

ANALYZE THE POTENTIAL OF SABANG FREE PORT AS A TRANSSHIPMENT HUB OF THE BELT ROAD INITIATIVE

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Abstract

This study aims to analyze the potential of Sabang Free Port as a transshipment hub within the Belt and Road Initiative (BRI) and to identify the challenges and opportunities for its development. The research employs a qualitative approach with a descriptive-analytical method. Data is collected through literature review, policy document analysis, and interviews with stakeholders, including academics and maritime industry practitioners. The findings indicate that Sabang Port has a strategic geographical advantage along the Malacca Strait and deep waters that support large vessels. However, infrastructure limitations, low trade activity, and minimal investment pose significant obstacles to its development. The discussion highlights the need for infrastructure improvements, investment promotion, and policy reinforcement to attract more maritime industry players. The study concludes that while Sabang has the potential to become an international transshipment hub, a comprehensive strategy from both the government and private sector is required to enhance its competitiveness. The successful implementation of appropriate policies will determine Sabang's role in supporting global maritime connectivity through the BRI.

Keywords: Sabang Port; Belt and Road Initiative; transshipment

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INTRODUCTION

Ports play a crucial role in economic development, particularly in facilitating intermodal transportation (J. Chen et al., 2019; Efimova & Gapochka, 2020; Hartog, 2023; Majidi et al., 2021). Effective logistics can lower transportation costs and enhance competitiveness (Deng et al., 2023; Pamucar et al., 2023; Wang et al., 2021). Sabang, in Aceh Province, Indonesia, exemplifies this potential as a long-established free port, strategically located at the country's westernmost tip. Covering 153 km², it serves as Indonesia's zero-kilometer point and a vital gateway to the west. Bordered by the Malacca Strait and the Andaman Sea, Sabang's location was pivotal in its designation as a Free Trade Zone and Free Port under Law Number 37 of 2000, enhancing its role in trade and regional economic growth.

As a free trade zone, Sabang aims to accelerate regional development and improve the welfare of Aceh's residents while contributing to national maritime goals. The area provides various facilities to attract foreign investors, fostering trade, employment, technology transfer, and market expansion (Hassanain et al., 2022; Liu et al., 2022; Nabilah et al., 2018). With a deep natural port and its position on the international shipping lane, Sabang is poised to become a center for international maritime traffic, handling 80,000 to 90,000 ships annually in the Malacca Strait, not counting smaller vessels (www.bisnis.com).

The Government of Indonesia recognizes the Sabang Region as a crucial hub for the collection and distribution of goods, both domestically and internationally (Apricia, 2022; Indrajaya et al., 2022; Purwanto & Lutfiana, 2023; Ummah, 2022). This potential is

bolstered by the growth of technology-driven industries aimed at attracting foreign and domestic investment through simplified permit processes. Sabang comprises five main islands—Weh, Klah, Rubiah, Seulako, and Rondo—along with surrounding rock islands. Weh Island is the largest and serves as the primary settlement, while Rondo Island is about 15.6 km away. The city, divided into two subdistricts and 18 villages, had a population of approximately 33,215 as of 2015. Its tropical climate, characterized by over 2,000 mm of annual rainfall and an average temperature of 26°C, supports a diverse ecology, with 65% of the land designated as protected areas, primarily forests.

Sabang's varied topography offers stunning landscapes suitable for agro-tourism, agriculture, fisheries, and maritime activities, with tourism showing the most significant growth among these sectors. The local government's spatial plan allocates 35% of land for tourism, with 73% of designated tourism forest already utilized, leaving 65% available for further development (Jabalamel et al., 2022; Ma & Qirui, 2023; Zou et al., 2024). While agricultural and plantation areas are fully utilized, urban development has lagged, with less than 10% of potential urban space developed. This presents substantial opportunities for infrastructure and service expansion, along with nearly 90% of residential and reforestation zones available for future development. The establishment of the Sabang Free Trade Zone and Free Port as a National Strategic Area highlights its economic growth potential, aligning with Indonesian spatial planning laws and positioning Sabang for continued investment across various sectors.

Additionally, the economy of the city of Sabang in the period 2008 to 2012 as indicated by the value of the Gross Regional Domestic Product (GRDP) has progressed, this has shown improved performance marked by increasing GDP values each year, both at current prices and at constant prices in 2000. Based on the value and contribution of the GRDP of Sabang City on the basis of Constant Prices in 2000 according to the 2008 Business Field, Rp. 255,193.57 million increased to Rp. 267,967.01 million in 2012. The increase in the value of GRDP occurred in all sectors. Gross Regional Domestic Product per capita of Sabang City at Current Prices from 2008 to 2012 has increased. In 2008 the value of GRDP per capita was recorded at Rp. 14,282,240 and continued to increase until 2012 reaching Rp. 19,181,630. Whereas the GRDP per capita based on 2000 Constant Price since 2008 has increased from Rp.7,538,620 to Rp.8,410,500 in 2012.

Geopolitically, Sabang's strategic location makes it a vital hub, bordered by the Malacca Strait to the north and east, and the Andaman Sea to the south and west. This positioning enhances its role in economic growth within Aceh Province, establishing it as a key port for international trade in one of the world's busiest maritime zones. The Malacca Strait connects the Indian Ocean to the Pacific Ocean, and while Singapore has thrived as a global transshipment hub due to its strategic advantages, success also relies on providing world-class services to meet user needs (J. M. Chen et al., 2017; Claudya et al., 2023; Minhat et al., 2021; Villar & Hamilton, 2017). Singapore's impressive handling of 32.6 million TEUs of cargo in 2013 underscores the importance of both location and service quality in achieving prominence in international trade.

