The Opportunity of Sovereign Blue Sukuk Issuance in Maritime Sectors: Case Study of Indonesia

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ABSTRACT

The sea potential in Indonesia is very abundant, but the water governance is still poor and still raises concern for the community regarding the threat of damage. This is due to the limited financing of the maritime sector in Indonesia. This research tries to give alternative financing by using Sovereign Blue Sukuk, which further analyses the factors of benefit and opportunity if implemented. The method used is ANP with Benefit, Opportunity, Cost, and Risk (BOCR) network approach. The biggest weight in the benefit is improving people's welfare. As for the opportunity, the biggest weight is adding Sharia investment instruments. The greatest weight on load is the cost of coordination between institutions. From the risk, side is operational risk. In general, the cost rate is greater than the benefit, opportunity, and also risk. Furthermore, the alternative strategy that can be done to minimize the cost and risk are (1) institutional coordination; (2) the empowerment of fishermen; (3) Identification of marine projects.

Keywords: Sovereign Blue Sukuk, Maritime Sectors, ANP-BOCR, Indonesia

INTRODUCTION

Indonesia is a maritime country because it has a sea area larger than its land area. According to data from the Ministry of Maritime Affairs and Fisheries in 2017, the total area of Indonesia is 7.81 million km² consisting of 2.01 million km² of land, 2.25 million km² of ocean, and 2.55 million km² of the Exclusive Economic Zone (EEZ). The number of islands in Indonesia reaches 17,499 islands from Sabang to Merauke. Meanwhile, according to the Geospatial Information Agency, the total length of Indonesia's coastline is 99,093 kilometers. (National Geographic Indonesia, 2013).

Through the Djuanda Declaration which was initiated on December 13th, 1957, by the then Prime Minister of Indonesia, Ir. H. Raden Djoeanda Kartawidjaja, Indonesia declared to the world that the Indonesian seas (the seas around, between, and within the Indonesian archipelago) become one unitary territory of the Republic of Indonesia. The Djuanda Declaration was written on December 13th, 1957 stated that: (a) Indonesia is an archipelagic country that has its characteristics, (b) since time immemorial the archipelago has been a single entity, (c) the provisions of the 1939 Ordinance on the Ordinance can divide the territorial integrity of Indonesia.

Indonesia as an archipelagic country has been recognized internationally through the third UN convention on the law of the sea, the United Nations Convention on the Law of the Sea 1982 (UNCLOS 1982), which was later reaffirmed by Indonesia with Law No. 17 of 1985. This made Indonesia as the largest archipelagic country in the world (the Biggest Archipelago in the World) (Lasabuda, 2013).

In the 2015-2019 RPJMN (National Medium-Term Development Plan/Rencana Pembangunan Jangka Menengah Nasional) concerning Marine Development, the Ministry of National Development Planning conveyed the direction of Marine
Development in the 2005-2025 RPJPN (National Long-Term Development Plan). In this case, the objective of realizing Indonesia as an archipelagic country that is independent, advanced, strong, and based on national interests is conveyed. (BAPPENAS, 2015).

Achieve the targets in the RPJPN, is marked by important aspects in Marine Development, including:

1. The establishment of a network of facilities and infrastructure as a glue for all islands and islands of Indonesia.
2. Increasing and strengthening human resources in the marine sector supported by the development of science and technology.
4. Development of an integrated marine economy by optimizing the sustainable use of marine resources.
5. Reducing the impact of coastal disasters and marine pollution.

Law No. 17 of 2007 concerning the National Long-Term Development Plan for 2005-2025, the directions, stages, and priorities for the development of the Indonesian nation in the future are the realization of Indonesia as an archipelagic country that is independent, advanced, strong, and based on national interests. Therefore, the pattern of Indonesia’s economic development in the future must dare to be oriented toward marine economic policies, because there are so many marine potentials that can be utilized as one of the economic support sectors. (Ismatullah, 2011)

Seeing the potential above, the government has many opportunities to carry out various developments that can be a driver of economic growth as well as a means of alleviating poverty and inequality in the Blue Economy corridor. The government can become a provider of marine infrastructure that is beneficial to fishermen, such as large-capacity fishing vessels that are environmentally friendly. The government also has the opportunity to reduce environmental pollution with the various facilities provided.

