



# Development of Financial Reporting Disclosure Index: A Study of the Cooperative Sector in Malaysia

Rusman Ghani<sup>\*1</sup>

<sup>1</sup> *Tunku Puteri Intan Safinaz School of Accountancy, Universiti Utara Malaysia*

**Abstract:** The disclosure index has been used for several decades to measure the quality of financial reporting. The disclosure index is divided into mandatory and voluntary disclosure indexes. The information disclosed can be financial or non-financial items. The disclosure index can also be weighted or unweighted. The main objective of this article is to serve as a guide for the development of a disclosure index to measure a level of disclosure that can also measure the quality of financial reporting in the cooperative sector.

**Keywords:** Disclosure Index, Cooperative Sector, Malaysia

**JEL Classification:** M4, M41, M48

**Paper Type:** Research

## 1. INTRODUCTION

The main purpose of financial information disclosure is to assist users of financial reports in decision making (Beest, Braam and Boelens, 2009); Md Tanvir and Md Zakir, 2015; Norhayati, 2011), meet legal requirements for financial reporting (Engku Ismail, 2010), ensure that stakeholders such as employees, investors, shareholders, and the public receive quality financial information at the right time so that they can make good financing and investment decisions (Hussein, Yazis, and Faizal, 2015), and provide information that is useful and relevant to all stakeholders (Saravanakumar, Mahadevan, Subramaniam, and Aarthy, 2012), compliance with regulations and social values (Adina and Ion, 2008), and a useful tool for managers to communicate information to investors (Popova, Georgakopoulos, Sotiropoulos, and Vasileiou, 2013), providing useful information about a cooperative's financial position, performance, and cash flow to various users to make economic decisions and actions based on relevant legislation (SKM, 2012).

Usually, financial reporting is done in the company's annual report by publishing the financial statements and notes to the financial statements (Akhtaruiddin, 2005).

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\* Corresponding author: E-mail: [rusman@uum.edu.my](mailto:rusman@uum.edu.my)

Companies may also disseminate information through press conferences, interim reports, letters or reports to shareholders, employee reports, and other means (Hossain, 2008). However, among the various ways, the annual report is considered as the main source of information for various user groups (Gibbins, Richardson, and Waterhouse, 1992; Hossain, 2008) and is also the main source for reporting the company's financial information (Adina and Ion, 2008).

Financial information disclosure is an important principle that shows the fairness and accuracy of financial reports, which has a positive impact on investors' decisions (Ailwan, Katrib, and Samara, 2013). If the disclosure of financial information is perfect and of high quality, it will trigger investment and improve the competitive position of the company in the market.

## **2. COOPERATIVE FINANCIAL REPORTING DISCLOSURE INDEX**

The financial reporting disclosure index is divided into two parts, namely the mandatory disclosure index and the voluntary disclosure index. The Mandatory Financial Reporting Disclosure Index for cooperatives was developed by the researcher himself and is based on the disclosure requirements listed in the Cooperative Societies Act 1993 (Act 502), the Cooperative Societies Regulations 1995, the Cooperative Societies Regulations 2010 and the Malaysian Cooperative Commission (MCC) circulars. The main reference in relation to the disclosure of cooperative financial information is the Cooperative Financial Statement Reporting Guidelines (GP23). The disclosure information is extracted from the cooperative's audited annual financial report.

Based on previous studies, voluntary disclosure is a disclosure of social responsibility information and disclosure of environmental information (Deegan & Rankin, 1996; as cited by Nik Nazli, Maliah & Dodik, 2003). Therefore, this study uses the above definition as the study definition for voluntary disclosure.

Based on the observations of previous studies, there is no index yet developed specifically for the cooperative sector in Malaysia. The researcher adapted the index development process previously conducted by Coy and Dixon (2004), who developed a public accountability index to measure the level of financial reporting by universities in New Zealand. In addition, the researcher referred to the process recommended by previous researchers, Galani et al. (2011) and Engku Ismail (2010). However, the index development process referred to by the researcher is limited to the mandatory disclosure index only. For the voluntary disclosure index, the researchers adapted the study of Mahadevappa et al. (2012), who developed a corporate social responsibility and environmental disclosure index. Therefore, the adapted voluntary disclosure index is used for the purpose of this study, focusing on the cooperative sector in Malaysia.