Given its advantageous position, Sabang has substantial potential to develop into a significant freeport in the region. The economic growth in the Asia-Pacific, fueled by China's expansion and the progress of India and Indonesia, is increasing trade volumes and the demand for transshipment ports. The Indonesian government should capitalize on this opportunity to enhance Sabang's role. China's involvement through the Belt and Road

Initiative (BRI), particularly its Maritime Silk Road Initiative, aligns with Indonesia's goal of becoming a maritime fulcrum. By collaborating on Sabang's development, both nations can enhance maritime trade routes, boosting regional trade and economic growth.

The urgency of this research stems from the pivotal role that Sabang City plays as a strategic economic hub in Aceh Province. With its well-sheltered deepwater port facilitating significant maritime activities, there is a pressing need to explore how to optimize its infrastructure for better service delivery and economic growth. Despite the existing capabilities of the CT-1 and CT-3 jetties to accommodate large vessels, there remains a gap in understanding how to fully leverage this potential in a way that aligns with the socio-economic dynamics of the local population. Previous studies have primarily focused on infrastructure development without adequately addressing the interplay between local cultural diversity, economic activities, and marine resource sustainability. This research aims to fill that gap by investigating how Sabang's unique socio-cultural landscape can be integrated into a cohesive economic strategy that promotes sustainable development.

The benefits of this research are manifold, not only for the local community but also for broader regional development in Aceh. By focusing on the multicultural and dynamic nature of Sabang's residents, the study will highlight the importance of inclusive economic policies that consider diverse perspectives and needs. Additionally, understanding the potential for small and medium-sized enterprises (SMEs) and the rich natural resources available can lead to innovative strategies for job creation and poverty alleviation. The findings will inform local government initiatives, enhance investment attractiveness, and ultimately contribute to the sustainable management of Sabang's marine and agricultural resources. This comprehensive approach can serve as a model for similar regions, showcasing how cultural and economic integration can drive development in a holistic manner.

METHOD

This study employs a qualitative approach with a descriptive-analytical method to analyze the potential of Sabang Free Port as a transshipment hub within the Belt and Road Initiative (BRI). Data is collected through literature studies and document analysis, including relevant regulations, maritime industry reports, and government policies regarding free trade zones and international ports. Additionally, interviews are conducted to gain insights from key stakeholders, including academics, maritime practitioners, and representatives from the Sabang Free Trade and Port Authority (BPKS). Data analysis is carried out qualitatively by interpreting policies, geographical conditions, and port infrastructure to assess Sabang's competitiveness as a transshipment center. The findings of this study are expected to provide insights into the challenges and opportunities in developing Sabang Port as part of Indonesia's maritime economic strategy within the BRI framework.

RESULTS AND DISCUSSION

1. Potency and Policy of Sabang Free Port Result

This chapter explores Sabang's potential as a transshipment hub within the Maritime Silk Road Initiative. Data was gathered through document-based research, internet sources, and interviews. The analysis focuses on Sabang's capacity to become an international transshipment hub, tracing its history, current facts, and phenomena.

Sea transportation accounts for nearly 90% of global trade, with 40% passing through Indonesian waters, particularly the Malacca Strait. Given its location on this trade route, Sabang has the opportunity to facilitate a significant portion of European-Asian trade. Ports are crucial in this context, as the value of world trade continues to rise. Today's competition among ports emphasizes not just quantity but also quality, with millions of barrels of oil transported by sea (Sabang Free Trade Zone and Free Port Area Master Plan 2007-2021).

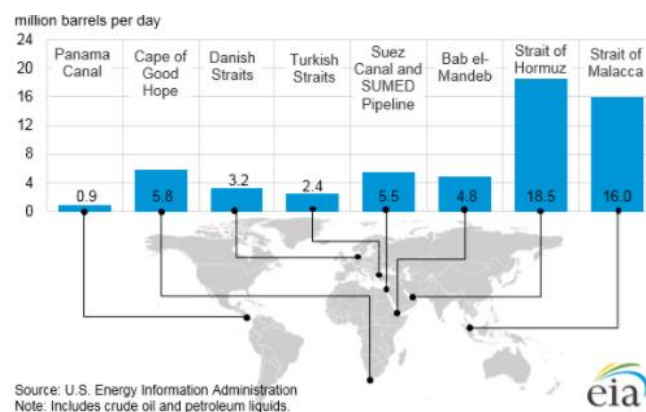


Figure 1. Petroleum transit volumes via select maritime routes (2016)

Source: <https://mansfield.energy/wp-content/uploads/7-27-2017-9-28-01-AM.png>

Transportation of sea trade in the world experiences an increasing trend from 2010 to 2014. Indonesia as a country with a population of 270 million contributes to the world market, both as a market and a producer. On the export side, liner trade is mostly dominated by countries in East Asia. Liner exports are also highly concentrated, with the top ten exporting nations accounting for nearly two-thirds of the total liner export value, and Greater China (including mainland China, Hong Kong, and Taiwan) account for 28 percent of the value of liner exports and 30 percent of the global volume of containerized exports.

Table 1. Top 20 exporters of containerized cargo 2010, 2013 and 2014

Rank	Exporter	2014 (TEUs Million)	2013 (TEUs Million)	2010 (TEUs Million)
1	China	36.0	34.2	31.3
2	United States	11.9	11.5	11.2
3	South Korea	5.93	5.79	5.20
4	Japan	5.28	5.20	5.74
5	Indonesia	4.00	3.59	3.00
6	Thailand	3.92	3.78	3.40
7	Germany	3.32	3.24	3.00
8	Taiwan, China	3.25	3.24	3.41
9	India	3.07	2.95	1.90

10	Vietnam	2.94	2.63	1.61
11	Brazil	2.88	2.74	2.30
12	Malaysia	2.60	2.50	2.50
13	Saudi Arabia	2.24	2.20	1.60
14	Italy	1.83	1.77	1.60
15	Turkey	1.82	1.66	1.60

Note: TEUs are fully loaded.

