



DEVELOPMENT COOPERATION IN DEVELOPING COUNTRIES: A CASE STUDY OF IMPLEMENTATION OF THE INDONESIA- CHINA PROJECT COOPERATION IN THE JAKARTA-BANDUNG HIGH-SPEED RAILWAY DEVELOPMENT

Bagus Mahardika^{*1}, Andi Purnawarman²

^{1,2} Universitas Mulawarman, Samarinda, Indonesia

*Corresponding Author: gushardika24@gmail.com

<p>Info Article</p> <p>Received : 03 Februari 2025</p> <p>Revised : 03 Maret 2025</p> <p>Accepted : 01 April 2025</p> <p>Publication : 30 April 2025</p>	<p>Abstract: <i>This study aims to understand and describe the project implementation of Indonesia-China project cooperation in the Jakarta -Bandung highspeed railway development. Data use in this research is secondary and collected using a literature review technique and analyzed qualitatively based on their relevance to the research problem. The result of this study is that the Jakarta-Bandung High-Speed Railway project has been effectively implemented through a functional partnership by Indonesia as host country and China. PT KCIC, a joint consortium between the two countries, was established to manage funding, distribute financing, and serve as the executor of Engineering, Procurement, and Construction (EPC) as well as Operation and Maintenance (O&M). The project reflects mutual interdependence which are China provides expertise, technology, and training to support localization and knowledge transfer, while Indonesia contributes its land and is responsible in the future for regional development along the rail corridor.</i></p>
<p>Keywords: Project Implementation, Development Cooperation, Highspeed Train, Indonesia, China</p> <p>Kata Kunci: Implementasi Proyek, Kerja Sama Pembangunan, Kereta Cepat, Indonesia, Tiongkok</p>	<p>Abstrak: Penelitian ini bertujuan untuk memahami dan mendeskripsikan implementasi proyek kerja sama Indonesia-Tiongkok dalam pembangunan Kereta Cepat Jakarta–Bandung. Jenis penelitian yang digunakan adalah deskriptif. Data dikumpulkan melalui teknik studi literatur kepustakaan serta dianalisis secara kualitatif berdasarkan relevansinya terhadap permasalahan penelitian. Hasil dari penelitian ini adalah proyek Kereta Cepat Jakarta–Bandung telah diimplementasikan secara efektif melalui kemitraan fungsional antara Indonesia sebagai negara tuan rumah proyek dengan Tiongkok. PT KCIC sebagai konsorsium bersama antara kedua negara dibentuk untuk mengelola pendanaan, mendistribusikan pembiayaan, serta bertindak sebagai pelaksana dalam bidang <i>Engineering, Procurement, and Construction</i> (EPC) serta <i>Operation and Maintenance</i> (O&M). Proyek ini mencerminkan adanya interdependensi timbal balik ditunjukkan oleh Tiongkok yang memberikan dukungan berupa keahlian, teknologi, dan pelatihan guna mendukung proses lokalisasi dan transfer pengetahuan, sementara Indonesia menyediakan lahan serta bertanggung jawab atas pengembangan kawasan di sepanjang koridor rel pada masa mendatang</p>
<p>Licensed Under a Creative Commons Attribution 4.0 International License</p>	
	

INTRODUCTION

Development in developing countries faces complex issues related to the improvement of education, health, economy, social welfare, and infrastructure. As a developing country, Indonesia faces various challenges in infrastructure development, which serves as a fundamental pillar of the state especially infrastructure that support the mobility of people. The transportation infrastructure performance index in the 2015 Global Competitiveness Report ranked Indonesia 62nd out of 144 countries (Schwab, 2015, p.10). Compared to Southeast Asia and East Asia countries, Indonesia lags behind Singapore and Malaysia in infrastructure development, especially Japan, South Korea, and China, which have already developed high-speed rail transport infrastructure.

The obstacles faced by developing countries like Indonesia in transportation infrastructure development are caused by funding limitations as well as technical barriers such as a lack of human resources, experts, and reliable technology. Developing transportation infrastructure requires a high level of investment and demands qualified resources in planning, construction, and maintenance, making it impossible to execute without thorough preparation. From 2011 to 2014, Indonesia planned to construct a high-speed rail system on the island of Java, providing an alternative to users of the Northern Coastal Route (Ministry of Transportation of the Republic of Indonesia, 2011). However, the government cancelled the execution of the plan due to the feasibility study indicating high costs. This is also mark that infrastructure development must also be incorporated into each government period's planning, namely the National Medium-Term Development Plan, to ensure proper preparation.

In 2015, the Indonesia government brought back the issue of high-speed rail development planning as part of its effort to transition transportation modes, enhance connectivity, and promote economic growth along the planned high-speed rail corridor between Jakarta and Bandung. This route between the two Indonesian cities was chosen as a pilot project following a comparative study with the Beijing-Tianjin route in China, which had shown significant benefits in terms of connectivity and economic development along the track (Unilubis, 2015). Due to similar issues faced in 2012-2014, such as funding and technical limitations, the Indonesian government initiated a bidding process for the high-speed rail project, with China and Japan participating as the most prominent high-speed rail developers in Asia. In this tender process, China was selected as the winner after offering a more substantial commitment compared to Japan.

The cooperation between Indonesia and China in this high-speed rail project demonstrates Indonesia's progress in engaging foreign partners to invest in domestic development, particularly in transportation infrastructure. Although the high-speed rail project was initially not included in the 2015–2019 National Medium-Term Development Plan (RPJMN), the government later integrated it into the National Strategic Projects in 2016 and later completed in 2023. Therefore, this study will describe the implementation of the Indonesia-China project cooperation in the development of the Jakarta-Bandung high-speed rail from 2015 to 2023. This study aim to understand Indonesia urge to develop its economy by developing infrastructure utilizing the capital investment from domestic SOEs and foreign parties which is China.

METHOD

The methodology employed in this study adopts a descriptive qualitative approach, with data collected through a literature review and analyzed using qualitative data analysis based on the relevance of the data to the research problem. The type of data collected is secondary, with sources consisting of books, government publication, documents, reports, media coverage, as well as research articles and academic journals.