Indonesia is currently promoting Sustainable Development with the theme “Changing Our World: The 2030 Agenda for Sustainable Development,” the SDGs (Sustainable Development Goals) which contain 17 Goals and 169 Targets are a global action plan for the next 15 years (valid from 2016 to 2030), to end poverty, reduce inequality and protect the environment. The SDGs apply to all countries (universally) so that all countries without the exception of developed countries have a moral obligation to achieve the goals and targets of the SDGs.

The 17 goals of the SDGs can be grouped into four pillars, namely human development, economic development, environmental development, and governance; (a). The pillars of human development are closely related to the provision of basic services so that the SDGs goals can be grouped into several sectors (healthy life, equitable quality education, inclusive education and lifelong learning for all, ending poverty and achieving gender equality, and empowering all women and girls). (b). The goals of the SDGs in the economic pillar are to promote sustainable economic growth and decent work for all, build infrastructure, promote inclusive and sustainable industrialization and encourage innovation, and make cities and human settlements inclusive, safe, resilient, and sustainable. (c). The SDGs goals in the environmental development pillar include ensuring food security and good nutrition, achieving universal access to water and sanitation, ensuring sustainable energy, ensuring sustainable consumption and production patterns, taking action to combat climate change and its impacts, and managing resource assets. sustainably, manage sustainable ecosystems, and stop the loss of biodiversity. (d). In the field of governance, the goals of the SDGs include reducing inequalities within and between countries, ensuring a stable and peaceful
society, and strengthening the means of implementation and revitalizing the global partnership for sustainable development.

**Figure 1. Sustainable Development**

Resources: https://sdgs.un.org/

Indonesia is challenged to be able to implement Sustainable Development Goals (SDGs) point 14 in a real form that can be accepted by the wider community. Item 14 is about the marine ecosystem which includes the development of the maritime and marine economy. To observe the maritime development of Indonesia’s economy, it is appropriate to review the position of the marine sector which consists of 7 main sectors, namely: sea transportation sector, maritime industry, fisheries, marine tourism, marine energy, and mineral resources, marine construction, and marine services, played a role in the past and how the Indonesian nation should lay a strong foundation for the development of an archipelagic state that can prosper the people of the archipelago (Law No. 17 of 2007).

It is well known that the marine economy is still a relatively lagging sector when viewed from the low productivity of the level of resource utilization, the level of technology used, the level of poverty, the level of environmental friendliness, and the relatively low interest in medium and large scale investments, as well as a large amount of capital, required even though the “rate of return” is also high (Rani & Cahayasari, 2015).

The marine sector has complex problems because it is related to many sectors and is also sensitive to interactions, particularly with environmental aspects. Various marine fisheries management issues in Indonesia have the potential to threaten the sustainability of fish resources and the environment, the sustainability of community livelihoods in the fisheries sector, food security, and economic growth that comes from the use of fishery resources (Ministry of Marine Affairs and Fisheries, 2019).

As the largest archipelagic country in the world, Indonesia has marine and coastal potential that can be exploited as a source of food. Some Indonesian people have also relied on activities to make a living from the sea by being fishermen, or from the coast by being shrimp farmers, milkfish, or cultivating seaweed. The exploited seas and beaches are still not optimal. With the intervention of knowledge, technology, and capital, Indonesia can still explore more marine resources.

The utilization of the sea for the welfare of the community, energy security, and future food sources is in dire need of financial support. Various sources of financing have been provided by various creditor institutions such as the Asian Development Bank (ADB) and the Islamic Development Bank (IDB). However, it is not yet comparable to Indonesia’s needs.

