

Pertamina and Saudi Aramco Joint Venture Project of Refinery Building in Indonesia as Indonesian Strategy for Energy Security

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Abstrak

Kebutuhan energi Indonesia untuk mendukung pembangunan industrinya telah meningkat secara signifikan. Konsekuensinya, Jakarta membutuhkan sumber energi baru dalam menghadapi pasokan diesel dan bensin yang semakin turun. Saudi Aramco menjadi mitra penting Pertamina dalam memenuhi kebutuhan energi Indonesia dengan mempertimbangkan kemampuan produksinya. Artikel ini akan meneliti proyek bersama antara Pertamina dan Saudi Aramco sebagai strategi Indonesia untuk mengatasi kebutuhan minyaknya yang terus berkembang dan memenuhi keamanan energinya. Penelitian yang menggunakan metode kualitatif ini juga akan menggunakan konsep International Joint Venture (IJV) untuk melihat peran pemerintah Indonesia dalam proses negosiasi dan implemmentasi proyek serta tantangan yang dihadapi.

Kata Kunci: Pertamina; Saudi Aramco; proyek bersama; keamanan energi; kebijakan luar negeri

Abstract

Indonesia's demand for energy to maintain its industrial development has grown significantly. As a consequence, Jakarta needs new energy sources to support the shortage of diesel and gasoline as the main resources. Saudi Aramco has been a vital partner to fulfil the energy supply considering its source and production capacity. This paper will scrutinise the joint venture project between Indonesian oil company, Pertamina and Saudi Arabian oil company, Saudi Aramco as an Indonesian strategy to overcome its growing need for oil and pursue its energy security. This qualitative research will employ the concept of the International Joint Venture (IJV) to examine the role of the government of Indonesia in the negotiation and Implementation process and the challenges in implementing the project.

Keywords: Pertamina; Saudi Aramco; Joint Venture; energy security; foreign policy

Introduction

Indonesia is the world's largest archipelagic country with more than 13,000 islands and one of the most spatially diverse nations on Earth in terms of resource endowments, population settlements, location of economic activity, ecology, and ethnicity (Hill, et. al., 2009). By 2016, the total population of Indonesia is approximately 260 million and which makes Indonesia the fourth largest population in the globe (Worldometers, n.d.). The country stretches along the equator for about 6,000 kilometres between the Indian and Pacific Oceans and connects the continents of Asia and Australia with a total area of about 7.9 million kilometres square (Resosudarmo, et. al., 2010). In terms of energy, Indonesia consumes roughly 191 million tons of oil per year and it is expected to be rising along with economic growth (World Bank, 2010; Resosudarmo, et. al., 2010). In order to meet its energy supply, the government of Indonesia has placed energy security as one of its policy priorities.

The main objectives of the Ministry of Energy and Mineral Resources of the Republic of Indonesia are to provide energy security and ensure energy independence as well as inclining energy's value-added that takes into account environmental issues and present the greatest benefit to the welfare of the people (Ministry of Energy and Mineral Resources of the Republic of Indonesia, 2010; Resosudarmo, 2010). It is mentioned in Article III of the newly established law on energy law, namely Law No. 30/2007 that the key strategy to administer the energy issues in the country is to support the country's national sustainable development and energy security. The law also cited the goals of managing energy, such as achieving energy independence management; guaranteeing the availability of energy in the country, both through domestic and foreign sources; guaranteeing optimal, integrated, and sustainable management of energy resources; efficient use of energy in all sectors; improving energy access for low-income people and those living in remote areas to improve their welfare in an equal and just way; developing autonomous energy industries and services and improving human professionalism; and protecting the environment (Resosudarmo, 2010).