RESULTS AND DISCUSSION

The Problematization of Indonesia Railway Development

The development of railway transportation in Indonesia is a result of early collaboration between the private sector and the government, dating back to the Dutch East Indies era in 1864 (Setya, 2022). During that time, rail transport was used to move goods and passengers, and during the Japanese occupation, it was used to mobilize war equipment. Post-proclamation of Indonesia's independence, both private and government-run railways were integrated under the authority of the Republic of Indonesia, marked by the creation of the Railway Bureau of the Republic of Indonesia (Djawatan Kereta Api Republik Indonesia – DKARI) on September 28, 1946.

Over time, the structure of public railway operations evolved as demand for rail transport increased. A key development occurred in 1981 when the railway manufacturing industry was diversified, with PT INKA becoming independently responsible, while operational management remained under the Directorate of Railways (DNKA) (Werune, 2020). As passenger numbers grew through 2011, the Ministry of Transportation, which oversees PT KAI as the national public railway operator,

recognized the need for innovation in railway transportation, especially on the island of Java. This was driven by rapid population growth on the island, along with the increasing number of private motor vehicles, which is projected to overpopulate the roads' capacity in Java Island (Husaini & Junoasmono, 2017).

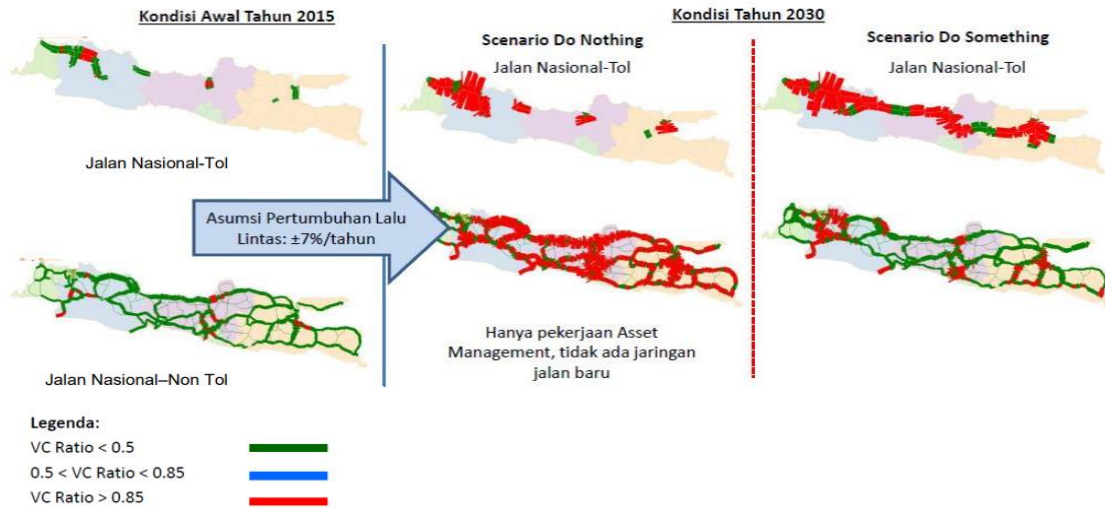


Figure 1 Projection of Java National Road Overcapacity

Source: Indonesia Infrastructure Initiative (in Husaini & Junoasmono, 2017)

Between 1987 and 2011, the number of railway passengers experienced a significant increase, rising from 43 million to 340 million, coinciding with a population growth of 19 million on the island of Java within five years and the vehicle user growth of 20,6 million in the same period from 2011-2015 (BPS Indonesia, 2025). The growth as shown in the Figure 2 presents both a challenge and an opportunity for Java to build its economy through the development of a high-speed rail line, particularly by leveraging the economic benefits of agglomeration resulting from high levels of urbanization.

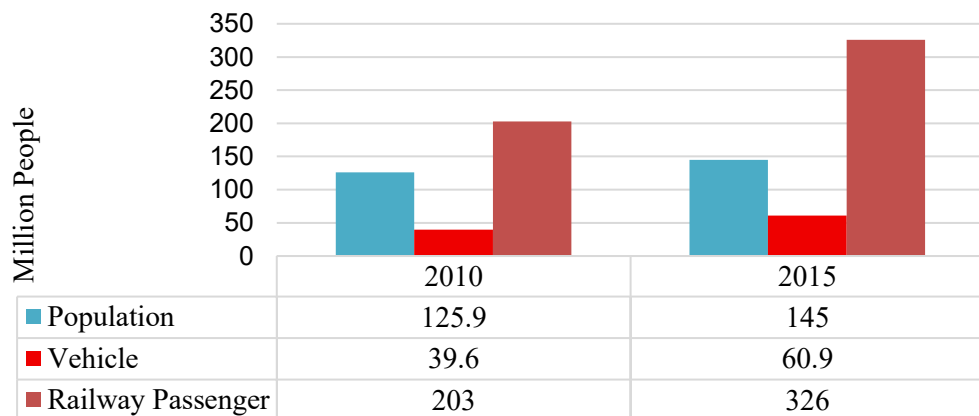


Figure 2 Comparison of Population Increase, Motor Vehicles and Railway Passengers on Java Island 2010-2015

Source: Processed by the Author from BPS Indonesia and Transportation Statistics, 2025

Indonesia-China Development Cooperation

The relationship between China and Indonesia dates back to 1949, following the sovereignty of the Republic of Indonesia given in the The Hague Round Table Conference and the establishment of the People's Republic of China (PRC). Indonesia was among the countries that recognized the PRC's sovereignty and independence, especially after the civil war with the Kuomintang party, which later relocated to Taiwan. Since then, China and Indonesia have experienced various diplomatic dynamics, with both countries are tied as part of the Asia-Africa Conference founding member in 1965 and later tore apart particularly due to the influence of domestic anti-communist sentiment in Indonesia during the early period of President Suharto's administration. China, under the leadership of Mao Zedong, also faced internal political instability, which led to the hunger and revolutionary movement in 1970s. Until in the 1990s, both countries finally normalize back the diplomatic relations and started cooperation in certain areas.

In the early 21st century, the bilateral relations between the two countries were strengthened through initiatives such as the joint declaration of a strategic partnership in 2005. Eight years later, this partnership was elevated with the adoption of the Indonesia-China Comprehensive Strategic Partnership vision in October 2013 (Oratmangun, 2022). As a country in the Asia-Pacific region, China also plays a role in the Regional Comprehensive Economic Partnership (RCEP), which was jointly initiated with Indonesia to promote trade and investment through multilateral regional cooperation (Gultom, 2020). Gultom describes this cooperation as a realization of the collaboration that started back in 2011 between China and Indonesia, aimed at establishing multilateral relations among the countries within the ASEAN Free Trade Area (FTA), which was negotiated intensively starting in 2013, coinciding with the election of Xi Jinping as President of China.

