

DEVELOPING INTEGRATED ENVIRONMENTAL ACCOUNTING MEASUREMENT IN ISLAMIC BANKS

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ABSTRACT

This study is aim to develop the new measurement of environmental accounting that fit with the nature of Islamic Banks. This study employed quantitative approach to measure the intensity of the samples in implemented the environmental accounting. The Islamic Banks (IBs) usually employed the conventional yardstick in measuring the environmental accounting. Otherwise, this yardstick is not fit with the IBs nature. Therefore, this study suggests the usage of the integrated environmental accounting measurement on IBs, that more accurate than the index measurement. The originality of this study lies on the measurement method of environmental accounting which was developed from several relevant studies. This study had major implication for practitioners of IBs and also environmental accounting thinker

Keywords: Environmental Accounting, Islamic Bank, Tripple Bottom Line.

INTRODUCTION

The Environmental crises are growing rapidly and the world population should pay attention on this immense problem. The majority of crisis environmental is caused by the enterprise activity that could create natural problem, as instance greenhouse, gas emission, ecological devaluation, soil depletion, biodiversity loss as well as eroded ozone layer which are threatening the life on earth (Abdelzaher et al., 2019). Some academics discussion had highlighted this immense scale environmental problem, and they insisted that this problem could be tackled not only by offering the formal regulation but also by offering religious influential guidance from the side of religious systems (Brammer et al., 2007). This phenomenon also created the society question and demand about the corporate responsibility to the environment.

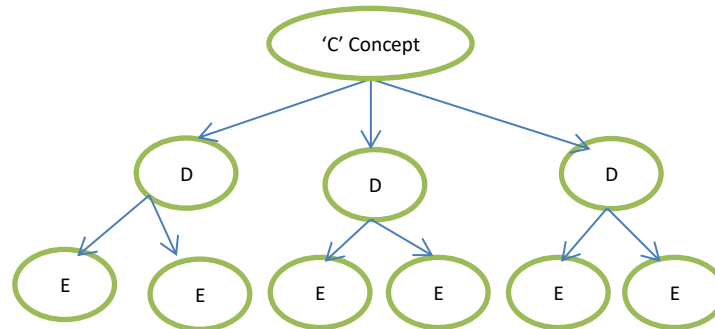
The Natural disasters and the other ecological phenomenon was a force major condition that was very debatable and should be highlighted by the Islamic accounting thinker. The accounting thinker should be able to awake the businessmen consciousness about environment and should be able also to create a framework and conceptual guidance to the businessman in reporting their business responsibility to the public. The environmental accounting could provide information about the environmental cost which encompasses the cost that exists because of the industry waste.

This current work developed new measurement of the environmental accounting in Islamic Banks (IBs). The theory which could cover the environmental accounting was Al-Maqasid shariah theory as well as triple bottom line theory. Both of these concepts fit with the modern accounting framework that conscious about the environmental aspects in the corporate. The classic accounting mainly only discuss about the financial aspects but tend to ignore the existing of environment that could be effected by the corporate activity. Hence, this study operationalized Al-Ghazali framework and triple bottom line concept to build a new measurement of environmental accounting in Islamic Bank.

The majority of the previous research examined the environmental accounting by employee the conventional yardstick, but in this study the author used ratio performance method in order to get more comprehensive result. Therefore, the originality of this study lies on the environmental accounting practice which measured by employee the ratio performance measurement method that had been developed from the method of Hudaefi & Noordin (2019). A review literature of environmental accounting indicates a plethora definition of this term, ranging from corporate social responsibility and the cost that had been spent because of the corporate waste. According to Marta and Ramos (2015) environmental accounting was also known as green accounting that disclose information about the damaged cause in to the environment that is linked to the company activity. It was also means as the systematic information about the grade of the damage of the natural elements, linked to the business activity. Hence, in this study, the author attempts to assess the degree of the variation of the environmental accounting which disclosed in the corporate annual report with new developing measurement. Specifically the author measured the degree of six Islamic Banks from six different countries based upon the annual report approach in the range of three year, from 2018 to 2020.