The Financial Services Authority’s plan to encourage financing efforts in making breakthroughs to improve the maritime sector from the Non-Bank Financial Industry (IKNB/Industri Keuangan Non-Bank) which is used to carry out various financings such as ship financing, cold storage financing, fishery production centers, seaweed cultivation financing, and port financing (Kompas.com, 2015).

The government needs to develop financing instruments that can be used for the development of maritime areas in Indonesia. One of the steps that can be taken is to invite the public to invest in the sector through
instruments provided by the government such as state Sukuk.

One of the instruments issued by the government is the green Sukuk. The issuance of green Sukuk by the government is almost the same as another state Sukuk because currently, the majority of the issuance proceeds are used for infrastructure financing. It's just that the infrastructure that will be used as the basis for issuance (underlying assets) must meet the green infrastructure criteria (Anggraini, 2018). After the successful issuance of green Sukuk, it seems that the government needs to conduct a study to encourage the creation of similar instruments that can be used for the maritime sector. The government can review the issuance of ‘sovereign blue Sukuk from various sides, by taking the green Sukuk as a benchmark. This research wants to contribute to the government in analyzing the feasibility of implementing the ‘sovereign blue Sukuk.’

The concept of sharia-based finance is growing rapidly. It is hoped that this research that analyses the implications of the issuance of sovereign blue Sukuk can be a diversification of maritime sector funding. This is supported by the existence of a budget deficit policy which is generally correlated with an economic development strategy by taking into account the general state of the state’s finances (Hariyanto, 2017a). In terms of financing the maritime sector, the issuance of the sovereign blue Sukuk has an important role to support the ‘blue economy’ program which is echoed by the government to preserve the Indonesian seas. In addition, the ‘sovereign blue Sukuk is in line with SDGs point 14 on Protecting Marine Resources.

In its implementation later, it is hoped that ‘sovereign blue Sukuk can finance infrastructure related to the maritime sector such as Port Development, SKPT (Integrated Marine and Fishery Centres/Sentra Kelautan dan Perikanan Terpadu), fishermen’s markets, and other large projects that can be used as underlying assets. The government has several advantages and opportunities as well as burdens and disadvantages in this financing implication. The next step is to find the best alternative for the ‘sovereign blue sukuk’ strategy to be implemented in financing the maritime sector in Indonesian waters.

**LITERATURE REVIEW**

**Blue Economy**

Awareness of the importance of the function of the sea and the need to protect the resources contained therein has been increasing and gaining momentum in recent years. The number of countries that implement marine policies (ocean policy) in the national legal order is also increasing. Along with this, the condition of marine ecosystems in several parts of the world has decreased due to human activities and natural changes such as the impact of climate change.

In 2010, Gunter Pauli introduced a new approach, namely the blue economy through his book ‘The Blue Economy: 10 years, 100 innovations, and 100 million jobs.’ The blue economy concept is intended to challenge entrepreneurs that the Blue Economy business model provides opportunities to develop investments and businesses that are more economically and environmentally profitable, use natural resources more efficiently and do not damage the environment, and production systems are more efficient and cleaner, produce products and economic value in a larger scale, increasing employment, and providing opportunities to provide benefits to each contributor more equitably.

The blue economy was developed to answer the challenges that exist today. This environmental damage is not only caused by the presence of industrial waste and also by natural damage that exceeds the capacity or carrying capacity of nature. So far, resource efficiency, low carbon, and social inclusiveness have developed, but they have not been able to overcome human greed to dominate nature more. (Kompasiana, 2013)

The blue economy is a concept of optimizing aquatic resources which aims to
increase economic growth through various innovative and creative activities while ensuring business sustainability and environmental sustainability. This concept puts forward and focuses on efficiency. Efficiency encourages investment and fishery business development while maintaining a sustainable environment. The main core of this blue economy is pro-ecosystem activities. (Ilma, 2017)

From the description above, it can be concluded that the essence of the blue economy concept:

1. Learning from nature: Blue Economy imitates the way nature works (ecosystem), works according to what nature provides efficiently, and does not reduce but instead enriches nature.

