The Sustainable Responsible Investment and Islamic Finance for Achieving Sustainable Development Goals (SDGs) in Indonesia

Rani Puspitaningrum, Darmawati Muchtar, Andrea Zulfa, and Ratna Husein

Faculty of Economic and Business Universitas Malikussaleh, Aceh, Indonesia

Abstract. This study aims to investigate the influence of SRI-KEHATI (The Sustainable Responsible Investment in Indonesian Biodiversity), JII (The Jakarta Islamic Index) and FOREST (forest area) on three Sustainable Development Goals (SDGs) in Indonesia. The data of this study retrived from World Bank, Indonesia Stock Exchange and Central Bank of Indonesia. This study used time series data from 2009 to 20016. The multiple regression analysis methods is apply to achive the research objective and answer the research hypotheses. The results shows that SRI-KEHATI have positive and significantly affacted 8th and 13th SDGs goals, but it has negative on 15th SDGs goals. Moreover, JII has negative and significant impact on 8th SDGs but insignificant impact on 13th and 15 SDGs goals. The negatif of JII implies that reducing carbon emission levels as an indicator of climate change and environmental sustainability that emphasizes the important role of forests as life support is also expected to be aligned with economic growth. Then, FINANCING seems do not have any significant impact for the three SDGs. In sum, the SRI-KEHATI index has an important indext to achived these sustainable development goals.

Keywords: SRI-KEHATI · JII · Financing · Sustainable Development Goals (SDGs)

SCITEPRESS
SCIENCE AND TECHNOLOGY PUBLICATIONS

1 Introduction

Islamic finance and Sustainable Responsible Investment (SRI) also known as "Socially Responsible Investment" have experienced rapid development in recent years. The similarity of the nature, values, and characteristics of both for some people can bridge the sides of Islamic and conventional finance so that they have a more varied portfolio. Islamic finance values that prioritize distribution, social justice and environmental sustainability based on the Qur'an and Hadith are also partly a component of forming SRI products. As reported from page http://kehati.or.id/ that SRI products are products that are considered to have various forms of consideration in their efforts relating to environmental care, corporate governance, community involvement, human resources, human rights human, and business behavior with business ethics that is accepted at the international level [1].

In this regard, Indonesia has a very large market share potential for these two products, supported by a majority of more than 80% of the population who are Muslim. The dualism of the financial system that runs in Indonesia provides several benefits to the public to

Puspitaningrum, R., Muchtar, D., Zulfa, A. and Husein, R.
The Sustainable Responsible Investment and Islamic Finance for Achieving Sustainable Development Goals (SDGs) in Indonesia.
DOI: 10.5220/0009837400002900
In *Proceedings of the 20th Malaysia Indonesia International Conference on Economics, Management and Accounting (MIICEMA 2019)*, pages 133-139
ISBN: 978-989-758-582-1; ISSN: 2655-9064
Copyright © 2022 by SCITEPRESS – Science and Technology Publications, Lda. All rights reserved

have more alternative investment choices that do not conflict with their religion and beliefs without ignoring the prospect of income gains that will be received and ultimately impact on economic growth. In response to this, it is not considered excessive if Indonesia as a strategic financial market can become a country pilot project for other countries in realizing a financial system that is in line with the principles, objectives, and sustainable development goals that are on the agenda of the United Nations.

The sustainable development agenda launched by the United Nations is the blueprint to achieve a better and more sustainable future for all. They address the global challenges the world has, including those related to poverty, inequality, climate change, environmental degradation, peace and justice, represented by the 17 SDGs [2]. Therefore, related to the nature and characteristics of Sustainable Responsible Investment (SRI) and Islamic finance, both are expected to make a meaningful contribution to the realization of the goals of sustainable development, especially Goals No. 8 (*Decent Work and Economic Growth*), No. 13 (*Climate Action*), and No. 15 (*Life on Land*).

2 Literature Review

Sustainable development has been defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development calls for concerted efforts towards building an inclusive, sustainable and resilient for future for people and planet. For sustainable development to be achieved, it is crucial to harminize three core elements: economic growth, social inclusion and environmental protection. These elements are interconnected and all are crucial for the well-being of individuals and societies. Eradicating poverty in all its forms and dimensions is an indispensable requirement for sustainable development. To this end, there must be promotion of sustainable, inclusive and equitable economic growth, creating greater opportunities for all, fostering equitable social development and inclusion, and promoting integrated and sustainable management of natural resources and ecosystems (United Nation, n.d).

