeholders. To support this initiative, the government has included CSR as one of the public policies in the National Economic Policy, the Malaysian Vision 2020, National Integrity Plan, and the current necessities for CSR disclosure in the annual reports for all public listed company.

From an Islamic perspective, the concept of CSR integrates `aqidah (creed), `ibadah (worship), and akhlaq (morality and ethics) apart from the principles of maqasid al shari`ah and maslahah. Shari`ah is a system of ethics and values covering all aspects of life (e.g., personal, social, political, economic, and intellectual) with its unchanging bearings as well as its major means of adjusting to change (Dusuki and Abdullah, 2007). All of these concepts do not consider the principles of maqasid al shari`ah and maslahah and also delineates the ethical considerations of accountability and transparency in their CSR.

2.1 Reporting index

A broad category of literature investigates the quality, amount and methodological issues of CSR quality. The most commonly used and proven techniques that enable the measurement on the quality of reporting are by means of reporting index (Marston and Shrives, 1991) that is applicable in non-profit organisations. The study by Dixon, Coy, and Tower (1991) which was followed by Coy, Tower, and Dixon (1994) examined the New Zealand tertiary education annual reports from 1990 to 1992. The index was improved by reducing the items into 26 items in total,
and a 5-point system was assigned to the index based on each item of information. The index was later known as “Modified Accountability Disclosure Score Index.” For each of the studies reviewed, it was found that the reporting index is a useful tool for examining the quality of reporting. The reporting index is utilized to focus on the ability of the report to communicate important information to its multiple stakeholders, as part of their ethical considerations for accountability and transparency in reporting. The used of index has also been used in many shariah-compliant studies (Haniffa and Hudaib, 2002; Rohana and Azlan, 2010). Rohana and Azlan (2010) developed their i-CSR index based on the original index developed by Haniffa and Hudaib (2002), by emphasizing on the governance theme as a vital element for accountability and transparency.

3. Research methodology

3.1 Initial reporting index for shariah-compliant companies

A reporting index was initially developed by Rohana and Azlan (2010) based on 47 items of information divided into six themes: (i) Finance and Investment; (ii) Products and Services; (iii) Employees; (iv) Society; (v) Environment and (vi) Corporate Governance. This index was particularly developed for the shariah-compliant companies. The most updated number of shariah-compliant companies approved by the Shariah Advisory Council (SAC) under the Securities Commission (SC) is 653. The companies are all listed on Bursa Malaysia as at 29 November 2013. There were 16 newly classified as shariah-compliant securities and 158 securities have been removed from the previous list issued in May 2013. The SC obtained all necessary information on the shariah-compliant securities through annual reports and all enquiries were made to the companies. The shariah status of shariah-compliant securities listed on Bursa Malaysia is reviewed annually by the SC. The revision was made on the latest available annual audited financial statements of the companies. The securities are classified as shariah-compliant when the business activities are made within the business activity benchmark and the financial ratio benchmarks (Securities Commission Malaysia, 2013). Shariah-compliant companies appoint Shariah boards, and conduct shariah audit and they prohibit certain types of income. Based on this criteria and standards put forward, a new improved reporting index for shariah-compliant companies is constructed.

3.2 New improved reporting index for shariah-compliant companies

A focus group was formed to identify further more items of information needed in the reporting index. The composition of the SAC of the SC of Malaysia consists of risk management committee, audit committee, investment panels from Islamic financial experts, legal and scholarly experts, including two academicians from higher learning institutions who participated in the focus group discussion. This allows for further insights into the important items of information (variable) that should be included in the new improved reporting index. Each participant in the focus group was given one score sheet that listed all the 47-items of information listed in the original index. The score sheet provides one space of open-ended questions, which allow the participant to add new items or remove any unnecessary items of information. Based on the focus group discussion, the results indicated three additional items to be added to the reporting index, i.e.; (i) sukuk; (ii) ijarah and (iii) halal product information. As a result, 50 items of information in the reporting index were listed, which are divided into six themes: Finance and Investment (8 items); Product and Services (6 items); Employees (10 items); Society (12 items); Environment (7 items) and Corporate Governance (7 items).