2. Ecosystem logic: just as water flows from mountains carrying nutrients and energy to meet the basic needs of life for all living things and plants, waste from one becomes food/energy source for the other, so that the living system in the ecosystem becomes balanced. Only by gravity is energy distributed efficiently and evenly without external energy extraction. To support living systems, sunlight becomes photosynthetic energy for all contributors who need it.

3. Innovation and creativity: Empirically practical economic innovations have been developed and proved that ecosystems are always working towards higher levels of efficiency to transport nutrients and energy without leaving waste to harness the capabilities of all contributors and meet the basic needs of all.

The blue economy will ultimately ensure that development carried out will not only result in economic growth but also ensure ecological and social sustainability. In general, the blue economy can be understood as an economic model to encourage the implementation of sustainable development with a framework like how ecosystems work.

The application of a blue economy must have a comprehensive understanding of aspects of connectivity between sectors that jointly utilize marine and coastal ecosystems. For example, the development of urban areas located in coastal areas will be very dependent on access to other resources such as water and energy. Likewise, the aspect of maritime trade depends on the supply of maritime goods and port services. This requires arrangements to be implemented as efficiently as possible.

The blue economy is in line with the determination of the United Nations in realizing the Sustainable Development Goals set by UN member countries on September 25, 2015. About the series of the 2030 Sustainable Development Agenda which includes 17 Sustainable Development Goals (SDGs) in English. The SDGs are based on the Millennium Development Goals (MDGs), which have been pursued from 2000 to 2015, and will guide the achievement of the global goal of sustainable development until 2030.

The concept of the blue economy in the marine sector in the context of sustainable development in Indonesia provides a sustainable way of working (sustainability), the way of working in the marine sector is carried out by way of back to nature. The blue economy is a new economic concept that is hopeful for two major problems that are currently being experienced by the world, namely environmental problems and the energy crisis. (Sitorus, Jayakusuma, & Edorita, 2018)

The Asia Pacific open economic cooperation forum, namely the Asia Pacific Economic Cooperation (APEC) was formed as an effort to advance all aspects of economic activity in the Asia Pacific in November 1989 in Canberra-Australia. With 21 member countries, namely, Australia, Brunei Darussalam, Canada, Chile, China, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russia, Singapore, Chinese Taipei, Thailand, United States of America, Russia, and Vietnam (Rani & Cahayasari, 2015).

The Asia Pacific Economic Cooperation (APEC) defines the blue economy as an economic model that encourages the
implementation of sustainable development. An economic model that develops marine and fisheries industrialization that emphasizes growth, and job creation, and encourages environmentally friendly technological innovation. Marine development that is less than optimal and tends to be unsustainable is caused by a pattern of development that is not based on science and technology, does not apply an integrated supply chain system approach, is less inclusive, and is not environmentally friendly.

The implementation of the Blue Economy model in Indonesia began when President Susilo Bambang Yudhoyono delivered a speech at the Rio+20 Summit in Riocentro, Rio de Janeiro, Brazil which was held for nine days from 13-22 June 2012. The Sustainable Development Summit or Rio Summit +20 was attended by 191 countries attended by 105 heads of state and heads of government and 487 ministers. Indonesia’s reason for implementing the blue economy model is based on the fact that Indonesia’s geographical condition is an archipelagic country that has the second longest coastline in the world (after Canada), therefore it is necessary to think about how to preserve marine resources because the preservation of marine resources will have an impact on the community’s reliable food source reserves. About the implementation of the blue economy concept in marine ecosystems, there are at least 3 main things that form the basis of the approach, namely: the condition of ecosystem health (healthy ocean), economic activities centered on people’s welfare (people-centered activities), and the existence of good resource management (ocean governance).