METHOD

The population of this study consists of IBs from six different countries, which encompasses Indonesia, Bahrain, UK, Egypt, Oman and Kazakhstan. To explore the measurement method of environmental accounting in the IBs the author used Integrated Environmental Accounting Ratio, which is adopted and developed from intergrated maqasid shariah performance (IMSPM) a work study from Hudaefi & Noordin (2019) and the other environmental aspect had been adopted from Uddin (2018). This study followed Sekaran (2019) concept of operationalization. This concept enables the decoding of abstract ideas into measurable criteria. The object of this concept was not to see the correlation, reason or consequence; but to describe its observable characteristics for measurement purpose (Hudaefi & Noordin (2019). The symbol of the abstract concept was C, the dimension was D, and Element was E. In this current work, the abstract concept applies to triple bottom line as explain by Timothy (2011), D was the dimension of planet, people and profit (3P), and E encompasses the indicators of 3P, along with the developed performance ratios (PRs).



Tabel 1. Concept, Dimension, and Element of Integrated Environmental Accounting for IBs

Concept (C)		Dimensions (D)	Elemen (E)	Performance Ratio (PR)
Triple Bottom Line	Planet (environment)	D.1. Social Responsibility	E.1. Charity and CSR Cost	R1. Charity and CSR/Charity and CSR distributed
		D.2. Paper Consumption	E.2. E-Banking Operational and online advertisement	R.2. Administrative expense or Publicity/Total expense
	People (Social/Business Entity)	D.3. Ethical Banking	E.3. Zakat	R.4. Zakat Paid/Zakat distributed
		D.4. Green Training and Awareness Program	E.4. Training Expense	R.5. Training expense/Total expense
		D.5. Green Education	E.5. Education Grant	R.6. Education grant/Total Income
		D.6. Shariah Compliance	E.6. Interest Free Product	R.7. Interest Income Free/Total Income

Profit (Financial)	D.6. Green Loans	E.6. Profit Sharing Ratios	R.7. Mudharabah Financing/ Total financing
	D.7. Green Mortgage	E.7. Mortgage Financing	R.8. Mortgage Financing/Total Financing
	D.8. Sustainable Banking	E.8. Operational Efficiency	R.9. Operating expenses/Operating revenue

Sources: Data Process (2022)

Commonly, each company had different environmental accounting form, as instance the business process in the mining industry different with the business process in the automotive industry or chemical industry. This distinguish process could create different waste industry, and therefore this could lead to a different environmental cost as well. The Bank industry is also different with the other industry; IBs had a unique business process which could affect the accounting report including the environmental accounting report. There was several dimension of environmental accounting which should be measured in Islamic Bank which was described in table 1.

Table 1 described about the concept dimension, element and performance ratio of Integrated Environmental Accounting Ratio which was developed from the study work of Hudaefi & Noordin (2019) and Uddin (2018). This ratio also developed from the combination of Al-Maqasid Shariah theory and triple bottom line theory. The first concept of triple bottom line was planet which had two dimension social responsibility (D.1.) and paper consumption (D.2.). The dimension of social responsibility could be measured by using formula R.1. (Charity and CSR/Charity and CSR distributed). The dimension of paper consumption could be measured by using formula R.2. (Administrative expense/Total expense) and formula R.3. (Advertisement expense/Total expense). Furthermore, table 2 show information about sample of study which encompasses of six IBs from six different countries.

Table 2. List Sample of Study
Representative of Islamic Bank (IBs)

No	Country	Name of IBs	Abbreviation	IB's Website
1.	United Kingdom (UK)	Al-Rayan Bank United Kingdom	UK-RYB	www.alrayanbank.co.uk
2.	Bahrain	Al-Baraka Banking Group Bahrain	ABG	www.albaraka.bh
3.	Indonesia	Bank Muamalat Indonesia	BMI	www.bankmuamalat.co.id
4.	Kazakhstan	Al-Hilal Islamic Bank Kazakhstan	ALHILAL	www.alhilalbank.kz
5.	Oman	Aliz Islamic Bank Oman	IZZB	www.alizzislamic.com
6.	Egypt	Abu Dabhi Islamic Bank Egypt	ADIB	www.adib.ae

Sources: Data Process (2022)

RESULT AND DISCUSSION

The first step that has been done was collecting data from each of IBs websites and then the author employed the yardstick of measuring environmental

accounting using the integrated environmental accounting formula. This current work has examined 6 samples IBs which is from 6 different countries. The population was Islamic Bank around the world and the object of the sample was annual report of the IBs. The author chooses these samples used purposive sampling method. After collecting the data, the samples were computed using performance ratio (PR) in table 1. The calculation has been done by using Microsoft Excel because of its accuracy reason.