In the same year, relations between the two countries intensified with the launch of a new grand initiative, known as the Belt and Road Initiative (previously known as One Belt and One Road). President Xi Jinping later introduced this grand vision at Nazarbayev University in Kazakhstan through the Silk Road Economic Belt approach (Xinhua, 2016). This Belt and Road strategy has attracted interest from many developing countries, including Indonesia. In October 2013, President Xi made his second diplomatic visit promoting the Belt and Road Initiative (BRI), this time addressing the Indonesian parliament. Unlike his visit to Kazakhstan, China adopted a different

approach in Jakarta by promoting a complementary strategy to the Silk Road Economic Belt, specifically the 21st Century Maritime Silk Road, which emphasized the importance of maritime cooperation between Indonesia and other countries, including China.

In his speech to the Indonesian parliament, President Xi emphasized the importance of enhancing connectivity and proposed establishing the Silk Road Infrastructure Bank, the Asian Infrastructure Investment Bank (AIIB), and the New Development Bank to address the infrastructure needs of developing countries, particularly within ASEAN. As part of the historic Maritime Silk Road, Southeast Asia has become a key focus for China's maritime cooperation efforts, further supported by the optimization of the China-ASEAN Maritime Cooperation Fund (Mutia, 2023). This initiative aims to build a 21st-century Maritime Silk Road and expand cooperation across various sectors based on the principle of mutual complementarity for shared development and prosperity.

Since Indonesia's leadership transition from President Susilo Bambang Yudhoyono (SBY) to President Joko Widodo, China has emerged as Indonesia's largest trading partner. China's investment in Indonesia reached USD 297 million in 2013 and soared to USD 8.1 billion in 2024 (Tjhin, 2025). Chinese investment in Indonesia has averaged a 59% annual growth rate over the past two decades, since the establishment of the Comprehensive Strategic Partnership in 2005. The BRI has become the foundation for more intensive cooperation, starting in 2013. According to Chinese Foreign Ministry spokesperson Wang Wenbin, as cited in Setiawati (2023), the results of this partnership have led to the creation of 3,000 projects with a total investment value of USD 1 trillion which investments cover the construction of ports, railways, toll roads, and energy infrastructure, all contributing to improved connectivity and regional economic development

In its development, China's high-speed rail construction began through cooperation with foreign companies possessing high-speed rail technology (Shirouzu, 2010). This was based on agreements in which China required technology transfers from companies such as Siemens (Germany), Alstom (France), Bombardier (Canada), and Kawasaki (Japan) as part of their involvement in early high-speed rail projects (Anthony, 2025). China's first domestic high-speed rail line connected Beijing and Tianjin, which became the country's first high-speed rail that met the international highspeed standard and the commercial operation on the corridor started since August 2008. Between 2008 and 2013,

China developed more than 10,300 kilometers of high-speed rail lines, in parallel with the launch of the Belt and Road Initiative (BRI).

China's Urge of "Going Out" in the Industry of Highspeed Railway

China's overseas high-speed rail expansion began with cooperation with Turkey on the Istanbul–Ankara high-speed rail project, valued at USD 750 million and completed in 2014 (Kulaksız, 2019). Of the total funding, USD 500 million was provided as a soft loan under a government-to-government (G2G) agreement between China and Turkey (Qin, 2014). In addition, China made lobbying efforts in several countries to secure future high-speed rail projects, including Cambodia, Bangladesh, Hungary, Montenegro, Laos, and Indonesia in 2015 (Ker, 2017). These lobbying efforts were supported by major Chinese state-owned enterprises such as CRRC, the world's largest train manufacturer, and CREC, China's largest rail construction company (Gerald, 2017). This centralized industrial strategy enabled China to promote international exports of high-speed rail, particularly to Southeast Asian countries like Singapore, Malaysia, Thailand, Cambodia, Laos, and Indonesia.

Study made by Ker (2017), Wong (2022) and Wijaya (2023) showed numerous of highspeed railway proposed or has been developed by China in many countries crossing its domestic border. In the period of 2014-2015, under the BRI, China has proposed to Bangladesh, Hungary, Montenegro, Laos, Indonesia, Cambodia, Thailand, Singapore and Malaysia. Prior to 2015, China has been succesfully bid also started the construction of the Haramain Highspeed Railway in Saudi Arabia and finished build the Istanbul-Ankara Highspeed Railway in Turkey. While most of the host country are in the Middle East, China also tried to expand the market to Southeast Asia, with Laos and Indonesia accept the proposal in the late 2015.

Indonesia Acceptance towards China's Highspeed Railway

The cooperation between Indonesia and China on the Jakarta–Bandung high-speed rail project started with the signing of a Memorandum of Understanding in Beijing in March 2015 (State Secretariat of the Republic of Indonesia, 2015). This was followed by the signing of an MoU outlining the framework for the Jakarta–Bandung high-speed rail development in Jakarta in April 2015. The signing was a bilateral agenda for both countries as a part of the 60th Asia-Africa Conference Commemoration. Thus being said, the collaboration of both countries still proves the Bandung Spirit for both developing countries in cooperation towards development and peaceful coexistence. Later the quick progress in China's lobbying efforts with Indonesia was seen as part of China's strategy

to expand its influence in Southeast Asia by countering Japan, the oldest high-speed rail developer. Both countries entered a tender process in August 2015, where each submitting a proposal prepared by their respective planning teams, where CRDC (a China SOEs) developed China's proposal, while Japan's was the result of a three-year study by JICA (JICA, 2014).

The Indonesian government stressed that the state budget (APBN) must not be used to finance the project. This requirement made China's proposal the only acceptable option, as Japan's plan still included a component involving Indonesia's national budget. During the tender period, China committed to aligning with Indonesia's interests by offering a business-to-business (B2B) cooperation scheme through a joint consortium between the two countries. China also accommodated Indonesia's request for technology and knowledge transfer to support localization. Because of these efforts, the functional cooperation between Indonesia and China played a vital role in the successful execution of this project.

Implementation of Functional Cooperation in the Development of the Jakarta–Bandung High-Speed Railway

A series of functional cooperation processes was required for the implementation of the Jakarta–Bandung high-speed rail development project between Indonesia and China, involving both countries through the roles of institutional and non-institutional actors, such as state-owned enterprises from both countries, which served as the main actors under official government mandates.