From the work of several other researchers, several methods can be derived to develop a scoring scheme for determining the level of disclosure of annual reports. The weighted disclosure index approach has been used in several previous studies, for example, by the following researchers, namely Courtis (1979), Barrett (1976 and 1977), and Marston (1986) (cited by Hossain (2008)), which were adopted from previous studies. In addition, Buzby (1974 and 1975), Stanga (1979), Firth (1979), and Hossain (1999) (cited by Hossain (2008)) used weighted averages from questionnaire surveys on consumers' perceptions of the importance of disclosure items. Ahmed and Nicholls (1994) used a

dichotomous procedure in which items were scored as one if they were disclosed and zero if they were not.

In this study, the researcher used a dichotomous procedure in which items were scored as one (1) when disclosed and zero (0) when not disclosed, as used by Ahmed and Nicholls (1994).

### **3. THE PROCESS OF DEVELOPING THE COOPERATIVE SECTOR DISCLOSURE INDEX**

The process of developing this disclosure index, as proposed by Coy and Dixon (2004), consists of a six-step model, namely: (a) identifying the reporting objectives for the selected sector; (b) studying current studies in the selected sector; (c) determining the objectives of the disclosure index; (d) identifying appropriate items and their qualitative characteristics; (e) obtaining stakeholder validation on the items in the disclosure index; and (f) building and testing the disclosure index.

#### **3.1 Identify reporting targets for the cooperative sector**

Cooperative financial reporting is mandated by the Cooperative Act, namely the Cooperative Act of 1993, which is annual reporting that covers a cooperative's one-year accounting period. The audited annual report must be presented at the annual general meeting, which is closed within six months of a cooperative's balance sheet date each year.

The financial reporting of cooperatives required by the Cooperative Act 1993 is the annual reporting after the end of one year of a cooperative's operations. The audited annual report must be presented at the annual general meeting held each year within six months of the end of a cooperative's accounting period. The purpose of the annual report prepared for the cooperative sector in Malaysia, as stipulated in the Cooperative Financial Reporting Guidelines (GP23), is to present the financial structure and business results of a cooperative during a financial year. The annual report also aims to comply with the legal requirements set by the MCC for the preparation and submission of annual reports by cooperatives based on instructions, guidelines, circulars or notices regarding the form and content of financial statements and accounting standards and procedures (SKM, 2012).

The purpose of the annual report of the Cooperative is:

- a) To inform the members and other interested parties about the development of the economic activities of the Cooperative, especially in financial terms during a fiscal year.
- b) To present information on the investments, fixed assets and the amount of cash, the amount and form of liabilities borne by the Cooperative, the number of capital contributions contributed by the members and the net profit from the various cooperative activities carried out.
- c) Provide the cooperative's members and interested parties with an overview of the cooperative's resources, whether or not they are being efficiently managed.

In the context of the cooperative sector in Malaysia, the objective of preparing an annual report is to provide users with useful information about a cooperative's financial position, performance, and cash flow so that they can make economic decisions and act in accordance with the law (SKM, 2012). In this context, legal measures mean that each

annual report must be prepared and submitted to the external auditor without delay, i.e., no later than two months after the end of the fiscal year. In addition, cooperatives are also responsible for ensuring that the audited annual reports provide users of the financial reports with a true and fair view of the cooperative's financial position (SKM, 2012). In addition, the objective of preparing the cooperative's annual report is also to monitor compliance with the Cooperatives Act of 1993, the Cooperatives Ordinance of 1995, and related regulations and guidelines (MKM, 2010).

### **3.2 Review of current studies in the cooperative sectors**

The disclosure index for mandatory disclosure is important to ensure the quality of published financial statements. In the study by Popova et al. (2013), it was found that an index for mandatory disclosure was developed according to the International Financial Reporting Standard (IFRS), which the companies listed in the United Kingdom have used since 2005 and which is also used as a guide for mandatory disclosure. In addition, many studies have been conducted to develop an index for financial statement disclosure for public or private organizations, such as the studies by Akhtaruddin (2005), Engku Ismail (2010), and Yeoh (2005).