In terms of energy resources, Indonesia was a net oil-exporting country until 2005 and the only member state of the Organization for Petroleum Exporting Countries

(OPEC) from Southeast Asia until 2008 (Resosudarmo, 2010). Indonesia benefited from high oil prices in the 1970s but then suffered from the world oil price drop in the 1980s. The prices went from USD 37 per barrel in 1981 to USD 14 per barrel in 1986 (Hill, et. al., 2009). To cope with the declining revenue and economic crises at that time, the Indonesian government decided to diversify its economy by developing non-oil sectors because if the country depended on the oil and gas sector for too much, the economic revenue was not sustainable, especially in the volatile nature of world markets. Indonesia adopted policies with the goal of liberalising trade, providing incentives for increasing exports, and conducting structural changes within the local economy (Resosudarmo & Kuncoro, 2006; Resosudarmo, et. al., 2010).

Pertamina, an Indonesian national state-owned oil company encounters a strategic challenge to achieve its strategic aspiration, particularly because of the feedstock supply is getting shorter. Domestic crude availability would decrease and only be able to cover less than 50% of Pertamina's total refining capacity and Pertamina would increasingly import crudes that are sourer, driving the need to release sulphur constraints to maintain competitiveness. Furthermore, Indonesia's demand for gasoline and diesel would continue to grow significantly by approximately 8% and 5% from the year 2012-2025 respectively. It is also projected that Indonesia and the Association of Southeast Asia Nations (ASEAN) would be short on gasoline and diesel. Therefore, Indonesia needs to import any sources from outside ASEAN member countries as well (Yulianto, 2014).

To deal with the challenge, Pertamina formed Refinery Development Master Plan (RDMP) to transform its refining business by upgrading five major refineries, such as in Dumai, Plaju, Cilacap, Balongan, and Balikpapan. In order to fund the refinery building project, Pertamina approaches its strategic partners of international oil companies, such as Sonangol, Sinopec, China National Petroleum Corporation (CNPC), JX Nippon Oil and Energy, Shell, Total, British Petroleum (BP), Saudi Aramco, Rosneft, Petroleum Authority of Thailand (PTT), and many others (Yulianto, 2014).

In December 2016, Saudi Aramco, a Saudi Arabian oil company and Pertamina signed the agreement of a joint venture project for building the largest refinery in Indonesia in Cilacap. The signing was expected to be in November 2016, but it was suspended because according to Dwi Soetjipto, Pertamina's President Director, both parties could not yet agree on four issues, such as crude oil supply, control management, asset valuation, and lifting. On the agreement, it is written that Saudi Aramco would get 70% of the supply of the crude supply. Pertamina itself would appoint three members of the board of directors, while Saudi Aramco would appoint two. And on lifting, the domestic refining would be carried out by Pertamina and export would be handled by both Saudi Aramco and Pertamina (Florentin, 2016). Therefore, Saudi Aramco and Pertamina signed the Head of Agreement (HoA) in November 2016 instead (Agustinus, 2016).

Soetjipto also asserted that the cooperation between Saudi Aramco and Pertamina is expected to boost refining capacity. At present, the Cilacap refinery's capacity is 348,000 barrels per day (bpd) which will be stepped up to 400,000 bpd. Furthermore, he said that USD 5 billion has been invested to develop the Cilacap refinery. Saudi Aramco would hold a 45% stake and Pertamina would hold a 55% stake (Florentin, 2016). Meanwhile, according to Rachmad Hardadi, the Director of Mega Project Refinery and Petrochemical of Pertamina, the development of the Cilacap refinery of Pertamina is prioritised for domestic use and will be exported, only if the domestic supply is sufficient. He predicted that at least about 60% of the oil demand in Java Island would be accommodated by the Cilacap refinery (Anonymous, 2017b). However, the Cilacap refinery of Saudi Aramco may be sold to Pertamina or exported (Pertamina, 2016).

This ambitious joint venture project is also beneficial for Saudi Arabia because according to the Chief Executive Officer (CEO) of Saudi Aramco, Amin Nasser, Indonesian economic growth is growing quite rapidly. Thus, Indonesia is one of Saudi Arabia's strategic partnerships in terms of oil because of the significant investment and competitive supply. Nasser also stated that Saudi Aramco would like to expand the competitiveness of other refineries in Indonesia in the future (Pertamina, 2016).