3.3 Principal component analysis

A widely used method for exploratory analysis is the Principal Components Analysis (PCA) (Esbensen and Geladi, 1990; Geladi and Esbensen, 1990; Wold, Esbensen, and Geladi, 1987). The use of PCA technique is significantly important and has been widely used in various dataset across various disciplines including psychometrics and chemo metrics. The work reported in 1901 is the most famous and early introductory to PCA. Since its formulation and early introduction by Pearson in 1901 (Pearson, 1901; Wold, Geladi, Esbensen, and Öhman, 1987), others have similarly applied PCA in other fields as well, such as in physics as reported by Cauchy.
in 1829 (Brereton, 2009) and including almost all disciplines as well as in the field of chemistry. Nowadays, almost all disciplines have fully utilised PCA applications as a method for data visualisation and can be found from the works reported in the 1970s. There are two main algorithms to calculate PCA i.e. Nonlinear Iterative Partial Least Squares (NIPALS) (Brereton, 2003) and Singular Value Decomposition (SVD). NIPALS is computationally less intensive method and is more advantageous over SVD when the number of variables is high as the extraction of Principal Components (PC) can be done one by one as needed.

3.4 Class separation- Modified Silhouette Width

Modified Silhouette Width (mSW) is the average of the (mean distance between each sample and samples not in its own class minus the mean distance between each sample and samples in the same class except itself) over the maximum of these two measures. A measure of class separation for class \( g \) and \( h \) is the average SW over all samples is \( sw_{gh} \) (Brereton, 2009).

The mSW can be calculated by using only the sign of the SW calculated for each individual sample as above. If two classes are at present having the same population statistics, then both classes have high probability of been drawn in the same manner and have very similar mean. Therefore, on average, the sign for both classes assigned will approximately be 50% respectively, which prove that the values of mSW is close to 0 for highly overlapping situation. While the class separation increases, the samples will be closer to the mean of their cluster with a greater frequency.

4. Analysis of results

4.1 Data pre-processing and class separation index

The measure of CSR quality for 106 companies was carried out using six main themes. The average CSR quality is 14.98. Any company classified under this value is categorised as Class 1 and Class 2 otherwise. The best data processing is mean centring, thus the mSW close to 1. At the same time, the results in

Table 1 show that performing row scaling in data processing is unnecessary, as this will give low mSW. The analysis is also able to explain the ability of separating the company with high and low CSR quality by using 2PCs indicated by the values of mSW more than 0.5.

| Data preprocessing                  | PC1  | PC2  | Cumulative variance (%) | mSW |
|-------------------------------------|------|------|-------------------------|-----|
| Standardisation                     | 37.7 | 21.7 | 59.4                    | 0.92|
| Row scaling and standardisation    | 34.4 | 26.8 | 61.1                    | 0.73|
| Mean centring                       | 58.7 | 24.7 | 83.4                    | 0.94|
| Row scaling and standardisation    | 51.3 | 28.4 | 79.7                    | 0.69|

4.2 Principal Component Analysis -Biplot

The PCA results found that the reporting index quality for shariah-compliant companies is found to be more of standard when variable selection method of t-statistic algorithm under the PCA suggests that the strongest theme for the items of information in the index includes the two themes of Finance and Investment, and the Society (refer Fig. 1). The eight items of information which are included in the Finance and Investment theme are riba activities, gharar, zakat method, zakat amount, zakat beneficiaries, late repayments and insolvent clients, statement of financial position and value added statement. As for the Society theme, the items of information include donation, waqf, employee volunteerism, education, scholarship, graduate employment, youth development, underprivileged community, childcare, charities and sponsoring of public health. The weakest themes for the items of information in
the index encompass Corporate Governance and Employees. This paper addresses the deficiency of using reporting index of CSR to evaluate shariah-compliant companies through validation of PCA.

![PCA Loading Plot](image1)

**Fig. 1. PCA Loading Plot**

PCA score and loading were used to determine the relationship between all 106 companies as well as CSR indexes. As shown in Fig. 2, the company in Class 2, i.e. high CSR Quality are influenced by Environment and Society while the low CSR Quality (Class 1) are influenced by the other four indexes. The results show that the CSR quality was supported by the Society theme, one of the strongest themes in the index.

![PCA Biplot: ACC data](image2)

**Fig. 2. PCA Biplot**

5. **Conclusion**

This paper shows the application of PCA and class separation index with the application of CSR index and quality. It is possible to measure and determine the influential factor or index for CSR quality. The findings demonstrate the area of strength and also recommend improved reporting practices for shariah-compliant companies.
using the new improved reporting index, which has been empirically tested using PCA. Future research should include all the shariah-compliant companies listed in Bursa Malaysia from other sectors.

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