**State’s Sukuk**

In Islamic Economics, Sukuk is not something new. Sukuk has long been used as a financial instrument in domestic and international trade by Muslim traders since the early development of Islam (6th century AD). The term Sukuk then became popular in the 21st century after being widely used by governments and corporations in mobilizing funds to finance a particular project on an international scale. (Hariyanto, 2017b)

In language, Sukuk can be interpreted as a document or certificate. The term Sukuk itself comes from Arabic with the basic word which means document or certificate, and the plural form is سكوك (Sukuk). The term Sukuk can be found in various classical Islamic literature, namely at the beginning of the early Islamic century (early Hijri century/6th century AD) with various variations in mentioning names, such as sakk, Sukuk, or sukaik. The term has the meaning of a certificate or document. In the book of ‘Al-Muawatta’ by Imam Malik, it is stated that Sukuk has been used since the first-century Hijrah during the reign of Halifax Al-Marwan ibn Al-Hakam, namely the era of the Umayyad dynasty. (Directorate of Sharia Financing DJPPR, 2015).

Sukuk has also been explained in Regulation of the Capital Market Supervisory Agency for Financial Institutions No. IX.A.13 regarding sharia securities, Sukuk are defined as sharia securities in the form of certificates or proof of ownership which have the same value and represent an indefinite portion which includes: tangible assets, the value of benefits on assets, services, certain project assets, predetermined investment activities.

With a large number of potentials and the rapid development of Sukuk every year, it is hoped that the development of Sukuk will not experience significant obstacles in our country. Although of course there are still some weaknesses on several sides, it is still hoped that the development of Sukuk will have a positive impact on the Islamic financial market, and a good influence on Indonesia’s infrastructure development going forward.

Law Number 19 of 2008 defines state Sukuk as state securities issued based on sharia principles in both rupiah and foreign currencies. Issuance of state Sukuk aims to finance the APBN deficit as well as finance the country’s priority activities or projects (Hariyanto, 2017b).
The issuance of this state Sukuk is an effort by the government to obtain new sources of financing, especially from the domestic and global Islamic finance sector which has grown rapidly in the last ten years. Sukuk globally has grown since 1992 and was issued by a company from the United States, namely General Electric.

State Sukuk represents an important breakthrough and opens up many new opportunities in the realm of Islamic finance and banking. Sukuk has shown their role, that the Sukuk instrument has a role in national development by helping the government to meet the state treasury when taxes are not met (Adam & Thomas, 2004).

The issuance of SBSN was based on Law Number 19 of 2008 concerning state sharia securities or state Sukuk which was ratified on May 7, 2008. The issuance of this Law marked a milestone in the start of the issuance of state Sukuk by the government. As the legal basis for the issuance of state Sukuk, the existence of the law is certainly inseparable from the long process of preparation and discussion involving various parties in its issuance.

By the mandate of Law Number 19/2008 concerning SBSN, article 4, the purpose of issuing state Sukuk is to finance the APBN, including financing project development. The issuance of state Sukuk in the context of financing the APBN is intended to secure the financing needs of the APBN at a minimum cost at a controlled risk level, to maintain fiscal sustainability. Meanwhile, project financing is meant to finance the development of government projects allocated in the APBN, such as infrastructure projects in the energy, telecommunications, transportation, agriculture, manufacturing industries, and public housing sectors; provision of public services; empowerment of domestic industry; other developments by the Government's strategic policies. Whilst the project requirements:

1. It is a central government project.
2. According to priority.
3. Meets the readiness and eligibility criteria for implementation from Bappenas.
4. Has obtained approval from the DPR.
5. Has received an allocation in the APBN.
6. Meets the criteria and does not conflict with sharia principles.
7. It will not be transferred/written off as long as it is a state Sukuk asset.

