



Potential Development of Indonesian Green Sukuk: ANP (Analytic Network Process)

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Abstract: Environmental issues are one of the lessons that need to be considered, especially with the increase in the effect of greenhouse gases (GHG). Indonesia has the enthusiasm to reduce the decline in GHG emissions so as to present reen-based sustainable financing investment products. The purpose of this study was to examine the Indonesian green sukuk with the analytical network process method in order to obtain comparative results. The research used by the researcher is a qualitative research approach with the method used by the Analytic Network Process (ANP). The theoretical studies used include green financing and green sukuk. The findings explain that the development of green sukuk can be influenced by how the government provides alternative green sukuk products that are offered by looking at the reputation of the development of green sukuk so as to generate investor confidence.

Keyword: Green Sukuk, Analytic Network Process, & Green Financing

INTRODUCTION

In recent years, Indonesia has experienced economic growth above the world average growth that has not touched on social and environmental aspects. In 2009, the Indonesian government committed to climate change mitigation by reducing greenhouse gas (GHG) emissions by 26% with self-financing or reaching 41% with international support by 2020. Total funding to support GHG emission reductions reached 26% by 2020, nominally Rp.314 trillion per year or Rp. 1570 trillion during the 2015-2019 period (OJK, 2020).

Indonesia has the spirit to reduce the decline in GHG emissions so as to present sustainable financing investment products based on greens. The presence of green bonds in Indonesia encourages sharia players to issue green financing instruments that adhere to sharia principles known as green sukuk. Green Sukuk are securities (securities) that state ownership of an underlying asset that is managed based on sharia principles related to eligible green sectors.

Green sukuk is an innovation financing from sustainable financing, so from the description above, the researcher concludes that researching Indonesian Green Sukuk with the Analytic Network Process method, in order to obtain comparative results to maintain and maximize opportunities for the development of Indonesian Green Sukuk and anticipate the risks that hinder the development of Green Sukuk.

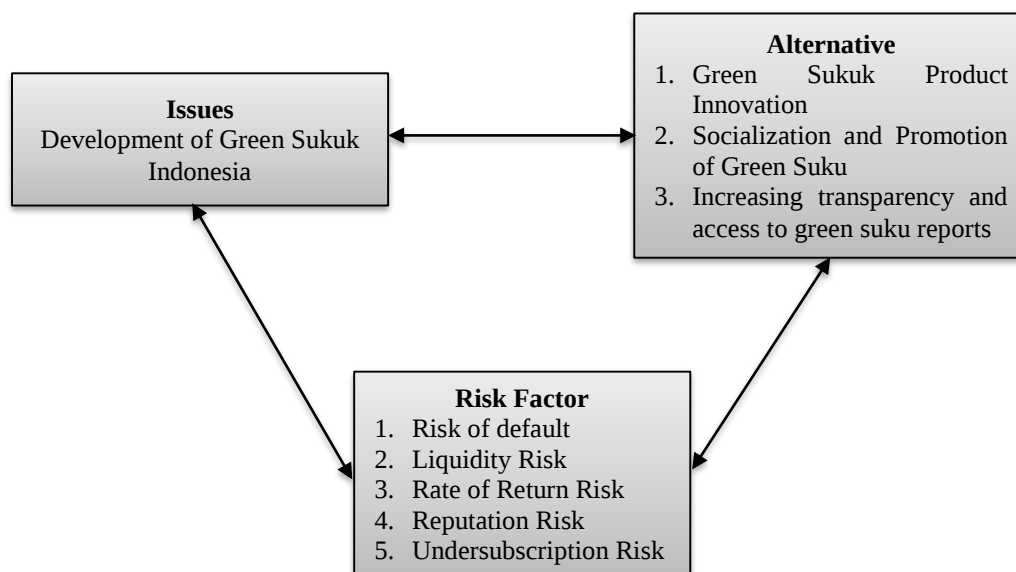
METHOD

This research is a qualitative research that uses the Analytic Network Process (ANP) method related to green sukuk in Indonesia using Super Decision 3.0 software. The ANP method is a decision-making method using a pair comparison questionnaire and super decision software to determine priorities from the opinions of experts, regulators and practitioners (Tanjung, 2013). The data sources used are primary data and secondary data.

RESULTS AND DISCUSSION

Results

Based on the results of previous surveys and research, as well as the results of discussions with several experts, the ANP framework is obtained for the priority weights of the risk of developing green sukuk in Indonesia and the appropriate alternative for the development of Indonesian green sukuk. The ANP structure can be shown in the image below:



Source: Processed by researchers (2021)

Figure 1. Structure ANP Green Sukuk

This structure consists of 3 clusters:

1. Problem Cluster: Development of Indonesian Green Sukuk.
2. Risk Clusters: Alternative risk factors identified from the results of interviews with actors involved in the development of Indonesian green sukuk are the risk of default, liquidity, rate of return, reputation and undersubration.
3. Alternative Clusters: Alternatives that play a role in the development of Indonesia's green sukuk are as follows: Green sukuk product innovation, socialization and promotion of green sukuk and increasing transparency and access to green sukuk reports.