Table 3. The Average Performance Ratio of Integrated Environmental Accounting Islamic Banks in the period of 2016-2020

Bank	Social Responsibility	Paper Consumption	Ethical Banking	Green Training	Green Education	Interest Free Product	Green Loan	Operating Efficiency
UK	0	0,50	0	0,50	0,42	0,94	0	0,80
Bahrain	3,51	0,40	0,0032	0,40	0,36	0,79	0,13	0,67
Indonesia	1	0,43	0,0002	0,50	0,60	0,68	0,019	0,34
Kazakhstan	0,60	0,51	0,0029	0,51	0,51	0,86	0	1,08
Oman	1,59	0,35	0	0,56	0,58	1,59	0	0,80
Egypt	0,78	0,22	0,0007	0,42	0,23	0,78	0,003	0,54

Sources: Data Process (2022)

After collecting the previous academic work which relevant with the topic of study, then the author operationalizing the formula of integrated environmental accounting which adopted and developed from Triple Bottom Line theory and the author combine this concept with al-maqashid syariah theory. This theory was chosen because the concept of triple bottom line was well established and also had extensively used by the environmental accounting researchers (Timothy, 2011). This concept discussed about modern accounting concept which classify the three main important stakeholders that could effect and effected by the enterprise activity, such as people, planet and profit. This concept synchronized with Al-maqashid syariah theory, mainly in the dimension of maintaining the soul, maintaining the intellect and also maintaining the wealth.

Based upon the table 3 the highest point of social responsibility was achieved by Al-Baraka Banking Group Bahrain. This dimension was reflected by the disclosure of charity and the cost of corporate sustainability in Islamic Bank. This finding indicated that Al-Baraka Banking Group Bahrain had immense desire to disclose the information of social responsibility activity in their corporate. This finding supported the previous academic work by Rahmayati et al., (2022) which found that the social responsibility could strengthen the community empowerment and this program could also socialize the green business of the corporate to the society. This finding also linked with triple bottom line theory, specifically on the first concept which known as planet. This concept also has the other term namely social dimension. Elkington (2013) stated on his theory that in order to get the sustainability of business activity the enterprise should show their good ethical behavior to the society towards social responsibility activity. The other researchers also insisted that the member of religion tend to hold broader conceptions of the responsibilities of the company (Brammer et al., 2007). This indicated that Bank with Islamic religious principles had high responsibility than the other Bank. Hence, this finding and all previous study work and also the theory are in line with the finding of this paper and their argument more strengthen the evidence that Islamic

Banks had immense desire to disclose the information of social responsibility than the conventional Bank.

The next dimension of planet concept was the amount of paper which consume by the corporate. The lowest amount of paper consumption was achieved by Abu Dabhi Islamic Bank Egypt. This indicated that Abu Dabhi Islamic Bank Egypt tend to use the paperless consumption on their transaction which reflected that this corporate minimize the paper consumption towards the implementation of digitalization process in almost all aspects include transaction and the other administrative activity. This finding are also in line with the research finding by Cahyadin et al., (2020) which found that the Bank that implemented the green banking tend to achieve business efficiency because of their fast ability to adopt with the changing of the technology. Uddin & Ahmmmed (2018) found also that electronic transaction in Islamic Bank was not only for achieving sustainability but also for providing convenience to the customers and Bank. Less paper means less cutting of trees which mean the IBs support the global agenda to minimize the operational environmental impact. Hence, this dimension was in line with the second concept of maqashid syariah which known as maintaining the soul as well as the first concept of triple bottom line that known as planet. This dimension represent the IBs desire to minimize the environmental damage towards decreasing the usage of paper in the IBs office.