In addition, projects financed by state Sukuk must also meet sharia criteria. The following is the explanation in the DSN-MUI Decree No. 01/DSN-MUI/III/2012:

Sukuk Allocation

Since 2011, the government has started to focus on issuing state Sukuk for project financing. The issuance of state Sukuk in the context of project financing is carried out based on the provisions of Law Number 19 of 2008 concerning State Sharia Securities which mandates that project financing in the context of implementing the APBN can be sourced from the issuance of state Sukuk. Issuance of state Sukuk to finance APBN projects is one of the stages that are expected to be a driving force for the achievement of national development goals.

As previously explained, state Sukuk is intended to finance the APBN deficit and state priority activities or projects (Project Financing). Financing the Sukuk project is a financing mechanism through the issuance of state Sukuk specifically for infrastructure projects and other strategic projects. Project financing through state Sukuk refers to Government Regulation (PP) No. 56 of 2011. In the PP it is stated that projects financed with state Sukuk are carried out in the context of:

1. Infrastructure development.
2. Public service improvement.
3. Empowerment of domestic industry.
4. Other strategic government programs.

The project being financed must also be a priority project. The scope of the project includes infrastructure development such as the energy, telecommunications, transportation, agriculture, manufacturing industries, and public housing sectors; provision of public services; empowerment of domestic industry; other developments by the Government's strategic policies. Whilst the project requirements:

1. It is a central government project.
2. According to priority.
3. Meets the readiness and eligibility criteria for implementation from Bappenas.
4. Has obtained approval from the DPR.
5. Has received an allocation in the APBN.
6. Meets the criteria and does not conflict with sharia principles.
7. It will not be transferred/written off as long as it is a state Sukuk asset.
1. The project has clear planning, implementation, and completion, covering at least the following aspects: (a) Utilization plan and (b) Project development plan in terms of benefits and harms.

2. Utilisation of the project is not for purposes related to (a) Implementation and/or contribution to conventional financial services (riba'ī). (b) Organizing and/or contributing to activities that contain elements of gambling (maysir) (c) Organizing and/or contributing to the production, distribution, trade, and/or provision of prohibited goods/services (haram). (d) Organizing and/or contributing to activities that are harmful/harmful (mudharabat) to moral character and the environment.

Various state projects have been financed by state Sukuk. Every year the financing of state projects with state Sukuk always increases. Projects financed include transportation infrastructures such as bridges, roads, and railroads. In addition, the state Sukuk also finances educational infrastructure projects such as university buildings, infrastructure for the ministry of religion such as the Office of Religious Affairs (KUA), as well as Hajj infrastructure such as the hajj dormitory, as well as other infrastructure such as roads and bridges (Directorate of Sharia Financing DJPPR, 2015).

The financing procedure is summarised into 5 processes. The first is project planning and proposals. At this stage, the project organizer (Ministry or institution) conducts planning and then proposes the project to the National Development Planning Agency (BAPPENAS/Badan Perencanaan Pembangunan Nasional). The third process is the submission of the project priority list by BAPPENAS to the Ministry of Finance. The next process is the preparation and financing of projects by DJPPR through the issuance of state Sukuk.

The final process is the implementation of project development by the relevant Ministry or Institution. In this case, the Ministry or Institution concerned supervises, monitors, and manages the object of financing. In addition to this, ministries and institutions must also submit reports on the progress of project implementation to the Minister of Planning by the provisions of PP. 56 of 2011. Submission of reports includes progress on the achievement of the physical implementation of the project as well as progress on the realization of budget absorption.

**Fiscal Policy**

It should be noted that the government needs to establish various policies in implementing the economy. One of them is fiscal policy, namely the government’s authority to regulate state revenues and expenditures aimed at influencing the course of the economy for the better (Hariyanto, 2017a). The regulated State Revenue and Expenditure Budget (APBN/Anggaran Pendapatan dan Belanja Negara) also include projects implemented by ministries or government institutions.

In the last decade, the government has implemented an expansionary budget policy. This policy is the government’s strategy that aims to encourage the rate of economic growth. In the expansionary policy, the government increases spending by increasing the budget for infrastructure development and other government-related projects. These development activities are expected to encourage people to provide more goods and services, create jobs, and increase consumption. The next cycle is expected to create higher economic growth and people’s welfare (Hariyanto, 2017b).