Three core elements in sustainable development are reflected in the 17 sustainable development goals as shown below:

Fig. 1. The Sustainable Development Goals (The United Nation).

Islamic finance as part of the sustainable development agenda has a very important role in achieving the existing SDGs. The Islamic Research and Training Institute (IRTI) has undertaken pioneering research that underlines the fact that many Sustainable Development Goals (SDGs) clearly align with *Maqashid al-Shari'ah* (*MaS*). The *MaS*-driven Islamic finance, therefor, would work towards achieving the SDGs. Islamic finance aims to promote an economic concept that extends beyond being the component of a financial system, but as part of a total value-based social system. The Shari'ah, which governs the Islamic financial system has ample injunctions which emphasize the need to care for the environment and forms of life on earth while ensuring the proper usage of natural resources [3]. The explanation given by (Obaidullah, 2018) formed a conclusion that Islamic financial development relates to SDGs, especially targets of decent work & economic growth (No. 8), climate action (No. 13), and life on land (No. 15).

The United Nation give a notion for Sustainable Development Goals (SDGs) No. 8 about decent work and economic growth is to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all through several targets and indicators. One of them is Adjusted Net National Income per Capita (annual % growth). Furthermore, SDGs No 13 is about to take urgent action to combat climate change and its impact with CO^2 emissions (metric tons per capita) as main indicators. While SDGs No. 15 is to protect, restrore and promote sustainable use of terrestrial ecosystem, sustainably manage forests, combat desertification, halt and reverse land degradation and biodiversity loss with its forest area (10^6 km^2) as an indicator [4].

Financial development is usually defined as a process that brings enhancement in quantity, quality, efficiency and efficacy of financial intermediary services. Thus, process involves the interaction of many financial activities and institutions e.g: financial market, banking and non-banking institution. Indicators of Islamic financial development include Islamic deposit money banks, private credit provided by Islamic banks, and Sukuk [5]. In this study, the Jakarta Islamic Index representing the Islamic financial market and private credit provided by Islamic banks (financing).

Furthermore, Grassa & Grazda (2014) research proved a positively significant relationship between private credit given by Islamic banks (financing) dan economic growth. While Shahbaz, et.al (2013) stated financing significantly towards carbon emissions in Malaysia [6]. Likewise, research conducted by Javid & Sharif (2016) mentions similar results but uses financial development indicators in general in Pakistan, namely domestic credit to private sector [7], [8]. While Alam et.al (2015) suggested the opposite results [9].

Sustainable Responsible Investment (SRI), sometimes also referred to as ”Socially Responsible Investment“, is generic term that covers any type of investment process which combines investors, financial objectives with their concerns regarding environmental, societal and governance (ESG) issues (Moghul & Safar-Aly, 2014 cited in Marwan & Engku Ali, 2016) [10]. In line with Islamic finance, Sustainable Responsible Investment (SRI) has its roots in religious value, and specifically the objective to develop prosperous, just and egalitarian economic and social structure economic and social structure. Economic development and growth, along with the social justice, are the foundational elements of an Islamic economic system in its all members of an Islamic society must be given the same opportunities to advance

SCITEPRESS SCIENCE AND TECHNOLOGY PUBLICATIONS

themselves; in other words, a level playing field, including equitable access to natural resources [11].

Based on the literature review and the theory have been explained above, thus the research hypotheses conducted as follows:

1. Sustainable Responsible Investment (SRI) and Islamic Finance have a significant impact on SDGs No. 8 (*Decent Work and Economic Growth*)
2. Sustainable Responsible Investment (SRI) and Islamic Finance have a significant impact on SDGs No. 13 (*Climate Action*)
3. Sustainable Responsible Investment (SRI) and Islamic Finance have a significant impact on SDGs No. 15 (*Life on Land*)