Establishment of the Joint Venture Company PT KCIC

Both countries agreed to establish a joint venture company, PT Kereta Cepat Indonesia-China, formed by a consortium of Indonesian state-owned enterprises under PT PSBI and a Chinese consortium under Beijing Yawan HSR Co. Ltd. The company's purpose is to facilitate funding and construction financing and serve as the implementing agency in the development process based on a concession agreement made with the Indonesian Ministry of Transportation. The funding is sourced from equity capital contributions by each consortium, along with a loan pledged by China through the China Development Bank.

The equity capital raised for this project amounts to 25% of the total project value, meaning that the remaining 75% will be financed through a loan provided by the China

Development Bank (CDB). PT PSBI, as the Indonesian consortium, consists of PT Wijaya Karya (a construction company), PT Kereta Api Indonesia (the national railway operator), PT Perkebunan Nusantara VIII (a plantation company), and PT Jasa Marga (a toll road management company). These companies collectively hold 60% of PT KCIC’s total equity, while the Chinese consortium holds the remaining 40%.

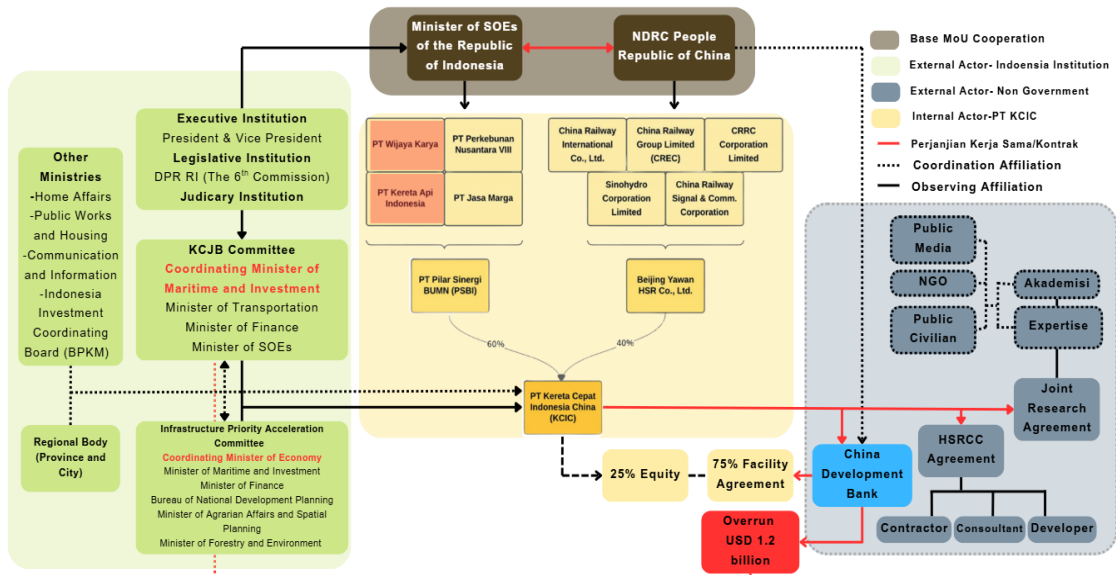


Figure 3 Actor Affiliations in the Jakarta-Bandung Highspeed Rail Project
 Source: Elaborated by the Author from Wijaya in *Journal of Contemporary Asia* (2023)

According to the project proposal submitted by China and agreed upon by Indonesia, the total project value is set at USD 5.5 billion. Based on this, the Indonesian consortium is responsible for USD 825 million in equity, while the Chinese consortium is responsible for USD 550 million. Meanwhile, CDB will provide a loan of USD 4.125 billion throughout the project's duration. The funding plan in Indonesian rupiah is detailed in the following table:

Table 1 KCJB Planned Fund Prior to Cost-Overrun (in billion rupiah, IDR ER Rp.12.800)

Year	Planned Fund	KCIC (25%)	CDB (75%)
2016	Rp 12.936,00	Rp 3.234,00	Rp 9.702,00
2017	Rp 26.124,00	Rp 6.531,00	Rp 19.593,00
2018	Rp 31.1771,00	Rp 7.942,75	Rp 23.828,25
TOTAL	Rp 70.831,00	Rp 17.707,75	Rp 53.123,25
PSBI	60%	Rp 10.624,65	
BEIJING YAWAN	40%	Rp 7.083,10	

Source: Processed by the Author from Information Disclosure PT WIKA (2016)

Functional Support Between China and Indonesia

The construction of the Jakarta-Bandung High-Speed Rail involved collaboration from both the Indonesian and Chinese sides, with clearly outlined roles and responsibilities. In this case, the involvement was executed through a whole-system approach. According to Huagiao (2022), the entire system in the KCJB project encompasses work on the subgrade, tracks, bridges, tunnels, overhead catenary systems (OCS), communication signals, train control, Electric Multiple Units (EMUs), and customer service, all of which adhere to Chinese standards

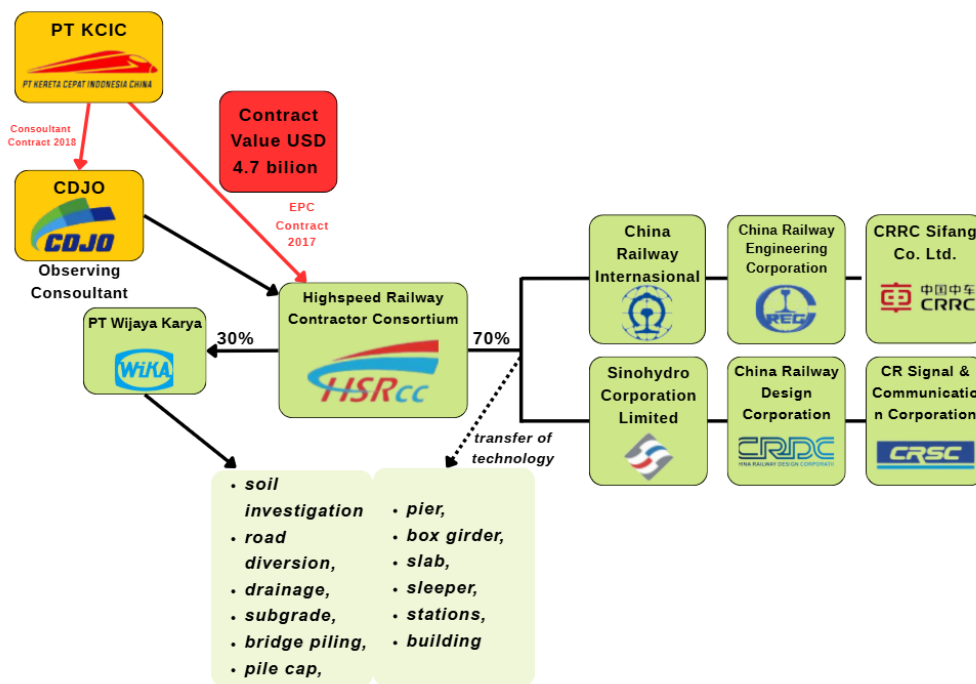


Figure 4 Functional Relationship of Contractors in the Jakarta-Bandung Highspeed Railway Project