Source: IHS Global Insight, World Trade Service

Table 2. Top 20 importers of containerized cargo 2010, 2013 and 2014

Rank	Importer	2014 (TEUs Millions)	2013 (TEUs Millions)	2010 (TEUs Millions)
1	United States	19.6	18.4	17.6
2	China	14.7	14.4	12.0
3	Japan	6.55	6.34	6.10
4	South Korea	5.09	4.80	4.50
5	Indonesia	3.17	3.13	2.50
6	Germany	3.00	2.78	2.80
7	United Kingdom	2.64	2.42	2.50
8	Taiwan, China	2.53	2.42	2.50
9	Australia	2.52	2.45	1.80
10	Vietnam	2.47	2.19	2.00
11	India	2.39	2.21	2.00
12	Thailand	2.35	2.32	2.00
13	Malaysia	2.33	2.08	2.10
14	Brazil	2.32	2.32	1.90
15	United Arab Emirates	2.30	2.06	2.10

Note: TEUs are fully loaded.

Source: IHS Global Insight, World Trade Service

The Malacca Strait, stretching 800 km from Sabang to Singapore, has been a major shipping hub since the 14th century. Although not very wide, it is deep enough for large vessels, with a minimum of 11 million barrels of oil passing through daily from the Middle East to East Asia. Annually, about 90,000 ships, primarily container vessels, navigate the strait, which handles one-third of global trade goods and half of the world's oil trade (detik.com).

According to the U.S. Energy Information Administration (2017), nearly one-third of the 61% of global petroleum and liquid production transported by maritime routes in 2015 transited the Malacca Strait, making it the second-largest oil trade chokepoint after the Strait of Hormuz. In 2016, petroleum traffic through the strait reached 16 million barrels per day, marking a fourth consecutive annual increase. The Malacca Strait connects the Indian Ocean to the Pacific Ocean, serving as the shortest maritime route between Persian Gulf suppliers and major Asian markets.

The Port Strategy in Competitive Advantage (UNCTAD, 1993) identifies several factors that enhance a port's competitiveness, particularly emphasizing the importance of geographical location. The Malacca Strait, a vital maritime route for global trade, connects numerous countries and ports, making Sabang City—located on Weh Island and serving as the gateway to the strait—well-positioned for free port development.

Key indicators supporting Sabang's potential as a free port include its sea depth. For an international standard port, sufficient depth is essential for facilitating global trade. As cargo ship sizes continue to increase for operational efficiency, ports require basin depths of over 15 meters. Sabang's natural harbor boasts a depth of 21 meters, surpassing

the depths of neighboring countries like Singapore, Malaysia, and Thailand. This significant depth advantage positions Sabang as an ideal location for large cargo ships, specifically designed for transshipment operations.

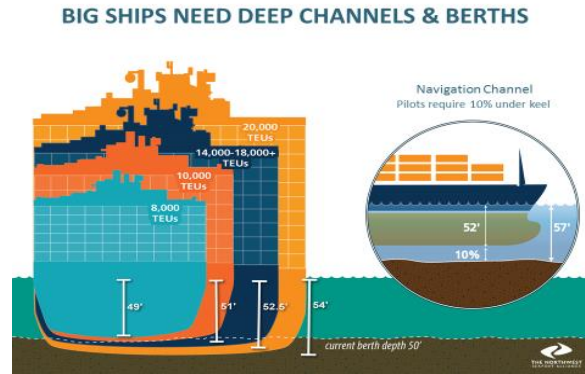


Figure 2. Big ships need deep channels and berths

Source: https://www.nwseaportalliance.com/sites/default/files/styles/large/public/tacomaharbordeepening_gfx.png?itok=zH8YNNRY

The development of a growing generation of cargo ships requires shipping lines and ports that have a depth of more than 20 meters. Other international sea ports such as: Singapore and Tanjung Pelepas in Malaysia only have a sea depth of about 15 meters. Sabang will not compete with surrounding ports because it will lose, they have taken all the market opportunities for ships with 6000 TEUs. However, Sabang must take advantage of the market opportunity for ships with 10,000 TEUs that require deeper water depths. The potential is in Sabang free port which has a depth of up to 21 meters. This advantage is an opportunity for Sabang free port to become a port for future generations of ships that have a draft ship of more than 16 meters that is not owned by Singapore and Malaysia.



Figure 3. The level of sea depth affects the cargo volume of a cargo ship

Source: <http://www.supplychainshaman.com/wp-content/uploads/2015/02/ships.png>

To establish Sabang City as an international transshipment hub, a robust telecommunications infrastructure is essential. Currently, Sabang benefits from modern telecommunications networks based entirely on fiber optic technology, part of Indonesia's initiative known as Modern Broadband City. This upgrade provides a solid foundation for digital services, accessible via high-speed 3G and 4G networks. PT Telkom Indonesia, a state-owned enterprise, is also working to introduce 5G services in Sabang. In line with the digital era, Sabang Customs has launched online services for customs and excise users in the Sabang Free Zone, including an online licensing platform called iON-Sabang. This platform facilitates applications for storage, loading, and unloading permits, complementing existing online services like the Yachter Service and Billing System. Users can access these services via the Sabang Customs website at www.bcsabang.beacukai.go.id/perizinan.

This online system is designed to simplify processes for service users, eliminating the need to visit the Customs office in person. However, users must register to use the iON-Sabang application, which helps Sabang Customs maintain control over the service. For assistance, users can contact the Sabang Customs Information hotline at 0811-6801-225 or visit the office at Jalan Diponegoro No. 19, Sabang City. The goal is to enhance convenience for consumers by enabling access from their own locations.

In addition, Sabang free port is already available loading and unloading services. Goods loading and unloading services provided by Sabang free port include public dock services, special docks, field services, and warehouse services. The entire loading or unloading service of the goods or pier aims to ensure that the loading and unloading activities of goods and the flow of goods at the pier can run well. The loading and unloading service activities take place starting from unloading goods from the ship, stacking of goods at the location of the stacking or warehouse, until the time of delivery of the goods to the owner of the goods.