Moreover, according to the General Director of Oil and Gas at the Ministry of Energy and Mineral Resources of the Republic of Indonesia, Wiratmaja Puja, the Cilacap refinery is one of the most accessible refineries in Indonesia that can be reached without having to cross Malacca Straits. Cilacap refinery also has the most amount of oil production comparing the other refineries in Indonesia (Tempo.co, 2017).

From the above-mentioned background of this research, we would like to scrutinise the joint venture project between Indonesian oil company, Pertamina and Saudi Arabian oil company, Saudi Aramco as an Indonesian strategy to overcome its growing need for oil and pursue its energy security as written in the regulation of Indonesia from the Ministry of Energy and Mineral Resources. Thus, we would like to propose a research question to what extent does the joint venture project between Pertamina and Saudi Aramco contribute to the energy security strategy of Indonesia? In order to help answer the question, we would also add two sub-questions such as, what is the role of the government of Indonesia in the negotiation and implementation process? and what are the challenges in implementing the project?

This paper is a qualitative analysis because although there are some mathematical predictions, it is not the primary argumentation. In this paper, we would divide it into four parts. Firstly, the theoretical framework includes a set of concepts and theories to explain the problem. Secondly, we would have two sub-sections which would be titled “Energy Security Strategy of Indonesia and the Role of the Government” which would talk about how Indonesia would implement its energy security goals and at the same time would answer the first sub-question about the role of the government in the joint venture project between Pertamina and Saudi Aramco. The next sub-section would be titled “The Joint Venture Project: Pertamina and Saudi Aramco” which would discuss the project in a more detailed explanation as well as answer the second sub-question about the challenge of the project. Finally, we would draw a conclusion at the end of the paper.

Theoretical Framework

First of all, we would like to present the concept of energy security to better understand the challenges and roles of the government in terms of energy issues. In dealing with energy security, The Asia Pacific Energy Research Centre (APERC), stressed the four approaches of availability, accessibility, affordability, and acceptability. APERC defined energy security as “the ability of an economy to guarantee the availability of the supply of energy resources in a sustainable and timely manner with the energy price being at a level that will not adversely affect the economic performance of the economy”. Therefore, based on a such view, the security of energy supply is influenced by the physical availability, the geopolitical accessibility, the affordability of price and infrastructure cost, and the environmental availability of the energy sources (The Asia Pacific Energy Research Centre, 2007; Alsaad, 2014).

In order to accomplish the energy security goal, the state would want to employ its energy companies as one of the state bodies to implement the energy policy. To explain this intertwined relationship between state and energy companies, we would use agency theory which examines “the contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent” (Jensen & Meckling, 1976). In this sense, the principal is the state and the agent is the companies or whichever agents that deal with the state. In most agency relationships, the principal and the agent will incur positive monitoring and bonding costs (non-pecuniary as well as pecuniary), and in addition, there will be some divergence between the agent’s decision which would maximise the welfare of the principal (Jensen & Meckling, 1976).

One of the methods that are exercised by the agent to accomplish the principal’s mission in terms of energy security is doing a joint venture project between local enterprises to foreign enterprises to boost productivity. According to Yan & Gray (1994; Luo, 2002; Li, et. al., 2009), in international joint ventures (IJVs) projects, multinational enterprises (MNEs) tend to transfer knowledge with a variety of performance-enhancing resources and capabilities, such as sophisticated technology,

manufacturing skills, managerial and marketing expertise, global support, and many others. Yan & Gray (1994; Li, et. al., 2009) also added that “these resources and capabilities are typically most scarce, proprietary, and inimitable in developing economies”. Moreover, usually, local companies in third-world countries lack these assets and skills and forcing the governments to require MNEs interested in entering local markets to establish IJVs to embrace and absorb the specific advantages of MNEs (Beamish, 1993; Meyer, 2004; Li, et. al., 2009). As transfer knowledge possessed by MNEs can be used to create and augment the competitive capabilities of IJVs, such transfer is crucial for improving the productivity of IJVs.