Mandatory disclosure for cooperatives must comply with the requirements of the Cooperative Act 1993 (Act 502), Cooperative Regulations 2010, Cooperative Regulations 1995, MCC circulars, and guidelines approved by MCC from time to time. Based on previous literature, studies that determine the scope of mandatory disclosure for cooperative organizations are less common compared to public and private organizations. Therefore, to achieve the objectives of this study, the extent of mandatory disclosure for cooperative organizations in Malaysia is determined, where the disclosure of financial information in the cooperative's annual report determines the extent of compliance. To date, no studies or other parties have been found that have developed an index of disclosure requirements for cooperatives' annual reports in Malaysia.

Voluntary disclosure in financial reporting can help reduce information asymmetry (Cerbioni & Parbonetti, 2007). Based on previous studies, voluntary disclosure is the disclosure of social responsibility information and environmental information (Deegan & Rankin, (1996), cited by Nik Nazli, Maliah & Dodik, 2003). The level of quality of social responsibility disclosure can be determined by using an index as a measurement tool. Social responsibility measurement tools used in previous studies include the Social Responsibility Index (Hong and Andersen, 2011) and the Domini 400 Social Index (Kim, Park, and Wier, 2012). In addition, environmental disclosure is less popular compared to social responsibility disclosure because not many companies are associated with environmental impacts. Most companies that do exist are largely associated with society, welfare, and the people involved in their operations (Gurvits, Startseva, & Sidorova, 2014).

Many studies such as Kamal & Deegan (2013), Mahadevappa, Rechanna, and Shankarappa (2012), Nik Nazli et al. (2003) investigated the level of disclosure of social responsibility or environmental information in public and private organizations, but there is no other study that measures the level of voluntary disclosure in cooperative organizations. Therefore, this study is the first attempt to determine the voluntary disclosure of social responsibility and environmental information in cooperative organizations in Malaysia.

### **3.3 Determination of Disclosure Index Objective**

The developed index of mandatory and voluntary disclosure of annual reports of cooperatives in Malaysia is used as a benchmark for MCC to compare the quality level of annual reports of cooperatives. In this way, the quality level of each cooperative's annual report can be improved, which in turn will increase the users' perception and confidence in the cooperatives' annual reports.

The mandatory and voluntary disclosure index developed as a result of this study can also be used by the authorities as a basis for the standard of annual reporting of cooperatives in Malaysia, as the content list is consistent and easy to understand. Users of cooperatives' annual reports can obtain information and easily make comparisons between cooperatives.

### **3.4 Identification of Appropriate Items and Their Qualitative Characteristics**

Coy and Dixon (2004) proposed 130 items in the index development process to form the disclosure index for the study sample. The items consist of mandatory and voluntary disclosure requirements. The study by Galani, Alexandridis, and Stavropoulos (2011) listed 100 items in their disclosure index, and their study focused on the corporate sector, while the study by Akhtaruddin (2005) listed 160 items. Significant differences were found in the study of Demir and Bahadir (2014), who listed 215 elements in their index. This shows that the number of elements that make up an index varies depending on the objective of the index, the type of index, the basis of the legal requirements, and the type of organization being studied.

The main reference sources for the cooperative sector in relation to mandatory financial reporting disclosure are the Cooperative Law of 1993 (Law 502), the Cooperative Regulation of 1995, the Cooperative Regulation of 2010, and the Guidelines for Financial Reporting by Cooperatives (GP23). The reference source for the development of the voluntary disclosure index (social responsibility and environmental information) is taken from the study by Mahadevappa et al. (2012).

### **3.5 Obtaining Stakeholder Validation on the Elements of the Disclosure Index**

The next step in developing a disclosure index for the cooperative sector is to obtain stakeholder validation on the identified items of the index (Coy and Dixon, 2004). Based on the reference source for mandatory disclosure for the cooperative sector, a total of 134 items were identified as mandatory disclosure items that the cooperative sector must disclose when disclosing its financial information. The items are divided into six sections, namely "Contents of the Cooperative's Annual Report," "Detailed Contents of the Balance Sheet," "Detailed Contents of the Income Statement," "Detailed Contents of the Cash Flow Statement," and "Detailed Contents of the Notes to the Financial Statements."