Source: Processed by the Author, 2025

The term “full elements” refers to the entire process of designing and building the Jakarta Bandung High-Speed Rail, including surveying, engineering, construction, equipment manufacturing, operational management, and business development, all using Chinese solutions. Additionally, the term “full industrial chain” describes the complete range of equipment involved in the project, such as construction machinery, OCS systems, rails, EMUs, communication signals, and train control systems, all produced by Chinese companies. This encompasses all parts of the industrial chain—from upstream to downstream—and is carried out through Engineering, Procurement, and Construction (EPC) processes, along with the deployment of experts, localization efforts, and

operational implementation by project partners (Institute of International Studies, Fudan University, 2022).

In its implementation, the Jakarta-Bandung high-speed rail line connects Halim, Karawang, Padalarang, and Tegalluar, areas considered the most optimal route between two of Indonesia's most densely populated regions. The line is expected to boost socio-economic development through increased industrial activity, employment, investment, tourism, and logistics (Yongkun, 2022). The government stated that these four stations are the most ready to serve as bases for Transit Oriented Development (TOD), leading to the postponement of the previously planned Walini Station.

After the planning and land acquisition phases, a consortium of contractors was formed as a partner to PT KCIC to undertake the physical construction of the project. The High-Speed Railway Contractor Consortium (HSRCC) signed an Engineering, Procurement, and Construction (EPC) contract with PT KCIC and the Ministry of Transportation in April 2017. The contract outlined all aspects related to planning, procurement, and construction for the Jakarta-Bandung High-Speed Rail project. Within HSRCC, PT Wijaya Karya (PT WIKA) was assigned 30 percent of the work, which included soil investigation (boring work), road diversion, drainage, subgrade, bridge piling, pile caps, piers, box girders, slabs, sleepers, stations, buildings, and other components. The project was scheduled to be completed within 36 months from the date the contract was signed (PT WIKA, 2016).

Sinohydro Corporation, a Chinese company, produced 51 percent of the total slab tracks or rail sleepers and then partnered with PT WIKA to complete their installation (Railway Technology, 2021). Sinohydro started producing 15,391 rail sleepers in January 2020, while PT WIKA produced the remaining 49 percent, or 14,786 units, finished in May 2022 (Railway Technology, 2021). The rail sleeper technology from China is patented and sets a new standard in high-speed rail, characterized by a simple design, stable performance, strong durability, and easy construction. This technology has also received scientific awards in China (Xinhua, 2023).

In the tunnel construction collaboration, the use of a Tunnel Boring Machine (TBM) imported from Shanghai, China, by Sinohydro in March 2019 marked a milestone for Indonesia, as it was the first time the country had used such large-scale boring technology, also making it the first in Southeast Asia (Rahayu, 2019). During construction, 13 tunnel projects were completed by June 2022, highlighted by the inauguration of Tunnel No. 2 in Purwakarta, West Java (Belt and Road Portal, 2022).

These 13 tunnels were key parts of the project, with the Walini Tunnel being the first breakthrough, achieved on May 14, 2019. PT KCIC celebrated this milestone as the “Walini Breakthrough” (Xinhua, 2019).

Ma Qiang stated that the Jakarta-Bandung High-Speed Rail is the first overseas project to use Chinese standards, technology, and equipment, and it represents a significant achievement in developing the new Silk Road (Chuanjiao, 2022). It was built using China’s domestically produced high-speed train model, the Fuxing series, designated as KCIC400AF. According to Huang (2023), the Chinese train exported to Indonesia includes adapted technology with disaster sensors, as the route crosses three tectonic plates and volcanic mountains. The disaster sensors are integrated into an emergency warning system that includes one early warning system, twelve signal units, and seven monitoring points designed to withstand earthquakes and reduce disaster risks. The integration of technology into the train’s signal network was carried out by China Railway Signal and Communication (CRSC) in collaboration with PT Telkomsel.

Interdependence Between Indonesia and China in the High-Speed Rail Project

As a project under China’s Belt and Road Initiative (BRI) cooperation framework, the partnership between Indonesia and China is based on shared values agreed upon by both countries. The BRI framework includes core concepts of vision and mission grounded in principles, targets, sectors, and cooperation mechanisms (Ohashi, 2019). Among the key points of the BRI framework, there is alignment with Indonesia’s Global Maritime Fulcrum vision, which emphasizes regional connectivity through infrastructure development.

The cooperation between the two countries in this project is part of China's effort to showcase the BRI to other nations. This project marks the first phase of the “strategic layout” in bilateral cooperation, which is planned to continue into a second phase called the “Regional Comprehensive Economic Corridor” between Indonesia and China (Yee, 2023). Indonesia is a key consumer market for China in Southeast Asia, being the fourth most populous country in the world. In the context of the high-speed rail project, President Jokowi called the relationship between the two countries “good friends and brothers” (Grossman, 2021). From 2005 to 2015, trade volume between the two nations grew from 8.7 billion USD to 48.2 billion USD, showing deepening economic ties (Anwar, 2019). Additionally, in 2016, China became Indonesia's third-largest foreign investor, moving up from ninth position in 2013 (Yee, 2023). Indonesia’s strategic

importance in the Asia-Pacific region is also viewed by China as crucial for countering U.S. and Japanese influence, which has historically dominated Indonesia’s economy (Pramono & Raharjo, 2023).