Some studies have indicated that successful knowledge transfer from MNEs to IJVs leads to the high performance of the IJVs in developing countries (Hobday, 1995; Lyles & Salk, 1996; Lane, et. al., 2001; Li, et. al., 2009). For example, Lyles & Salk (1996; Li, et. al., 2009) showed that IJVs in Hungary that had more knowledge transfer from their foreign partners gained more organisational capabilities, managerial skills, and financial performance.

Although there are other contributing factors which could possibly influence the productivity of IJVs, the ownership structure is considered one of the most significant ones (Killing, 1983; Steensma & Lyles, 2000; Li, et. al., 2009) because there are two potential paths, namely control and collaboration by which IJVs ownership structure can exercise its influence on IJVs efficiency. Beamish & Banks (1987; Li, et. al., 2009) argued that “this perspective, with its emphasis on the importance of control and reduced risk of appropriation, such as transaction cost economics, suggests that a higher ownership level of MNEs in IJVs will generally lead to higher productivity”.

According to prior research, an incline in foreign ownership levels typically indicates that the foreign partner will have more members on the board of directors which would increase the MNEs’ ability to affect or control the strategic directions of the company (Mjoen & Tallman, 1997; Li, et. al., 2009) because the board of directors are responsible for making all the fundamental decisions for the joint venture, such as production and business plans and appointment of top management teams (Yan & Gray, 1994; Li, et. al., 2009). “Also, prior research suggests that a foreign partner with

a higher equity investment may have the higher bargaining power that it can use to negotiate for the appointment of functional managers from its side for critical assets” (Yan & Gray, 1994; Mjoen & Tallman, 1997; Li, et. al., 2009). Therefore, from a such theoretical framework, the joint venture project that is done by Pertamina and Saudi Aramco might be boosting productivity and increase benefits for Pertamina, particularly in terms of accomplishing energy security in Indonesia.

Energy Security Strategy of Indonesia and the Role of the Government

Indonesia is now seen as a new emerging political and economic power in Southeast Asia and the broader Asia-Pacific because of its successful democratic transition and strong economic growth. The country is also a key player in shaping a peaceful and prosperous future for Asia as it is a tight relationship with the United States of America (USA) in terms of economic partnership. Under the reign of President Joko Widodo, Indonesia is entering a revitalised era of governance reform and domestic policy where the equity of oil and gas provision is the main energy objective of Indonesia (Ministry of Energy and Mineral Resources of the Republic of Indonesia, 2017). Since President Widodo took office in October 2014, he has replaced the entire board of directors and appointed a new CEO in order to reform the country’s tainted oil sector and restore investor confidence (Wang, 2017).

Energy is known to be behind Indonesia’s success story as it has played an important role in supporting the country’s rise. Indonesia has been a leading energy supplier in the region with a diverse wealth of resources, such as natural gas, oil, geothermal potential, and coal (Gillispie, 2015). However, the sharp increase in domestic energy demand coupled with slowing production is a threat to Indonesia’s energy security for its inability to support sufficient domestic supply and export to the neighbouring states. According to the research that is conducted by Gillispie (2015), “as noted by the United States Energy Information Administration (EIA), the International Energy Agency (IEA), and other organisations, Indonesia’s total primary energy consumption grew by almost 50% between 2003 and 2013. Moreover, new demand growth in the coming decade will quickly dwarf these numbers...”. The

population growth and rapid industrial development in the country could also contribute to the escalating energy demand.