In financing the APBN deficit, the government also has various sources of budget financing instruments. Among these instruments are direct loans and the issuance of Government Securities. The Government Bonds issued include two, Government Securities and State Sharia Securities (SBSN/Surat Berharga Syariah Negara or State Sukuk).
RESEARCH METHODOLOGY

The research model carried out is a qualitative type, which is non-parametric and non-Bayesian, for a decision-making process that provides a general framework for treating decisions without making assumptions about the independence of elements at a higher level than the elements at a lower level and the independence of the elements in a level. The research was carried out with a focus on several respondents who were divided into three categories of experts, namely regulators, practitioners, and academics.

This study uses primary and secondary data. Primary data was obtained from filling out questionnaires by regulators, practitioners, and academics, totaling nine people. Meanwhile, secondary data were obtained from various kinds of literature. Primary data was obtained through:

1. In-depth Interview, which is an in-depth interview to collect detailed information about the object of the problem discussed in this study. From the results of interviews, the authors obtained data on the factors that influence and relate to the financing of the maritime sector in Indonesia.
2. Survey of sharia economic experts and practitioners, namely data collection focused on sharia economists and Sukuk practitioners in Indonesia. From the survey results, the authors obtained data to be analyzed quantitatively in an analytical framework formed from the results of in-depth interviews.

Data and information on opinions represented by experts and practitioners are compiled in the form of a framework model. If the results of the questionnaire about responses or opinions have been collected, then the next step is to analyze the results obtained, using the “Super Decision” software.

In preparing the ANP framework, it is necessary to have data and information on preferences represented by experts, namely practitioners and academics of the maritime sector as well as Sukuk. After getting the information, the authors form the ANP framework and a questionnaire that will be filled out by experts, practitioners, and regulations. The distribution of questionnaires is needed to make measurements using a ratio scale.

Analytic Network Process (ANP)

Analytic Network Process or ANP is a non-parametric non-Bayesian qualitative approach that is used to produce a decision with a general framework without making assumptions. ANP is a general theory of relative measurement that is used to derive the composite priority ratio from the individual ratio scale which reflects the relative measurement of the effect of interacting elements concerning the control criteria (Saaty & Vargas, 2013).

This method was first developed by Thomas L. Saaty which the method is the development of the Analytic Hierarchy Process (AHP) method. ANP is a new approach to the decision-making process without making assumptions. In the AHP network, there are levels of objectives, criteria, sub-criteria, and alternatives, where each level has an element. Meanwhile, in the ANP network, the levels in the AHP are called clusters which can have criteria and alternatives in them, which are now called nodes.

Benefit, Opportunity, Cost, and Risk (BOCR) analysis is an analysis of prioritization based on the calculation of the desired criteria as benefits (Benefits) and criteria that are not desired as burdens (Cost). In addition, there are criteria based on future events that may occur as positive things (Opportunity) and things that can lead to negative risks (Risk). To perform the analysis, the calculation is done by pairwise comparison (Saaty, 2001). The resulting
decision is divided into three parts, namely the assessment system, merits from the BOCR decision as a consideration for making decisions, and a network of objective linkages that make an alternative decision more desirable than the others.

**RESULT AND DISCUSSION**

Based on the problem identification, the ANP BOCR network can be seen in the figure below:

**Figure 2. ANP Framework**

The data that is processed into the BOCR network in the Network image above will produce six super matrixes. The supermatrix provides a priority order of the most important aspects, namely the overall BOCR model, benefit aspects, opportunity aspects, cost aspects, risk aspects, and the choice of the right alternative strategy according to the respondents.

In this method, a definite good possibility is called a benefit. Whilst the opposite possibility is called cost. The uncertain possibilities are called opportunities (Opportunities) that may be obtained from a decision and risks (Risks) that may occur (Saaty, 2005).