To secure this influence, China had to outcompete Japan in the 2015 contest for the Jakarta–Bandung high-speed rail project. China used its domestic financial institution, the China Development Bank (CDB), as the lending partner. CDB is expected to make profits either through interest on loans or from the returns of infrastructure projects it helps finance (Ohashi, 2019). This shows China’s economic interest in the project, which must succeed to bring financial returns to CDB, and other Chinese companies involved, as well as strengthen China’s geopolitical influence in the region.

CDB also plays a strategic role in promoting the internationalization of China’s currency through the project. The internationalization of the renminbi (RMB) is a key part of the BRI’s mission to lessen global reliance on the U.S. dollar (Ohashi, 2019). During this project, CDB signed a Facility Agreement with PT KCIC on May 14, 2017, to provide a loan of 4.55 billion USD. The loan terms include 60 percent at a 2 percent interest rate in U.S. dollars and 40 percent at a 3.5 percent interest rate in renminbi (Komisi VI DPR RI, 2023). The 2 percent interest rate reflects China’s political interest in the project, as CDB typically does not offer rates lower than those of the World Bank (Schwarz & Rudyak, 2023).

From Indonesia’s perspective as a developing country, the partnership with China offers significant benefits. These include China’s commitment and execution of the high-speed rail project as a pilot initiative not only for Indonesia but for Southeast Asia as a whole. Improved connectivity aims to enhance regional integration and create new opportunities for economic, trade, and business cooperation among countries in the region.

Table 2 Comparison of Jakarta-Bandung HSR and Beijing-Tianjir HSR

Component	Jakarta-Bandung	Beijing-Tianjin
Length	142.3 km	142.6 km
Area Population	13.14 million	32.32 million
Characteristic	-Jakarta as Capital City of Indonesia and Business Center -Bandung as Capital of West Java Province and Region for Crative SMEs and Industry	-Beijing as Capital City of China and Business Center -Tianjin as Capital City and Tech. Based Development City
Area Development	Jakarta-Bandung Mentropolitan Area	Beijing-Tianjin Metropolitan Area

Transition	Vehicle Based Transportation(Car, motorcycle, Bus, Conventional Train), with assumption of 11% user will shift towards Highspeed Train		Vehicle Based Transportation (car, bus, conventional train). Realization of shifting reached 36,8% in 2010 (2 years of operation)	
<i>Transition Demand Forecast</i>	Transportation	Daily	Transition	
	Car	134.775	15.135	
	Bus/travel	116.829	13.120	
	Conventional Train	7.890	886	
	Total	259.495	29.140	
Ticker Fare	Economy Class	Rp 125.000 bottom bar	Rp 250.000 top bar	USD 13 or Rp 200.000

Source: Processed by the Author, 2025

Based on a feasibility study conducted in 2015, the number of motor vehicles traveling between Jakarta and Bandung each day reached 143.518, with the majority, 123.133, being private cars (Rostanti, 2015). The majority of these private vehicle users are expected to switch to public transportation. This shift is especially important considering the high usage of other modes of transport, such as the Argo Parahyangan train, which carries between 2.000 and 2.500 passengers per day, and travel buses, which transport around 14.000 passengers daily

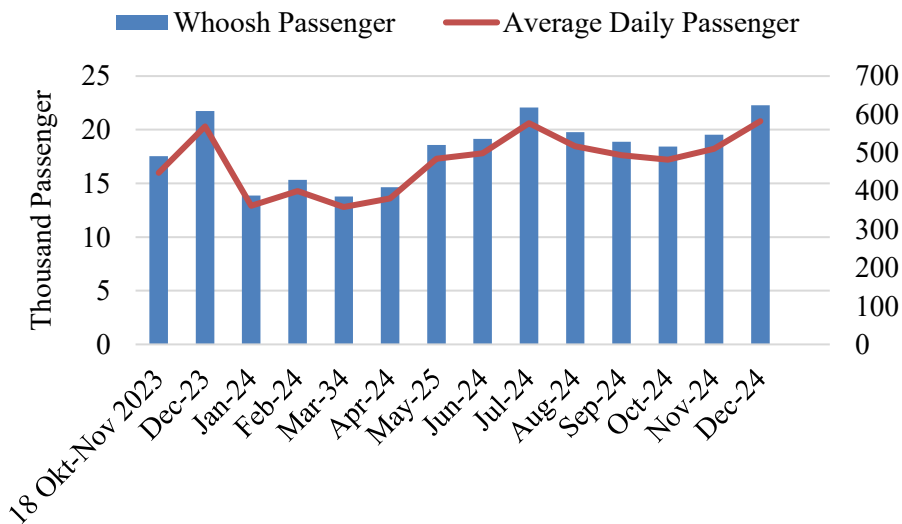


Figure 5 The Significance of Whoosh Highspeed Train Passengers

Source: Processed by the author, 2025

In its first month of operation, the Whoosh high-speed train showed a significant shift in mode, with 71% of passengers switching from private cars and buses (Komisi VI DPR RI, 2023). The report also revealed an increase in high-speed rail users, mostly

private sector employees and students, making up 70%, with 73% of them traveling for leisure and business. From late 2023 through 2024, Whoosh has recorded a growing passenger count totaling 5 million. Although this number is high, it remains fairly steady month to month. Despite this, PT KCIC needs to revisit the optimistic passenger projections from the feasibility study. The current average daily ridership ranges from 16.000 to 20.000, indicating a shortfall of 10.000 to 20.000 passengers per day compared to the forecasted 29.000 to 40.000 passengers.

This situation worsens the financial condition of the project's operations due to the ballooning loan from PT KCIC to the China Development Bank (CDB). The additional loan granted by CDB came with strict conditions requiring the Indonesian government to provide guarantees. The government responded by approving State Capital Participation (PMN), which was specifically regulated under Minister of Finance Regulation No. 89 of 2023 following Presidential Regulation No. 93 of 2021, which amended Presidential Regulation No. 107 of 2015. Under this regulation, the government appointed PT Penjaminan Infrastruktur Indonesia (PII) to act as the guarantor for PT PSBI's debt on behalf of the Indonesian government (DPR RI, 2023).