Ship services have been provided by the Sabang free port starting when a cargo ship enter to the port area. The cargo ship must dock outside the harbor when the harbormaster checks the completeness of the documents. The aim is to determine whether the cargo ship has fulfilled the operational requirements and has fulfilled the shipping safety requirements. Besides customs, immigration officers, as well as health and quarantine services do their work here. The ship's services can be categorized as follows:

a) Docked services

This service is provided for ships so that they can dock safely waiting for the following services such as mooring, loading and unloading or waiting for other services (docking, document handling, etc.). The aim is to avoid the possibility of a collision with another ship that is anchored and ensure the depth of the water so that the ship does not run aground and does not wait for the shipping lane.

b) Guiding services

This service serves to guide the ship when entering the cruise line to the dock or harbor pond to dock. The aim is to facilitate the captain in regulating the movement of the ship and maintain the safety of the ship, passengers and their cargo.

c) Towing Services

This service is for pushing, escorting, guarding, pulling or holding ships moving, to mooring to or for releasing and mooring piers, breasting dolphins, buoys and other vessels using tugboat.

d) d) Mooring services

This service serves to tie and release the rope of ships that move to lean or depart from or one pier, bridge, buoy, dolphin and others by using or not using a mooring boat. The services also provided for ships moored at mooring and are technically in a safe condition to be able to load and unload goods smoothly and safely.

The Government of Indonesia is planning to build a new international airport to replace the existing Maimun Saleh Airport. The Sabang City Government has allocated approximately 40 hectares of land for this development. The Abu Dhabi Investment Authority (ADIA) is interested in investing in the airport's infrastructure. Salem Al Darmaki, ADIA's Deputy Director of Property and Infrastructure Investment, announced that a team will soon visit Sabang to advance the investment plan. ADIA also intends to establish a special department for infrastructure development in Aceh Province, highlighting the region's economic potential, particularly in tourism and energy.

Additionally, Sabang Free Port offers various services to support port operations, including water and electricity supply, fuel services, and equipment rentals. Available equipment includes Komatsu reach stackers, forklifts, truck trailers, and a 60-ton mobile crane.

The Indonesian government's goal of establishing Sabang Free Port as an international transshipment hub involves funding port infrastructure through the state budget. The port is managed by the Sabang Free Port Management Board (BPKS), which receives annual funding from the government and has a relatively strong budget. However, BPKS's dependence on state funds is inefficient; it should aim to enhance revenue generation from the free trade area and port. To support user needs, Sabang Free Port has a public dock, which acts as a commercial pier managed by BPKS for passenger services, cargo loading, and unloading. The port features three docks: the old pier, Pier CT 1, and Pier CT 3, with a total capacity of 100,000 DWT, designed to accommodate all port service users.

BPKS also offers warehouse facilities for storing goods unloaded from ships, protecting them from damage or loss before they are exported or delivered to their owners. Currently, BPKS manages two warehouses with a combined capacity of 2,304 m² and open fields capable of holding up to 175,500 m².

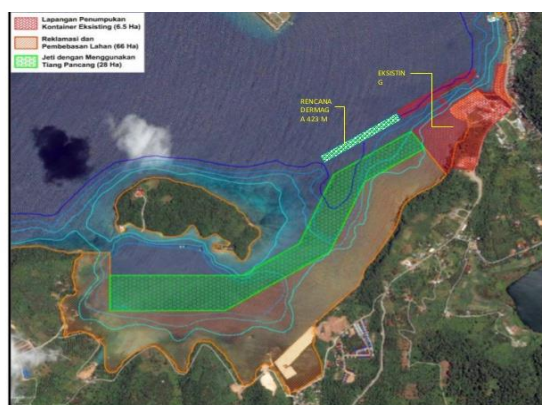


Figure 4. Map of reclamation location for the construction of the pier in Sabang free port

Source:<https://image.slidesharecdn.com/sabangharbourpresentationengfh-150823073210-lva1-app6892/95/sabang-harbour-presentationengfh-13-638.jpg?cb=1440315187>

Regarding consumer satisfaction, the world community is actually not familiar with the existence of Sabang free port. Thus, there are still very few cargo ships that choose Sabang free port as a transshipment hub. The Indonesian government must be more vigorous in promoting the Sabang free port as a transshipment hub in the Malacca Strait.

Along with the increasing number of Sabang port service users, the Sabang Zone Business Entity (BPKS) continues to strive to provide various facilities needed by Sabang port service users. One of them is related to meeting the needs of clean water and fuel oil. With a reservoir capacity of up to 1,000 tons of clean water and fuel tanks of up to 2,000 tons, BPKS has opened a 24-hours service for the entire needs of cargo ships, passenger ships, cruise ships, patrol boats, fishermen and for other needs. Additionally, port service users will be charged a tariff for all port services such as ship services, goods services, tool services, and other port support services. This rate applies to Public Ports, Ports for Self-Purpose, Special Ports and Ports of the Sabang Zone.



Figure 5. Map of the Sabang Free Trade Zone and Free Port location

Source: <https://twitter.com/investinaceh/status/944557849291587585>

Sabang Free Port holds significant potential due to its strategic location at the crossing of the Malacca Strait, making it a crucial area for global economic, political, and security interests. Control of this region can influence the world's economic and political landscape, presenting opportunities for involvement in Sabang's operations, particularly for initiatives like China's Maritime Silk Road.

Razuardi Ibrahim, head of BPKS, highlighted three essential elements for port success. First, infrastructure that meets international standards has been achieved at Sabang Free Port, which is equipped with facilities for transshipment activities, welcoming major international vessels for loading and unloading in line with global protocols.