The second concept was people which had four dimensions; ethical banking which was reflected by the zakat payment; green training and awareness program which measured by the training expense; green education which measured by the amount of scholarship that given to the students; and shariah compliance which measured by the interest free income. This study found that the smallest ratio for zakat distribution was Abu Dabhi Islamic Bank Egypt which reflected that this Bank had distributed almost all of the zakat payment. The ethical banking was represent by the zakat payment, because the goal of zakat was cleaning the soul and also to minimize the wealth disparity. Then, the green training and awareness program was measured by the training expense which reflected the role of the IBs corporate in maintaining the intellect. This dimension explained that the IBs had program to increase the staff capacity and knowledge towards training and awareness program. The scholarship which represents the education grant dimension reflected the IBs effort to involve in the community development program, which can boost the society positive perception about the IBs social image, hence this dimension, could be a promotion tool for the IBs. The last was shariah compliance which reflected by the existing of interest free product. The existing of interest free income on the annual report described the positive enthusiasm of the customer to invest their fund on the IBs halal product. The dimension on the people concept reflected the IBs positive relation with the internal and external stakeholders. The disclosure of the social activity on the annual report could become the value added for the IBs, and it also increase the customer and society trust because of the good portrait of the IBs has been revealed clearly towards IBs social program and also IBs social disclosure. The business activity could give bad impact on the environment and community; hence the society had their own right to get information about the corporate social activity. In addition, the social program also could enlarge the IBs networking.

Anggrayni (2022) also found that the social program and social disclosure was a social capital which could boot the stakeholder trust to the company.

The third concept was profit; this study found that green loans, green mortgage, and also sustainable banking dimensions could reflected the profit or financial concept. Green loans and green mortgage reflected that the IBs release the halal product and it means the IBs had encouraged the projects which care about the environment and community. Green loans also means that the IBs do not invest their money to the non-halal industries, as instance tobacco industries, hotel industries, and the other industry that offered non-halal product and business process. This means that the IBs attempt to maximize the social welfare, reduce the hazards, and protect the nature from the any degradation in its operational activities. The last dimension was sustainable banking, this dimension measured by the operating expense account, which reflected the efficiency of management in maintain the sustainability of the industry, the smaller the ratio means the smaller the operating expense. The operating return bigger than the operating expense, indicated that the IBs could fulfill the accounting principle which is well known as business sustainability. Sustainable business is the way of using the resources that not only meet the human needs of present and future generation but also preserve the environment. This last concept was in line with the fifth concept of maqashid syariah “maintaining the wealth”. Based on maqasid shariah concept, IBs were socially responsible in providing finance that monitored by the bankers expert under the ‘Shariah’ (Islamic law) Board guidance. IBs could not invest money to the tobacco industry, gambling industry, production of goods that damage physical or mental health or harmful to the environment or any product or service industry that involve in unethical practices. Islamic Bank is committed to establish a socio-economic justice system where the public interest and social welfare were important than the individual interests.

CONCLUSION

Balancing the organizational and environmental ethics was a global dilemma, and in order to tackled this immense problem this current study had developed and modified the tool measurement of environmental accounting. The paper established integrated environmental accounting measurement, which measured the environmental accounting in Islamic Bank with the annual report approach. This paper also examined the triple bottom line concept then combines it with al-maqashid shariah theory. This current academic work found that integrated environmental accounting was fit with the nature of Islamic Bank. This research had major implication for Islamic Bank practitioners and also accounting researchers. This study also found that the corporate action according to triple bottom line and maqashid syariah theory tend to disclose their environmental and social activity towards annual report.

In addition the future study might be used the other ratio as instance green mortgage or agricultural financing when calculating the ratio of green loans dimension, because commonly the IBs provide financing product based upon the society condition, as instance Al Rayan Bank did not provide the agricultural financing because the people and customers on their region more need to build

house. Therefore this ratio could be change with the other financing which more beneficial and fit with the community necessity.

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