Since 2021, the PMN provided by the government has changed the shareholding structure of PT PSBI, with PT KAI holding 51.37%, PT WIKA 39.12%, PT Jasa Marga 8.30%, and PT Perkebunan Nusantara VIII 1.21% (KCIC, 2024). After PT KAI made an additional capital injection of IDR 2.7 trillion into PT PSBI, its stake increased to 58.56% (Komisi VI DPR RI, 2023). Aditya Dwi Laksana, Chairman of the Forum for Railway and Intercity Transportation of the Indonesian Transportation Society, stated in Mahardhika (2023) that the concession signed between the Ministry of Transportation and PT KCIC in 2017 for providing public railway services could potentially be extended from 50 to 80 years. This concession covers the joint operation period of the high-speed rail project, during which management, financing, maintenance, and funding responsibilities rest with both countries. This extension could boost PT KCIC's revenue, especially through non-ticket streams like property and advertising, creating opportunities for future profits. However, Indonesia also risks prolonged dependence on China during this period, due to the capital and additional costs needed for developing Transit-Oriented Development areas.

The cooperation between Indonesia and China in the Jakarta–Bandung High-Speed Railway project has been effectively carried out based on both countries fulfilling their specific roles. According to the research findings, the high-speed rail project required active

participation from both parties to address key aspects of the collaboration. China fulfilled its designated functions by meeting Indonesia's infrastructure needs, while Indonesia depended on China's contributions. Both nations established a joint institution in the form of a joint venture company, PT Kereta Cepat Indonesia-China (KCIC), which includes contractors and developers from the Indonesian consortium PT PSBI and the Chinese consortium Beijing Yawan HSR Co. Ltd. The company was created to facilitate equity capital and loan financing from the China Development Bank (CDB). This joint venture also serves as the executor of the construction process, which has been carried out since 2018 through Engineering, Procurement, Construction, and Operation and Maintenance phases. The interdependence between the two countries is demonstrated by China's recognition of the project as part of its Belt and Road Initiative (BRI) strategy and its "going out" policy to export high-speed rail technology abroad for the first time. In this context, China has effectively fulfilled its role by providing financing, technology transfer, and knowledge sharing. Meanwhile, Indonesia views this high-speed rail project as a step forward in modern transportation technology with significant domestic benefits. However, its success largely depends on Chinese loans and the need to develop regions along the railway corridor to generate economic returns.

CONCLUSION

The cooperation between Indonesia and China in the Jakarta-Bandung High-Speed Railway project has been effectively carried out based on both countries fulfilling their specific roles. According to the research findings, the high-speed rail project required active participation from both parties to address key aspects of the collaboration. China fulfilled its designated functions by meeting Indonesia's infrastructure needs, while Indonesia depended on China's contributions. Both nations established a joint institution in the form of a joint venture company, PT Kereta Cepat Indonesia-China (KCIC), which includes contractors and developers from the Indonesian consortium PT PSBI and the Chinese consortium Beijing Yawan HSR Co. Ltd. The company was created to facilitate equity capital and loan financing from the China Development Bank (CDB). This joint venture also serves as the executor of the construction process, which has been carried out since 2018 through Engineering, Procurement, Construction, and Operation and Maintenance phases. The interdependence between the two countries is demonstrated by China's recognition of the project as part of its Belt and Road Initiative (BRI) strategy and its "going out" policy to export high-speed rail technology abroad for the first time. In this context, China has effectively fulfilled its role by providing financing, technology transfer, and knowledge sharing. Meanwhile, Indonesia views this high-speed rail project as a step forward in modern

transportation technology with significant domestic benefits. However, its success largely depends on Chinese loans and the need to develop regions along the railway corridor to generate economic returns.

REFERENCES

Books

- Budiman, A. (2000). *Teori-Teori Pembangunan Dunia Ketiga*. Jakarta: PT Gramedia
- Dougherty, J.E. & Pfaltzgraff, R.L. Jr. (2001) *Contending Theories of International Relations: A Comprehensive Survey Fifth Edition*. Longman
- Groom, A.J.R. & Taylor, P. (1975). *Functionalism: Theory and Practice in International Relations*. London: University of London Press
- Kusumohamidjojo, B. (1987). *Hubungan Internasional: Kerangka Studi Analisis*. Jakarta: Bina Cipta.

Report

- BPS Indonesia. (2010). *STATISTIK TRANSPORTASI*. Retrieved from <https://media.neliti.com/media/publications/49890-ID-statistik-transportasi-2010.pdf>
- Kementerian Perhubungan RI. (2011). *Rencana Induk Perkeretaapian Nasional 2030*. Retrieved from <https://ppid.dephub.go.id/fileupload/informasi-berkala/RIPNAS-2030.pdf>
- Ker, M. (2017). China's High-Speed Rail Diplomacy. In *US-China Economic and security Review Commission*. Retrieved From <http://www.worldbank.org/en/news/press->
- KOMISI VI DPR RI. (2023a). Laporan Kunjungan Kerja Spesifik Komisi VI DPR-RI Ke PT Kereta Api Indonesia (Persero), Bandung Provinsi Jawa Barat. Retrieved from: <https://berkas.dpr.go.id/akd/dokumen/K6-12-c7256729ec8a24bb436e4afc4bc21293.pdf>
- KOMISI VI DPR RI. (2023b). Laporan Kunjungan Kerja Spesifik Komisi VI DPR RI Ke PT Kereta Api Indonesia (Persero) Dan PT Kereta Cepat Indonesia China (KCIC), Tegalluar Bandung. Retrieved From <https://berkas.dpr.go.id/akd/dokumen/K6-12-6d53cea67e57225965a407fe560feac3.pdf>
- United Nations Office of South-South Cooperation. (2016). *Framework of operational guidelines on United Nations support to South-South and triangular*

cooperation. Retrieved from: <https://unsouthsouth.org/wp-content/uploads/2023/08/Framework-of-Operational-Guidelines-on-UN-Support-to-SSTC-2016.pdf>

Schwab, K. (2015). *Global Competitiveness Report*. World Economic Forum. Retrieved From: <https://www.weforum.org/publications/global-competitiveness-report-2015/>

Wijaya Karya. (2016). *Keterbukaan Informasi*. Retrieved from https://investor.wika.co.id/newsroom/KI_PT_WIKA_2016.pdf

Thesis/Dissertation

Mulyani, S. (2021). *Implementasi Kerja Sama China-Laos Railway Tahun 2015-2021* [Bachelor's Thesis, Unpublished, International Relations]. Universitas Mulawarman.