Second, professional management is in place through BPKS, which oversees all port activities and is tasked with developing Sabang into an international transshipment hub. Third, the presence of capable entrepreneurs is crucial, but this remains a challenge

for BPKS. Razuardi noted that without entrepreneurs and investors, Sabang will struggle to compete with other international ports. Despite having the necessary facilities, Sabang Free Port has mainly attracted cruise ships for tourism, while few cargo vessels choose to transit through it.

2. BRI for the balance of the world economy

China, as a global power, should be viewed in a balanced and rational manner. The Belt and Road Initiative (BRI) is seen as a grand strategy aimed at narrowing the economic divide between the East and West while also rebalancing U.S. economic and political influence in Asia. Economically, the BRI presents potential benefits for the Indonesian government. Enny Sri Hartati, Executive Director of the Institute for Development of Economics and Finance (Indef), stated that Indonesia is justified in supporting the BRI, as the project could accelerate economic growth with appropriate governmental responses. However, if BRI cooperation does not lead to increased productivity and investment, Indonesia risks becoming merely a supplier of raw materials to global producers. Minister of Industry Airlangga Hartarto also emphasized that the BRI is essential for attracting investment to the country. Ultimately, the initiative's impact on the Indonesian economy will heavily depend on future projects.

The Belt and Road Initiative (BRI) aligns with national interests within the vision of the World Maritime Axis, particularly concerning three of its five pillars: maritime connectivity, maritime economics, and maritime culture. The enhancement of maritime infrastructure aims to boost connectivity across maritime routes throughout the archipelago, positively impacting Indonesia's maritime economic activities.



Figure 6. Map of Maritime Silk Road Infrastructure Development Plan

Source: <https://www.linkedin.com/company/onebeltoneroad>

This pathway aims to accelerate development while equalizing outcomes, ultimately boosting Indonesia's economic growth. The National Economic and Industrial Committee (KEIN) believes the Belt and Road Initiative (BRI) presents a significant opportunity for Indonesia to improve its trade balance with China. During the BRI conference in Beijing on April 26, 2019, Indonesia signed 23 collaborative projects, focusing on North Sumatra, North Kalimantan, North Sulawesi, Maluku, and Bali. These projects include developing industrial estates, waste-to-energy power plants in North Sulawesi, and a Technology Park on Turtle Island in Bali.

Vice President Jusuf Kalla emphasized that BRI projects should align with Indonesia's national development strategy, prioritizing private sector involvement without

increasing government debt. To protect national interests, the government has set specific requirements for Chinese investors, such as hiring Indonesian workers, producing value-added goods, and transferring technology. The government prefers a business-to-business (B2B) investment model over a government-to-government (G2G) approach, promoting environmentally friendly practices and fostering collaboration among private businesses, State-Owned Enterprises (SOEs), and universities in the BRI.

3. Infrastructure Development in Indonesia

Indonesia can reap significant benefits from the grand plan for infrastructure development within the Maritime Silk Road (MSR) initiatives. This development is crucial for the Indonesian economy in three main aspects: first, enhancing transportation and logistics infrastructure will improve Indonesia's competitiveness, as an efficient logistics sector is closely linked to trade performance and can reduce export and import costs. Second, investments in energy infrastructure and water management, vital for irrigation and public consumption, support sustainable economic growth. Third, improving information and communication technology (ICT) infrastructure will strengthen economic activities and connectivity. Successful examples can be seen in Singapore and Hong Kong, where investments in the logistics sector have driven trade growth. Additionally, China's economy, heavily reliant on exports, has required significant developments in its logistics services network to accommodate new flows of raw materials, components, and finished products.



Figure 7. The challenges of developing infrastructure projects in Indonesia

Source: <https://rezaprama.com/tantangan-isu-infrastruktur-dan-lingkungan-hidup-di-indonesia-masa-depan/>

Secondly, infrastructure development is essential to address the current supply constraint issues in Indonesia. The latest assessment of Indonesia's competitiveness by the World Economic Forum revealed that infrastructure development has not kept pace with the economy's robust macroeconomic expansion. While Indonesia ranked 34th out of 144 countries in the macroeconomic environment category, its infrastructure performance was ranked at 56th. If these supply constraints remain unaddressed, they could lead to an overheated economy, resulting in high inflation and a significant current account deficit. Thirdly, infrastructural challenges across various sectors hinder foreign direct investment (FDI) and impede industrial growth. Inadequate infrastructure threatens Indonesia's long-term economic growth, making increased investment in infrastructure crucial. However, the value of infrastructure investment in Indonesia has consistently lagged behind that of China and India. Although the share of investment in infrastructure

has steadily increased in both Indonesia and India, Indonesia has struggled to match India's spending levels.

There are two main obstacles to investing in Indonesia's infrastructure. First, there is a significant lack of financial resources. This issue could technically be addressed by increasing private sector participation; however, Indonesia has yet to establish a conducive investment climate that attracts both foreign and domestic investors. The Doing Business Report 2015 ranked Indonesia 114th in terms of business environment, which is considerably lower than the benchmark rank of 92 for the East Asia and Pacific region, as well as the rankings of both China and the Philippines.

Secondly, infrastructure spending in Indonesia has historically constituted a relatively small portion of GDP. By 2013, infrastructure spending was around 5% of GDP, which is the minimum required to support an economic growth rate of over 7%. A significant portion of funding for infrastructure comes from the national budget, yet private sector participation remains low. Moreover, issues such as mismanagement, corruption, and incompetence have exacerbated the lack of financial resources for infrastructure maintenance, leading to inadequate infrastructure overall.



Figure 8. Corruption case is one of the challenges in developing infrastructure projects in Indonesia

Source: <https://rezaprama.com/tantangan-isu-infrastruktur-dan-lingkungan-hidup-di-indonesia-masa-depan/>

Indonesia's infrastructure spending is significantly lower than that of its peers. In 2016, it accounted for just 2.2 percent of GDP, compared to the 5.1 percent average for emerging market Asia. Access to essential infrastructure, particularly in electricity, road transportation, and healthcare, remains critically insufficient.