In 2007, the Indonesian government established an energy law called Law No. 30/2007. The law emphasised the establishment of “a legal basis for energy policy and management at the national level, providing general principles and basic targets for future development, and the country’s energy mix. It also laid the foundation for regulations on energy conservation and the development of renewable energy” (Stuart, 2015). The implementation of the energy law of the country can be seen as a strategy for Indonesia to achieve its energy security whereas in the law it is mentioned that Indonesia tries to achieve a just energy provision to the citizenry and obtain a safe and sustainable energy supply.

However, there are several challenges in implementing Indonesian energy goals, including subsidies, lack of infrastructure, the overall regulatory environment, the challenges with production-sharing contracts (PSCs), resource nationalism, corruption and lack of governance in the energy sector, and changes at Pertamina. Although there are quite many serious threats to Indonesian energy security, we would discuss more in the challenges with PSCs. The role of PSCs in Indonesia is “providing legal certainty over a long-term horizon that allows high-capital, high-risk investments to move forward” (Stuart, 2015). However, according to Stuart (2015), the Law of Oil and Gas 2001 is short of a clear timetable and process for handling renewals, extensions, or divestment of PSCs and this condition allows the disability of the investors to make long-term investments to promote new projects or perform any enhanced oil recovery projects. In order to solve the problem, in 2015 the Ministry of Energy and Mineral Resources of the Republic of Indonesia released a new regulation which provides revised guidance on expiring PSCs. “The regulation recognised that expiring PSCs should be managed by the state-owned oil company Pertamina, the existing PSC contractor if an extension is granted, or a joint operation between PSC contractor and Pertamina” (Stuart, 2015). This new regulation is expected to allow the government to receive a greater interest in oil and gas concessions to multiply its production shares.

Pertamina is the key actor in Indonesia's energy sector. It is Indonesia's state-owned oil and gas company which contributes to the upstream and downstream sectors of oil, gas, and lately geothermal energy (Maslanka, 2015). Despite Pertamina's bad reputation in the past for its mismanagement and massive corruption under the reign of President Soeharto, it is now getting more well-managed with its decentralised structure in managing the oil and gas industry in the country. Under the supervision of the Ministry of Energy and Mineral Resources of the Republic of Indonesia, other several ministries, and experts, Pertamina is expected to bring back Indonesia's glory in terms of oil and gas provision (Hartman & Nakano, 2017) although compared to other key players of energy in the region, such as Petronas, Pertamina still has a long way to go. In 2010 – 2014, the investment capability of Petronas reached USD 10-15 billion, while Pertamina only reached USD 2-7 billion (Anonymous, 2017b). Therefore, foreign investors are very important to sustain Indonesia's energy growth as it lacks capital and necessary technical ability (Maslanka, 2015).

Pertamina has engaged with other international oil companies to implement Indonesia's energy goals by executing joint venture projects to either revitalise its potential refineries or build new refineries. For example, in 2016 Pertamina dealt with Saudi Aramco to revitalise the refinery in Cilacap in order to boost its production up to 50,000 bpd. Another project is also done with Rosneft, a Russian oil company to build a new refinery in Tuban way before the concurred project with Saudi Aramco (Gumelar, 2017).

As President Widodo is eager to attract as many investors as possible to increase the productivity of the Indonesian oil and gas industry, he encourages Pertamina to engage with other international oil and gas companies to achieve Indonesia's energy goals. One of the key events is the visit of the Saudi Arabian King, King Salman bin Abdulaziz al-Saud in 2017 which was seen as the most highly publicised visit by a foreign leader under President Widodo's administration. The king's visit to Indonesia contributed to eleven signed Memorandum of Understandings (MoUs) between the two countries in terms of energy investment (Negara, 2017). It is also believed that the

successful Saudi Aramco mega project in the Cilacap refinery is influenced by the king's visit.