For the voluntary disclosure index, the researchers refer to the index development process proposed by Coy and Dixon (2004) and Mahadevappa et al. (2012), adding two sections, namely Section A: Cooperative Annual Report (seventeen additional items) and Section B: Cooperative Member Benefits (seven additional items). The additional items in the index list are intended to include unique elements of the cooperative sector that are not included in the company.

Once the items are identified, the next process is to confirm the content of the disclosure index items with stakeholders. The selected stakeholders are composed of a group of experts (Engku Ismail, 2010). The purpose of the review is to ensure that all identified elements are consistent with the requirements of the reference sources and actual practice. The expert panel is a knowledgeable and experienced group involved in the preparation and monitoring of financial reports for cooperatives. The selected expert panel also consists of people who are directly and indirectly involved with the cooperative, namely the MCC staff, the board members of the cooperative's audit committee or the cooperative's audit manager and the cooperative's finance manager. Thus, in this study, the expert panel consists of four people, one of whom is an MCC staff member who is an expert in the field of cooperative financial reporting. One member is the board member of the cooperative's internal audit committee. Another member is the cooperative's chief financial officer, and the final member is an academic staff member who is knowledgeable in the area of cooperative financial reporting.

### **3.6 Structure and Review of the Disclosure Index**

Once a panel of experts has analyzed the index that has been created, the next step is to construct and review the index. During this process, changes are also made to the number of elements if the expert panel provides feedback. The final index takes into account all the considerations of the reference sources and the opinions of the expert panel. This final index can be used as a guide for measuring the extent of disclosure in the cooperative's annual financial report.

The disclosure index is tested by comparing the content of the cooperative's annual report with this index. Items that are disclosed in the annual report receive a score of 1, while items that are not disclosed receive a score of 0. The number of items receiving a score of 1 is calculated as a percentage of the disclosure level, where the higher the disclosure percentage, the higher the disclosure level.

## **4. SUMMARY AND CONCLUSION**

The results of the analysis show that the developed disclosure index is able to measure the level of disclosure of annual reporting of cooperatives.

New items can be added to the voluntary disclosure index since the voluntary items are not limited to inclusion in the cooperative's annual report. Future researchers can create, test, and validate a voluntary disclosure index that is appropriate for the cooperative sector and complies with the regulations and guidelines in place there. Currently, voluntary disclosure of the information is not as advanced as in corporate annual reports.

It is hoped that this disclosure index can be used as a tool to measure the degree of compliance and quality of annual financial reporting of cooperatives by government agencies to strengthen the cooperative sector, which in turn can make the cooperative sector the backbone of the national economy.