Infrastructure development in Indonesia is highly decentralized and faces limited implementation capacity and efficiency. Of the government's US\$480 billion investment plan for 2015–2019, only about 30 percent is executed at the central level. Since 2017, 25 percent of central government transfers to regions have been allocated for infrastructure. Non-central channels—such as state-owned enterprises and public-private partnerships—carry more risk and show less capacity for efficient project development and implementation. According to the IMF in 2015, Indonesia's public investment efficiency is relatively low, with a 56 percent efficiency gap compared to the most efficient countries, exceeding the average gaps for emerging markets and developing regions.

Any increase in infrastructure spending must be accompanied by improved public investment management, as expanding public investment often leads to reduced efficiency and rising integrity issues. The government could implement reforms such as

streamlining the annual budget process, creating a multiyear pipeline of high-quality projects, promoting multiyear contracting, enhancing information flow to subnational governments, and simplifying reporting requirements. Furthermore, five central agencies—namely the Ministry of Finance, the Ministry of Home Affairs, BAPPENAS, the Committee for Accelerated Infrastructure Delivery, and the Evaluation and Monitoring Team—need to coordinate effectively and establish a unified monitoring system for public investments, which could later integrate public-private partnerships and state-owned enterprise projects.

Infrastructure has an important function, namely as an indicator of the level of competitiveness (World Economic Forum 2018). Infrastructure can increase economic growth (Calderon & Serven, 2004). Infrastructure can increase economic equality (Chotia & Rao, 2017) and can increase added value for various other types of businesses (Bappenas, 2017). With infrastructure, it can increase economic growth for the construction sector by 33.3%, the manufacturing sector by 19.7% and the distribution sector by 14.4%. In addition, the existing electricity infrastructure can increase the electrification value by 97.3% throughout Indonesia so that many places in Indonesia have received electricity. So that's the function and impact of infrastructure. Data from the Global Competitiveness Index 2017-2018 from the World Economic Forum, overall the rating has improved from 2012. However, compared to neighboring countries, Indonesia's infrastructure is still below Singapore, Malaysia and Thailand. For infrastructure, Indonesia ranks 52nd, Malaysia ranks 22nd, and Singapore ranks 2. As a whole, Indonesia ranks 36th out of a total of 137 countries. Therefore, there is still a huge opportunity to be able to improve infrastructure in Indonesia so that Indonesia's competitiveness ranking will also improve overall.

There are several challenges that remain obstacles in the development of infrastructure in Indonesia. The first challenge, which can be felt is the rise of corruption cases in the infrastructure sector. This is supported by data from the 2017 Executive Opinion Survey in the World Economic Forum which states that the main problematic factor in doing business in Indonesia is corruption. Therefore it is the duty of all parties, both the government and the community, to be able to oversee and oversee the infrastructure that will be built so as to reduce or eliminate corruption in this sector. The second challenge is the funding challenge. As it is known that not all infrastructure funding can be funded by the government. So Public Private Partnership (KPS / PPP) is really needed. Even so, the current PPP/PPP funding scheme is limited to construction and operation / maintenance costs, making it less attractive to investors. Even though there are still many PPP / PPP funding schemes that can cover all processes including the initiation and design process. In addition, the existing KPS / PPP has not been transparent in determining how this project uses the KPS/PPP scheme or not.

For many parties the PPPs / PPPs are also still considered as a financing tool that is considered too complicated and complex because it requires comprehensive coordination in its application. Therefore, this scheme still needs to be developed well in the process of coordination, regulation and transparency to increase investor interest so that the infrastructure that has been needed can be realized as soon as possible. Theoretically there are many PPP models depending on project risk, public sector and private sector participation in the project. The third challenge is related to the quality of existing infrastructure. If we look at the 2017-2018 WEF GCI data, the quality of

Indonesia's infrastructure. Compared to other countries, it is still lower than Singapore, Malaysia, and Thailand in the rank of 68. So, the quality of infrastructure is a challenge that needs to be improved in the future by improving the quality of human resources and good governance. So that the infrastructure owned can last a long time with premium quality for the next 50-100 years.

Indonesia faces significant environmental challenges, prominently greenhouse gas (GHG) emissions. In November 2016, Indonesia committed to its first Nationally Determined Contribution (NDC), aiming to reduce GHG emissions by 29% unconditionally and up to 41% conditionally by 2030, compared to a business-as-usual (BAU) scenario. This translates to a national target of reducing emissions by 2.869 million metric tons of CO₂e, with 2.037 million metric tons for the unconditional target and 1.693 million metric tons for the conditional target. Indonesia's ambitious goals position it among countries aiming for substantial emissions reductions by 2030, necessitating concerted efforts from both the government and citizens. Recommended strategies include managing land use through reforestation and promoting renewable energy. The second environmental challenge involves overlapping regulations, which create disharmony and complications in governance. A 2018 review by the Corruption Eradication Commission (KPK) identified issues related to authority, rights, obligations, and the enforcement of environmental protection laws. This regulatory overlap hinders the pursuit of justice, sustainability, and effective governance in environmental matters, leading to legal uncertainties, corruption, and conflicts over natural resource management. The resulting socio-economic inequality exacerbates the unequal distribution of environmental resources, creating an unhealthy investment climate. Consequently, the state experiences revenue losses, while environmental degradation continues unabated.

Third is about sustainable infrastructure. In my opinion this is a solution as well as a conclusion from the development of infrastructure that often conflicts with the environment. In the future, every infrastructure development should have followed the principle of sustainability that is able to integrate the economic, environmental and social together. This concept means building infrastructure without having a detrimental impact on the environment while having a positive social impact. The infrastructure built can produce a low carbon footprint, does not damage the surrounding ecosystem and can even provide employment for the surrounding community. Of course infrastructure like this will not be possible without the support of all parties, especially investors if they do not have the same goal. Examples are renewable energy, green building, wind power generation and others. In conclusion, the challenge ahead is how to make infrastructure built not only increase economic value but can also improve environmental sustainability by diverting the direction of investment into sustainable and quality infrastructure supported by good governance and regulations and supported by government commitment and the community in protecting the environment so as to create a sustainable infrastructure for all communities.