The government of Indonesia has highly supported the ambitious joint venture project between Pertamina and Saudi Aramco as it is one of the requirements to achieve its energy goals. Both Jakarta and Riyadh have a good relationship and close cooperation since they have a strong traditional and religious connection. Especially, according to Negara (2017), "Indonesia accounts for the largest share of pilgrims to Mecca and Medina".

The Joint Venture Project: Pertamina and Saudi Aramco

Saudi Aramco allocated approximately USD 5.5 billion to fund the ambitious joint venture project with Pertamina in the Cilacap refinery. It is also reported that they would conduct a front-end engineering design (FEED) to upgrade the old refinery (Wang, 2017). According to Bradley (2015), FEED plays important role in preparing projects in order to be successful. FEED is not only estimating the cost of the project, but also involving a thorough project scope, total cost of ownership, complete project budget, initial risk assessment, and implementation timeline. All of these FEED's function is employed to mitigate the risk and uncertainty during the detailed engineering and commissioning phases and can help create value lasting throughout the production lifecycle.

Moreover, Bradley (2015) added that by exercising FEED, it is expected that the lifecycle costs will be lower, project technical, timetable, and cost risks will be reduced, the time to achieve plant startup and turnover will be faster, environment, health, and safety (EHS) and compliance risks will be reduced, and resulted in greater success during implementation, startup, and beyond as the well-defined scope, budget, timetable, and identifies risks are established. Research also shows that when FEED studies are performed, there will be up to 30% of reduced cost and shorter execution times.

Furthermore, the technology offered by Saudi Aramco would allow the refinery in Cilacap to process more sour crudes in order to meet high-quality product

specifications, namely Euro IV and produce basic petrochemicals and lubricant base oils (Anonymous, 2015). Saudi Aramco has invested in the technology of Euro IV for its oil products. By establishing this technology, the internal combustion of engines would burn gasoline more efficiently. The Saudi Arabian oil company has conducted research about the new technology in Detroit, USA. It is also reported that Saudi Aramco has worked with European and American automakers to develop the knowledge (DiChristopher, 2018). Therefore, it can be assumed that Saudi Aramco's technology in developing more efficient oil products would be transferred to the joint venture project with Pertamina in order to boost the capacity of the Cilacap refinery. Especially, according to Hardadi, there are approximately 120 engineers who are sent to the giant oil producer's country to study the technology and knowledge (Wicaksono, 2016).

Not only it is beneficial in terms of transferring knowledge, but also in resource provision. It is mentioned in the agreement that Saudi Aramco would improve the Cilacap refinery to produce more oil for fuel which is desired by Indonesia. Saudi Aramco also "offered crude oil from itself without having to import oil from other states" (Irawan, 2016).

Based on such amount of money invested, knowledge and technology transfer, and resource provision according to the theory of IJVs proposed by Li, et. al. (2009), it would surely boost the productivity of the project. In this case, Saudi Aramco as a big oil MNC has money and the know-how to be invested in Pertamina, a state-owned oil company of one of the developing countries which have a bad reputation in the past related to corruption and mismanagement. However, the newly reformed government under President Widodo's power encourages Pertamina to establish IJVs in order to pursue the strategic energy goals of Indonesia that have been written in Law No. 30/2007. By exercising IJVs, Pertamina also gained mutual partnerships that can boost its productivity and shares.

However, is Saudi Arabia's investment mutually beneficial? There are also pieces of evidence that the implementation of the project is constrained. It is reported that grievances are coming from the employees at Pertamina. According to the

President of the Labour Union of Pertamina, Novriandi, the project would not be fruitful for Indonesia because there is no time limit on the contracts. As long as the refinery in Cilacap is operated and managed well, Saudi Aramco would still be involved (Anonymous, 2017a). Especially, on the agreement, it is stated that the ownership structure of the upgraded refinery would be 55% for Pertamina and the rest would be owned by Saudi Aramco (Saudi Aramco, 2016) which is considered as unfair by the labours. Although the joint venture project between Pertamina and Saudi Aramco is protested by the labours, according to the Vice Minister of Energy and Mineral resources of the Republic of Indonesia, Arcandra Tahar, the ownership structure of 55% Pertamina and 45% Saudi Aramco is still temporary because this is just an initial step to the whole project itself (Amelia, 2017). In terms of company members mapping, it is reported that Pertamina would appoint three members of the board of directors while Saudi Aramco only appoints two (Florentin, 2016).