## REFERENCES

- Adina, P., & Ion, P. (2008). Aspects regarding corporate mandatory and voluntary disclosure. *Annals of the University of Oradea, Economic Science Series*, 17, 1407–1411.
- Ahmed, K., & Nicholls, D. (1994). The impact of non-financial company characteristics on mandatory disclosure compliance in developing countries: The case of Bangladesh. *The International Journal of Accounting*, 29(January), 62–77.
- Ailwan, B. M., Katrib, D. I., & Samara, A. I. (2013). The efficiency of disclosure in the financial reports in companies in the presence of International Accounting Standards and its effect on achieving profits, success, and being unique. *International Journal of Humanities and Social Science*, 3(17), 174–183.
- Akhtaruddin, M. (2005). Corporate mandatory disclosure practices in Bangladesh. *The International Journal of Accounting*, 40(4), 399–422. <https://doi.org/10.1016/j.intacc.2005.09.007>
- Beest, F. Van, Braam, G., & Boelens, S. (2009). Quality of financial reporting: Measuring qualitative characteristics. In *NiCE Working Paper 09-108* (Issue April).
- Cerbioni, F., & Parbonetti, A. (2007). Exploring the effects of corporate governance on intellectual capital disclosure: An analysis of European Biotechnology Companies. *European Accounting Review*, 16(4), 791–826. <https://doi.org/10.1080/09638180701707011>
- Coy, D., & Dixon, K. (2004). The public accountability index : crafting a parametric disclosure index for annual reports. *The British Accounting Review*, 36, 79–106. <https://doi.org/10.1016/j.bar.2003.10.003>
- Demir, V., & Bahadir, O. (2014). An investigation of compliance with International Financial Reporting Standards by listed companies in Turkey. *Accounting and Management Information Systems*, 13(1), 4–34. [http://www.cig.ase.ro/RePEc/ami/articles/13\\_1\\_1.pdf](http://www.cig.ase.ro/RePEc/ami/articles/13_1_1.pdf)
- Engku Ismail, E. A. (2010). *Hubungan antara sifat organisasi dan tadbir urus kerajaan tempatan di Semenanjung Malaysia*. Universiti Utara Malaysia.
- Galani, D., Alexandridis, A., & Stavropoulos, A. (2011). The association between the firm characteristics and corporate mandatory disclosure the case of Greece. *International Scholarly and Scientific Research & Innovation*, 5(5), 286–292.
- Gibbins, M., Richardson, A. J., & Waterhouse, J. (1992). The management of financial disclosure: Theory and perspective. In *The Canadian Certified General Accountants' Research Foundation* (Vol. 20). <https://doi.org/10.1017/CBO9781107415324.004>
- Gurvits, N., Startseva, E., & Sidorova, I. (2014). Corporate social reporting by the top 10 Estonian companies rated by profit growth. *Journal of Economics and Management*, 19(3), 274–279.
- Hasan, M. T., & Hosain, M. Z. (2015). Corporate mandatory and voluntary disclosure practices in Bangladesh: Evidence from listed companies of Dhaka Stock Exchange. *Research Journal of Finance and Accounting*, 6(12), 14–32.
- Hong, Y., & Andersen, M. L. (2011). The relationship between corporate social responsibility and earnings management: An exploratory study. *Journal of Business Ethics*, 104(4), 461–471. <https://doi.org/10.1007/s10551-011-0921-y>
- Hossain, M. A. (2008). *Disclosure Index Approach in Accounting Research: A Review of Related Issues*. *Disclosure Index Approach in Accounting Research : A Review of Related Issues* (Issue 0721, pp. 1–14).
- Kamal, Y., & Deegan, C. (2013). The disclosure of corporate social and environment-related governance practices : Evidence from the textile and garments industry of Bangladesh. *Australian Accounting Review*, 23(65), 117–134. <https://doi.org/10.1111/j.1835-2561.2012.00205.x>
- Kim, Y., Park, M. S., & Wier, B. (2012). Is Earnings Quality Associated with Corporate Social Responsibility? *The Accounting Review*, 87(3), 761–796.
- Mahadevappa, B., Rechanna, S., & Shankarappa, S. (2012). *Corporate Social Reporting Practices in India* (pp. 1–29).
- MKM, M. K. M. (2010). *Memahami Laporan Tahunan Koperasi*. Maktab Kerjasama Malaysia.
- Nik Nazli, N. A., Maliah, S., & Dodik, S. (2003). Corporate social reporting disclosure in Malaysia : An analysis of annual reports. *IJUM Journal of Economic and Management*, 11(1), 1–37.

- Norhayati, A. (2011). *Mandatory Disclosure of Interim Reporting by Malaysian Companies*. Lincoln University, New Zealand.
- Popova, T., Georgakopoulos, G., Sotiropoulos, I., & Vasileiou, K. Z. (2013). Mandatory disclosure and its impact on the company value. *International Business Research*, 6(5), 1–16. <https://doi.org/10.5539/ibr.v6n5p1>
- Saravanakumar, S., Mahadevan, A., Subramaniam, B. L. S., & Aarthy, R. (2012). An empirical investigation on the announcement of corporate quarterly results. *International Journal of Multidisciplinary Research*, 2(1), 162–176.
- SKM, Suruhanjaya Koperasi Malaysia (2012). *Laporan Tahunan SKM 2011*.
- Yeoh, J. (2005). Compliance with mandatory disclosure requirements by New Zealand Listed Companies. *Advances in International Accounting*, 18(05), 245–262. [https://doi.org/10.1016/S0897-3660\(05\)18012-X](https://doi.org/10.1016/S0897-3660(05)18012-X)