3 Reseach Methodology

This study uses economic and financial variables taken from various sources. The dependent variables used are Adjusted Net National Income per Capita (% annual growth) (ADJNNI), Carbon Emissions per Capita (metric tons) (CO2CAPITA) and Forest Area (10^6 km^2) (FOREST). The independen variable are Sustainable Responsible Investment Foundation for Biodiversity (SRIKEHATI), Jakarta Islamic Index (JII), and Private Credit Given by Islamic Banks (FINANCING) in Indonesia for the period 2009-2016. There are several sources for the available data gathered i.e, World Bank, Indonesia Stock Exchange, and Central Bank of Indonesia. This study applied the multiple regression analysis and the model estimation are as follows:

$$\text{SRIKEHATI} + \text{JII}+\text{FINANCING} = \text{ADJNNI.} \quad (1)$$

$$\text{SRIKEHATI} + \text{JII}+\text{FINANCING} = \text{CO2CAPITA} \quad (2)$$

$$\text{SRIKEHATI} + \text{JII}+\text{FINANCING} = \text{FOREST} \quad (3)$$

The general model estimation of multiple regression also can be write as follows:

$$\text{ADJNNI}_t = \beta_0 + \beta_1\text{SRIKEHATI}_t + \beta_2\text{JII}_t + \beta_3\text{FINANCING}_t + \varepsilon_t \text{ ....(4)}$$

$$\text{CO2CAPITA}_t = \beta_0 + \beta_1\text{SRIKEHATI}_t + \beta_2\text{JII}_t + \beta_3\text{FINANCING}_t + \varepsilon_t \text{ ....(5)}$$

$$\text{FOREST}_t = \beta_0 + \beta_1\text{SRIKEHATI}_t + \beta_2\text{JII}_t + \beta_3\text{FINANCING}_t + \varepsilon_t \text{ ....(5)}$$

4 Result and Discussion

This section present the results of the study and discussion the effect of SRIKEHATI, JII and FINANCING on SDGs Goals using multiple linear regression analysis with four research model as presented at Table 4.1.

In Table 4.1 shows that the SRI-KEHATI has positive and significant impact on both SDGs (Decent work and economic growth) and (Climate action) measured by ADJNN and CO2CAPITA with a positive coefficient at 1 percent and 5 percent level of significant respectively. This finding indicates that increase the Sustainable

Responsible Investment Foundation for Biodiversity lead to increase SDGs. This finding support the hypotesis expectation and consistent with the theory. The contradict finding find that the SRI-KEHATI has negative and significant impact on SDGs (Life on land) measured by FOREST. This finding is inconsistent with the theory.

Table 1. Estimation Results of SDGs Goals.

SDGs Goals No. 8 (*Decent Work and Economic Growth*)						
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
SRIKEHATI	0.244070	0.040674	6.000689	0.0058	R-squared	0.952960
JII	-0.175612	0.032743	-5.363384	0.0039	Adjusted R-squared	0.917679
FINANCING	8.340475	8.200419	1.017079	0.3666	S.E. of regression	1.963194
C	-144.2016	174.2135	-0.827729	0.4543	Sum squared resid	15.41652
					Log likelihood	-13.97550
					F-statistic	27.01108
					Prob(F-statistic)	0.004083
SDGs Goals No. 13 (*Climate Action*)						
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
SRIKEHATI	0.002324	0.000805	2.888381	0.0446	R-squared	0.929536
JII	-0.000696	0.000648	-1.074453	0.3431	Adjusted R-squared	0.876688
FINANCING	0.122262	0.162204	0.753756	0.4929	S.E. of regression	0.038832
C	-1.324780	3.445939	-0.384447	0.7202	Sum squared resid	0.006032
					Log likelihood	17.40918
					F-statistic	17.58888
					Prob(F-statistic)	0.009088
SDGs Goals No. 15 (*Life on Land*)						
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
SRIKEHATI	-0.000372	7.38E-05	-5.042371	0.0073	R-squared	0.977563
JII	5.58E-06	5.94E-05	0.093957	0.9297	Adjusted R-squared	0.960735
FINANCING	0.008210	0.014871	0.552084	0.6103	S.E. of regression	0.003560
C	13.63076	0.315920	43.14620	0.0000	Sum squared resid	5.07E-05
					Log likelihood	36.52487
					F-statistic	58.09222
					Prob(F-statistic)	0.000937

Notes: The significant level of probality are 1%, 5% and 10%.

SCITEPRESS
SCIENCE AND TECHNOLOGY PUBLICATIONS

Furthermore, Jakarta Islamic Index (JII) has negative and significant impact on 8th SDGs goals at 1 percent level of significant, but insignificant impact on 13th SDGs goals (ADJNNI). The negative impact implies that increase the JII would be decrease the SDGs goals (ADJNN and CO2CAPITA). The climate action indicators used in this study are carbon emissions per capita and the forest area is expected to represent the life on land indicator. Climate action targets to combat climate change and its impact while life on land is to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and biodiversity loss.