The results of data processing obtained are based on the results of an expert survey using the ANP questionnaire to determine the risks that are the top priority or the highest risks in the development of Indonesian green sukuk according to expert respondents. Of the overall risks that occur in all developments in Indonesia's green sukuk, the risk that has the highest value is the risk of default and reputation risk with a weight of 0.23. For comparisons between clusters of risk factors with alternative/strategy clusters can be seen in the following table:

Table 1. Priority results comparison between Risk to Strategy

Risk	CI	Information	Strategic Priorities	score
Risk of default	0,077	Consistent	Increasing Transparency	0,514
Liquidity Risk	0,070	Consistent	Product Innovation	0,761
Reputational Risk	0,051	Consistent	Socialization and Promotion	0,493
Rate of Return Risk	0,031	Consistent	Product Innovation	0,704
Undersubscription Risk	0,070	Consistent	Product Innovation	0,614

Source: Processed by researchers, 2021

Based on the table above, it can be seen that the priority risk in the development of Indonesian green sukuk is liquidity risk at the product innovation level, which is 0.76. Green investors with these characteristics tend to keep their securities until maturity, so that the dynamics of buying and selling in the secondary market will decrease (Castillejos Petalcorin et al., 2020; Fender, 2019; Reichelt & Keenan, 2017).

Discussions

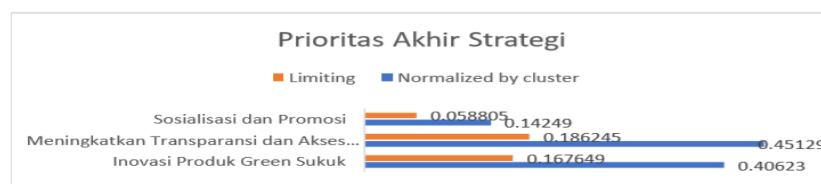
Analysis of Indonesia's green sukuk strategy helps to understand the strategic position in the development of Indonesian green sukuk to increase the potential for green sukuk development according to expert respondents, which can be presented in Table 2.

Table 2. Final Priority Strategy

Strategy	CI	Information	Risk Priority	score
Product Innovation	0,096	Consistent	Reputational Risk	0,470
Increasing Transparency	0,052	Consistent	Default Risk	0,348
Socialization and Promotion	0,037	Consistent	Default Risk	0,337

Source: Processed by researchers, 2021

The results of the pairwise comparison between green sukuk development strategies from Table 2 can be seen that the strategy of increasing transparency and access to green sukuk reports has the highest weight value of 0.451 compared to other strategies. It can be concluded that in the development of Indonesian green sukuk, transparency and access to green sukuk reports are needed so that investors can get an overview of the investment to be made. For a comparison between strategy clusters and risk clusters, it can be seen in the following figure:



Source: Processed by researchers, 2021

Figure 1. Priority results comparison between Strategy against Risk

- ❖ If the CI < 0.1 then the respondent's assessment is consistent
- ❖ If the CI > 0.1 then the respondent's assessment is inconsistent

Based on the table above, it can be seen that the priority comparison between strategies and risks in the development of Indonesian green sukuk is product innovation at the reputation risk level of 0.470. In Muhammad's research (2019), it was stated that there was a sluggishness in interest in green sukuk but provided a reinforcing impetus by presenting alternatives to make green sukuk attractive to Malaysian investors. Meanwhile, Nayan's research (2020)

states that there are several suitable contracts for the issuance of green sukuk as well as being aware of the project categories available for the issuance of green sukuk so that they can provide confidence and increase investor confidence.

From the test results with ANP above, it can be concluded that the development of green sukuk can influence how the government provides alternative green sukuk products offered by looking at the reputation of green sukuk development so that it can build investor confidence.

CONCLUSION

The development of green sukuk in Indonesia has received a positive side from investors. Based on the weighting of the comparison between risk and strategy, it was found that the development of product innovation and increasing transparency and access to green sukuk reports received the highest weight in each comparison, both the ratio of risk to strategy and strategy to risk. This means that a person's tendency towards maturity awareness really needs to be considered. For that, it is necessary to have a system that supports so that there are reminders of payments due according to the green sukuk agreement

The results of this study can be considered by investors and the government in developing green sukuk. In addition, green sukuk can be implemented optimally through measuring the number of coupons received, the effect on exchange rates, inflation or explaining the development of green sukuk.

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