After grouping each Benefit, Opportunity, Cost, and Risk, then to analyze the results, a survey was conducted on seven respondents. The questionnaire which is the main tool for the respondents was compiled through literature processing, in-depth interviews, and the formation of ANP models and networks. Furthermore, the processing results are continued by calculating the average value (Geometric Mean) and the level of agreement (Rater Agreement) to obtain a priority order. The level of agreement or rater agreement between respondents as indicated by the value of Kendall’s coefficient of concordance (W) with the provisions (W; 0 < W < 1) W = 1 indicates perfect conformity, in other words, the closer to 1, the respondent’s agreement is the same. The majority of the results of the rater agreement in each BOCR cluster and alternative strategies are high.

Seeing the potential and role of the marine sector in Indonesia, the government needs to pay more attention to marine sector actors. Increased productivity can be done by procuring vessels that use ‘sovereign blue sukuk’ in diversifying financing. The overall results in this study indicate that the ‘sovereign blue Sukuk for financing the Indonesian maritime sector has opportunities and benefits for the government. However, on the other hand, there are considerations of burden and risk.

As for the level of agreement between respondents, the research shows that each institution, both the Ministry of Finance and the Ministry of Maritime Affairs and Fisheries (KKP/Kementerian Kelautan dan Perikanan), has its interests. The Ministry of Finance tends to prioritize the interests of state Sukuk, while the Ministry of Marine Affairs tends to look at the possibility of projects being financed. Respondents with academic backgrounds tend to have the same mindset as the Ministry of Finance because the selected academics have Islamic finance bases and understand Sukuk and also the projects financed by the Sukuk.

**CONCLUSION**

The results of the study revealed that:

1. The ‘sovereign blue Sukuk issuance plan for financing the maritime sector in Indonesia has several benefits, namely (1) diversification of APBN financing instruments; (2) increasing the role of Islamic finance; (3) improving the welfare
of the community. The opportunities obtained are (1) diversification of SBSN underlying assets; (2) marine economic sustainability; and (3) adding sharia investment instruments. On the other hand, the government also needs to consider the costs and risks. Some of the costs are (1) inter-institutional coordination costs; (2) an increase in the burden on the state budget; (3) implementation costs. Meanwhile, the risks that must be considered are (1) operational risk; (2) technical risk; (3) moral hazard, and human error.

2. The priorities obtained from the respondents’ conclusions are (1) the main benefit obtained by the government by financing the maritime sector with the ‘sovereign blue sukuk’ is to improve the welfare of the community. The next advantage is increasing the role of Islamic finance. And the last advantage is the diversification of APBN financing instruments. (2) Meanwhile, the main opportunity obtained by the government is to add sharia investment instruments. The second opportunity is the sustainability of the marine economy. The last opportunity is the diversification of SBSN’s underlying assets. (3) The main burden that must be considered is the cost of coordination between institutions. The second burden is to increase the burden on the state budget. And the third is the cost of implementation. (4) Meanwhile, the risk that becomes the main concern is operational risk. The second is technical risk and the third is moral hazard and human error.

3. The priority of alternative strategies: (1) Institutional coordination; (2) Fishermen empowerment; (3) Identification of marine projects. This shows that this study is consistent with the results of the BOCR priority, namely the cost of inter-agency coordination.

**SUGGESTION**

From the results of this study, suggestions that can be given by researchers are as follows:

1. Researchers see that the role of ‘sovereign blue sukuk’ in financing can continue to be developed for productive real sectors such as port financing, ship financing, cold storage financing, Fishery Production Centers (SKPT/Sentra Produksi Perikanan), and seaweed production financing.

2. For the Ministry of Finance to conduct further studies on the structure of the ‘sovereign blue Sukuk that can be used to finance the maritime sector in Indonesia.

3. For the Ministry of Maritime Affairs and Fisheries to conduct further studies on diversification of marine sector financing with ‘sovereign blue Sukuk.’

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