However, the JII has positive impact on 15th SDGs goals (FOREST) but also insignificant. Similarly, with FINANCING, find that there is no significant impact on three SDGs goals, but it has positive impact. This finding consistent with theory although insignificant.

Issues regarding the environment and sustainable finance occupy strategic studies in finding solutions to climate change problems caused by human economic activities that are not based on just and sustainable ethical, values and norms. The community no longer becomes indifferent and ignores the fact that every investment and the economic decision they make in order to increase their income and welfare has an impact on the surrounding environment.

The SRI-KEHATI Index and JII are clear evidence that people's choice to invest in stocks that pay attention to environmental sustainability and sharia principles can increase a country's national income which means it can also contribute to SDGs No. target. 8 decent work and economic growth. This research is in line with the theory presented earlier that financial development, one of which is marked by the development of capital markets has a significant effect on economic growth [5], [11]. Furthermore, private credit provided by Islamic banks also known as financing showed insignificant results in this study.

Sustainable Development Goals No. 13 climate action and 15 life on land can be achieved from the contribution of increased investment in companies officially listed on the SRI-KEHATI index. Companies listed on the SRI-KEHATI index are companies engaged in the environmentally friendly economic and industrial sectors and have gone through a selection process mechanism which is carried out through two stages, namely the first stage is the initial screening of negative core business selection and financial aspects then at the stage second is the fundamental aspect.

5 Conclusion

This study provides a comprehensive picture that the existence of Sustainable Responsible Investment (SRI) and Islamic finance has a role in achieving the Sustainable Development Goals announced by the United Nations. However, real contributions can only be made by Sustainable Responsible Investment (SRI) while Islamic finance's contribution has not been seen significantly, so there is a need for hard efforts to improve the development of Islamic finance from time to time. In addition, diversification in financial investment options involving Sustainable Responsible Investment (SRI) and Islamic finance can also be utilized to the maximum extent in supporting the achievement of other SDGs targets.

References

[1] KEHATI, "Indeks SRI KEHATI - KEHATI." 2016.

[2] The United Nations, "About the Sustainable Development Goals - United Nations Sustainable Development," Sustainable Development Goals. pp. 3–6, 2015.

[3] M. Obaidullah, "Managing Climate Change: The Role of Islamic Finance," SSRN Electron. J., 2018.

[4] E. B. Barbier and J. C. Burgess, "Sustainable development goal indicators : Analyzing trade-offs and complementarities," vol. 122, pp. 295–305, 2019.

[5] R. Grassa and K. Gazdar, "Financial Development and Economic Growth in GCC Countries: A Comparative Study between Islamic and Conventional Finance," Int. J. Soc. Econ., vol. 41, no. 6, pp. 493–514, 2014.

[6] M. Shahbaz, S. Adebola, H. Mahmood, and M. Arouri, "Does fi nancial development reduce CO 2 emissions in Malaysian economy ? A time series analysis," Econ. Model., vol. 35, pp. 145–152, 2013.

[7] M. Javid and F. Sharif, "Environmental Kuznets curve and fi nancial development in Pakistan," Renew. Sustain. Energy Rev., vol. 54, pp. 406–414, 2016.

[8] F. Abbasi and K. Riaz, "CO 2 emissions and fi nancial development in an emerging economy : An augmented VAR approach," vol. 90, pp. 102–114, 2016.

[9] A. Alam et al., "Environmental quality indicators and financial development in Malaysia: unity in diversity," Environ. Sci. Pollut. Res., vol. 22, no. 11, pp. 8392–8404, 2015.

[10] "The potential of innovative financial tools: Social Impact Bond (SIB) and Sustainable and Responsible Investment (SRI) sukuk, towards the sustainable growth of the Islamic finance industry," Eur. J. Islam. Financ., no. 4, 2016.

[11] M. S. Bennett and Z. Iqbal, "How socially responsible investing can help bridge the gap between Islamic and conventional financial markets," Int. J. Islam. Middle East. Financ. Manag., vol. 6, no. 3, pp. 211–225, 2013.

SCITEPRESS
SCIENCE AND TECHNOLOGY PUBLICATIONS