4. Foreign Direct Investment in Indonesia

Various economic or business law literatures, the term investment has been interpreted as investments made directly by local investors called domestic investments and foreign direct investments called foreign investments, and investments made indirectly by foreign parties (foreign indirect investment, FII). For FII, it is known as

investment in the form of portfolio, which is the purchase of securities through the Capital Market Institution. Jurgen Basedow expressed his opinion about the above, as quoted by An An Chandrawulan (An, 2022). According to him, national and international laws governing FDI are very dynamic. This condition has been influenced by the rapid development of foreign investment, corporate merger strategies and global mergers of multinational companies (MNCs).

In this case, the author will discuss about investments or investments made directly, both those made by domestic investors and foreign investors through FDI. The Investment Law does not distinguish between local and foreign investors. For this reason, we will first describe the meaning of investment or investment, which is adapted from several literatures. Bryan A. Garner, has given the definition of investment, "An expenditure to acquire property or assets to produce revenue; a capital outlay."

M. Sornarajah also gave a definition of foreign investment as follows, "Foreign investment involves the transfer of tangible or intangible assets from one country to another for the purpose of their use in that country to generate wealth under the total or partial control of the owner of the assets."

In general, Ida Bagus Rahmadi Supanca defines investment as an activity carried out by natural persons and legal entities, in an effort to increase and or maintain its capital value, whether in the form of cash money, equipment, immovable assets, intellectual property rights and expertise.

From the understanding described above, the development of investment or foreign investment in Indonesia will be described, starting with the first Ali Sastroamdjoko Cabinet (1952-1953) by preparing regulations to attract foreign investment in Indonesia. However, this regulation had not been submitted to parliament because of the fall of the regime at that time. Then in the era of the Ali Sastroamdjoko Cabinet, in 1953 the proposed Foreign Investment Law Plan contained several conditions including, foreign investment had been prohibited to hamper the economy of the Indonesian people. The Foreign Investment Law Plan also has not obtained parliamentary approval.

In 1958 Law No. 78 of 1958 concerning Foreign Investment was issued. Law Number 78 of 1958 concerning Foreign Investment was issued with consideration of:

- 1) Foreign capital is needed to accelerate Indonesia's economic development, and increase national production in order to enhance the level of people's livelihoods;
- 2) Capital that has been obtained in Indonesia at that time was not sufficient so it was considered beneficial to attract foreign capital to be invested in Indonesia;
- 3) Clear provisions must be made to meet the need for capital for national development, in addition to avoiding doubt from foreign capital.

C.F.G Sunarjati Hartono has stated that Law Number 78 Year 1958 concerning Foreign Investment imposes even more restrictive restrictions than the planned Foreign Investment Law which was rejected by parliament in 1953. Restrictions in Article 3 of Law Number 78 Year 1958 concerning Foreign Investment are aimed at companies that are normally carried out by Indonesian citizens closed to foreign capital and foreign capital is allowed to work in the production field with restrictions on the type of company. In addition to restrictions in the field of production and types of companies, Law Number 78 of 1958 concerning Foreign Investment regulates the allowances granted for foreign investment (now called investment facilities), namely regarding the following matters:

- 1) Double taxation. Prevention of double taxation has been attempted by international treaties as provided for in Article 11.
- 2) Company tax. Regulations that intend to provide corporate tax relief.

Law Number 78 of 1958 concerning Foreign Investment has been revoked with the issuance of Law Number 16 of 1965. The basis for the consideration of the issuance of Law Number 16 of 1965 to achieve an independent economy in accordance with the principles of economic sovereignty to develop the national economy clean of the remnants of imperialism and feudalism. To foreign capital companies established under Law Number 1 of 1967, tax concessions, as provided in Article 15, are granted in the form of exemptions and relief. In addition to the government opening business fields for foreign investment that are regulated in Act Number 1 of 1967, the government also regulates domestic investment, as stipulated in Act Number 6 of 1968 concerning Domestic Investment.

Law Number 6 of 1968 concerning Domestic Investment, in Article 1 paragraph (1) there is a definition, "Domestic Capital is Part of the wealth of the Indonesian people, including rights and objects, both those owned by the State and national private or foreign private companies domiciled in Indonesia, which are set aside / provided to run a business as long as the capital is not regulated by the provisions of Article 2 of Law No. 1 of 1967 concerning Foreign Investment."

The two policies governing investment have emphasized the separation between foreign investment and domestic investment. Separation of investment arrangements, subsequently in accordance with the development of the international trade system and the issuance of Law Number 7 of 1994 concerning Ratification of the Agreement Establishing the World Trade Organization. With the ratification of the Agreement Establishing the World Trade Organization, Indonesia has always tried to uphold the basic principles contained in the 1947 General Agreement on Tariffs and Trade / GATT (General Agreement on Tariffs and Trade in 1947), following the subsequent agreement which was produced before the Uruguay Round of negotiations. This includes discussing Trade Related Investment Measures / TRIMs (Investment Provisions relating to Trade), which aim to reduce or eliminate all policies in the investment sector that can hinder trade activities.

In response to changes in the global economy and Indonesia's involvement in international cooperation, it is essential to foster a conducive investment climate that ensures legal certainty, fairness, and efficiency while prioritizing national economic interests. Laws such as Law Number 1 of 1967 on Foreign Investment and Law Number 6 of 1968 on Domestic Investment have been replaced due to their inadequacy in addressing the needs for rapid economic development and legal reform in the investment sector. Consequently, the Government of Indonesia enacted Law Number 25 of 2007 on Investment, which integrates both foreign and domestic investments into a cohesive regulatory framework.