Another problem is addressed by the House's Commission VI Deputy Chairman of the Republic of Indonesia, Inas Nasrullah Zubir that the agreement indicates that there would be oil and gas mafias involved. Moreover, it shows that Saudi Aramco is being too greedy towards Pertamina. Zubir also added that Saudi Aramco's investment value is too small for Indonesia as it would only improve the refinery capacity by as much as 50,000 bpd. "Besides that, the small investment must be converted into a divestment of 45% shares to Saudi Aramco", Zubir argued (Irawan, 2016).

In addition, Zubir said that Saudi Aramco only focuses the investment project on desulphurisation units, so that the refinery in Cilacap could process crude with high sulphur content above 5,000 particles per million (ppm). Zubir also asserted that "Despite this, Pertamina has just improved the capacity of Cilacap refinery from Hydro Cracker into Reduced Crude Conversion (RCC), which is the unit that produces High Octane Mogas Component (HOMC), a component to increase the Research Octane Number (RON) of gasoline" (Irawan, 2016).

Based on the IJVs theory of Li, et. al. (2009), the ownership structure is one of the most important aspects to determine the effectiveness of the project. In this case, Pertamina holds bigger ownership of the project than Saudi Aramco. In order to boost

productivity, Li, et. al. (2009) suggested that MNEs should hold more ownership of the project because by having more control over the project, the bigger companies can maximise their technology and knowledge transfer to the smaller company. However, with the current ownership structure, the project is not welcomed well by the employees in Pertamina because it seems to undermine the authority of Pertamina.

Conclusion

Based on a set of concepts and theories that have been mentioned above, it is confirmed that the joint venture project between Pertamina and Saudi Aramco would bring both advantages and disadvantages. First of all, Saudi Aramco has invested around USD 5.5 billion to build the refinery in Cilacap for the joint venture project. As one of the Indonesian energy missions is including foreign investment in oil and gas companies, Saudi Aramco's cash flow to revitalise the Cilacap refinery could lead to the productivity of the project according to IJVs theory. Not only funding, but also technology, knowledge, and resources transferred by Saudi Aramco to establish the project could be beneficial for the rebuilding process based on IJVs theory.

However, the obstacles in the ownership structure of the project could possibly disadvantage the project, especially Pertamina since it is not only protested by the labours but also could lead to unequal power relations between two giant companies that one of them may has lower bargaining power. The current ownership structure between Pertamina and Saudi Aramco is 45%-55% which according to Li, et. al. (2009) cannot lead to the productivity of the local company since it will contribute less in terms of knowledge and technology transfer. The IJVs theory also indicates that the less a party holds ownership, the less they could appoint a member company. It is shown that in the Pertamina-Saudi Aramco relationship, Pertamina could appoint three boards of directors while Saudi Aramco could only have two. This shows that Pertamina has a higher bargaining power over the others. This might be good for Pertamina's authority. However, the knowledge and technology from Saudi Aramco would not be well-developed under the control of Pertamina which may cause less productivity.

Indonesia fully supported the project between Pertamina and Saudi Aramco in order to revitalise its energy sector. Through Pertamina, Indonesia is exercising the agency theory where the state is using Pertamina as an agent to accomplish the state's energy goals. Not only through Pertamina, but the government also attempts to maintain a good relationship through the government-to-government relationship. For instance, the visit of the Saudi Arabian King marked the success of the project. However, challenges are present in the joint venture project. Besides the protest from the employees, it does not rule out the possibility that mafias could be involved in the project as well.

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