Data from the Investment Coordinating Board (BKPM) shows that Chinese foreign direct investment (FDI) in Indonesia surged nearly 300% from January to September 2016 compared to the same period in 2015. To address an infrastructure funding gap exceeding USD 400 billion over five years, President Joko Widodo has prioritized transforming the investment climate, securing USD 68 billion from China and an additional USD 6 billion from Japan in 2015. Key infrastructure projects, including

seaports, airports, toll roads, and mass transit systems, are central to Indonesia's growth strategy, particularly in enhancing the maritime industry.

Large-scale infrastructure projects require substantial capital, and securing funding poses challenges for many Asian nations. The Belt and Road Initiative (BRI) is anticipated to facilitate access to necessary financial support through Chinese-backed policies. Institutions like the Asian Infrastructure Investment Bank (AIIB), the New Development Bank, and the Silk Road Fund have committed billions to various BRI projects, with both Chinese and foreign banks playing crucial roles in financing. Indonesia stands to benefit from the BRI not only through strengthened ties with China but also in sustaining funding for national infrastructure projects. The Chairman of BKPM emphasized the importance of Indonesia's proactive participation in the BRI to stay competitive within ASEAN's economic landscape. Relations between China and Indonesia have grown significantly, expanding cooperation beyond electricity and mining to sectors like e-commerce and tourism. In 2016, Presidents Joko Widodo and Xi Jinping agreed to boost bilateral trade, reduce trade deficits, and enhance investments in manufacturing and infrastructure.

Chinese FDI continues to show good growth prospects. China continues to maintain stable integration with the global economy through increased foreign investment, especially by utilizing the momentum of the BRI Scheme implementation. In the long term, China is expected to lead a new chapter in the process of globalization to support world economic growth. Foreign direct investment (FDI) in Indonesia rose 6.4 percent year-on-year to IDR 105.3 trillion (USD 7 billion) in the fourth quarter of 2019, following a 17.8 percent increase in the previous quarter. The top sources of investment were China, Hong Kong, and Singapore, with the base metal, utilities, and mining sectors being the primary beneficiaries. For the entire year of 2019, Indonesia received IDR 423.1 trillion in FDI, equivalent to USD 28.2 billion, fulfilling 87.5 percent of the annual target. Singapore and China were the largest contributors, especially in utilities, warehousing, transport, communication, and base metals. The Investment Coordinating Board aims to attract IDR 886 trillion in investment for 2020, with approximately 55 percent expected to come from foreign companies.

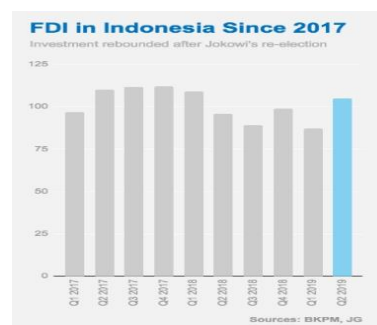


Figure 12. Development of Foreign Direct Investment (FDI) in Indonesia from 2017 to 2019

Source: <https://invest-islands.com/jokowi-reforms-indonesian-economy-fdi/>

5. Political economy interests in Sabang Region

Sabang, or Weh Island, is situated 710 km southeast of the Andaman Islands and less than 500 km from the entrance to the Malacca Strait, a crucial route through which nearly 40% of India's trade passes. Indonesia has agreed to grant India economic and military access to Sabang, located at the northern tip of Sumatra near the Malacca Strait, as confirmed by an Indonesian minister. The Malacca Strait is one of six critical choke points in global shipping, essential for energy security due to the significant volume of oil transported through these narrow channels. Approximately 15 million barrels per day of oil transit through the Malacca Strait from West Asia and West Africa.

The Malacca Strait is a focal point in the global struggle for political and economic interests, with millions of barrels of oil transported daily. This strategic waterway attracts the attention of several countries, notably China and India. There are discussions about India's plans to invest in Sabang, situated along the Strait, highlighting that investments often stem from both economic and political motivations. The Malacca Strait serves as a vital trade route while also acting as a tool for regional control and power influence. For China, securing energy supplies through the Malacca Strait is crucial, as 80% of its oil imports from the Middle East transit this route. Alternatives, like the Lombok and Makassar straits, would add significant delays to shipments. Thus, ensuring the security of the Malacca Strait is essential for maintaining uninterrupted oil supplies to support its industrial base (Ramadani, 2019).

According to Brewster (2016), the competition between India and China in the Indian Ocean reflects a struggle for status and legitimacy. While both countries sometimes share common interests, they often diverge, necessitating a nuanced understanding of their competitive dynamics. Chang (2016) notes that strategic competition involves disagreements over territorial matters, influence, and status, driven by shared interests, explicit goals, and broader political, economic, social, and cultural factors.

CONCLUSION

The city of Sabang has been designated as a Free Trade Zone and Free Port through Law Number 37 of 2000, aimed at enhancing the Indonesian economy, particularly in Aceh Province. The Indonesian government established DKS and BPKS in accordance with this law, where DKS consists of the Governor, Regent, and Mayor, while BPKS is responsible for managing and developing the Sabang area and granting business licenses. Although the government's policy through Law No. 11 of 2006 has strengthened Sabang's status as a Free Trade Zone, BPKS has not been optimal in attracting investors, due to a lack of relationships with potential investors and insufficient human resources. While the infrastructure at Sabang Port is ready for use as a transit point, with adequate facilities and a strategic location on international shipping lanes, challenges in management, infrastructure, and investment remain to be addressed. Only the infrastructure has been met, while the port's management performance is unsatisfactory, and the absence of business operators hinders investment and state revenue. Therefore, foreign investment involvement is essential to encourage the progress of the Sabang Free Port.

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