Werune, J. J. (2020). *Strategi Pemerintah Republik Indonesia Dalam Meningkatkan Ekspor Gerbong Kereta Api Ke Bangladesh Tahun 2016-2019*. (Bachelor's thesis, Universitas Hasanuddin) Retrieved from: https://repository.unhas.ac.id/id/eprint/1970/4/e13116515_skripsi_28-08-2020.pdf

Journal Article (retrieved online, with DOI)

Afifah, N. R. N., & Badaruddin, M. (2024). Potential Chinese Debt Trap In Infrastructure Development (Case Study Of The Jakarta-Bandung High-Speed Railway Project). *Indonesian Journal of International Relations*, 8(1), 198–222. Retrieved from <https://doi.org/10.32787/ijir.v8i1.517>

Astriani, N., & Adharani, Y. (2017). Pembangunan Kereta Cepat Jakarta-Bandung Dari Sudut Pandang Penegakan Hukum Penataan Ruang., 6. Retrieved from <http://www.walhijabar.org/2016/12/29/>

Chan, G. (2017). From Laggard to Superpower: Explaining China's High-Speed Rail "Miracle". *Kokusai Mondai*, 661. Retrieved from https://www2.jiia.or.jp/en/pdf/kokusaimondai/kokusaimondai661_Dr_Gerald_Chan.pdf

Chen, M. (2020). State Actors, Market Games: Credit Guarantees and the Funding of China Development Bank. *New Political Economy*, 25(3), 453–468. Retrieved from <https://doi.org/10.1080/13563467.2019.1613353>

- Husaini, H. W., & Junoasmono, T. (2017). *Peran Infrastruktur Jalan Pantura Jawa Dalam Rangka Mendukung Peningkatan Ekonomi Nasional*. 3(1).
- Brun, Lukas. (2016). Overcapacity in Steel: China's Role in a Global Problem. Retrieved from doi/10.13140/RG.2.2.11923.48161.
- Kulaksız, S. (2019). Financial Integration via Belt and Road Initiative: China–Turkey Cooperation. *Global Journal of Emerging Market Economies*, 1–2(11), 48–64. Retrieved from: <https://doi.org/10.1177/0974910119874632>
- Lin, S., Dhakal, P. R., & Wu, Z. (2021). The Impact of High-Speed Railway on China's Regional Economic Growth Based on the Perspective of Regional Heterogeneity of Quality of Place. *Sustainability 2021*, Vol. 13, Page 4820, 13(9), 4820. Retrieved from <https://doi.org/10.3390/SU13094820>
- Liu, H., & Lim, G. (2018). The Political Economy of a Rising China in Southeast Asia: Malaysia's Response to the Belt and Road Initiative. *Journal of Contemporary China*, 28(116), 216–231. <https://doi.org/10.1080/10670564.2018.1511393>
- Mumtaz, S. (2025). The Political Dynamics of Space Behind the Jakarta–Bandung High-Speed Rail (Whoosh) Megaproject Development. *PCD Journal*, 12(2), 233–272. Retrieved from <https://doi.org/10.22146/pcd.v12i2.16597>
- Ohashi, H. (2018). The Belt and Road Initiative (BRI) in the context of China's opening-up policy. *Journal of Contemporary East Asia Studies*, 7(2), 85–103. Retrieved from: <https://doi.org/10.1080/24761028.2018.1564615>
- Oratmangun, D. (2022). Indonesia–China Strategic Partnership Transformation: Building Cooperation, Synergy, and Solidarity. Retrieved from: https://doi.org/10.1007/978-981-16-8086-1_21
- Pramono, S., & Raharjo, W. A. (2024). Indonesia's Role in the Rise of East Asia amid China's Ascendancy. *Nation State: Journal of International Studies*, 6(2), 139–157. Retrieved from: <https://doi.org/10.24076/nsjis.v6i2.1324>
- Prasetyo, K. (2024). Global South Responses to China's BRI Projects: A Case Study of Jakarta-Bandung High-Speed Railway Project. *Global South Review*, 5(2), 7-26. /doi:http://dx.doi.org/10.22146/globalsouth.90951/
- Putri, S. Y., & Ma'arif, D. (2019). *Dinamika Hubungan Kerja Sama Indonesia Cina di Era Pemerintahan Joko Widodo*. Retrieved from <https://jurnal.lemhannas.go.id/index.php/jkl/article/view/47/10>
- Tuty, R., & Mutia, N. (2023). *BRI: Xi Jinping's Path to Complete His Historical Task*. 637–649. Retrieved from: https://doi.org/10.2991/978-2-38476-058-9_50

Wijaya, T. (2024). "Risk is not Measured, but Contested and Compromised": A Case Study of Jakarta–Bandung High-Speed Railway. *Journal of Contemporary Asia*. https://doi.org/10.1080/00472336.2024.2378856/ASSET/74D3556D-D865-4A92-AB5F-7D690ACFE951/ASSETS/GRAPHIC/RJOC_A_2378856_F0003_B.JPG

Electronic source

- Anthony.(2025). Ultimate Guide to China’s High-Speed Rail (HSR). Retrieved from <https://www.thechinajourney.com/chinas-high-speed-rail-hsr/#:~:text=The%20Jakarta%E2%80%93Bandung%20line%20in,the%20Belt%20and%20Road%20Initiative>
- Belt and Road Portal. (2022, June 21). *All 13 tunnels of Jakarta-Bandung High-Speed Railway completed*. Retrieved from: <https://eng.yidaiyilu.gov.cn/p/254816.html>
- BPS Indonesia. (n.d.). *Jumlah Penumpang Kereta Api*. 2023. Retrieved from: <https://www.bps.go.id/id/statistics-table/2/NzIjMg==/jumlah-penumpang-kereta-api.html>
- BPS Indonesia. (2024). *Jumlah Penumpang dan Barang Melalui Transportasi Kereta Api Indonesia Tahun 1987-2022*. Retrieved from: <https://www.bps.go.id/id/statistics-table/1/MTQxNCMx/jumlah-penumpang-dan-barang-melalui-transportasi-kereta-api-indonesia-tahun-1987-2022.html>
- Grossman, D. (2021). *Indonesia Is Quietly Warming Up to China*. Retrieved from: https://www.viet-studies.net/kinhte/IndonesiaWarmChina_FP.pdf
- Gultom, D. (2020). *Perjanjian Regional Comprehensive Economic Partnership (RCEP): Peluangnya bagi Indonesia dan Langkah Pemanfaatannya*.
- Husaini, H. W., & Junoasmono, T. (2017). *Peran Infrastruktur Jalan Pantura Jawa Dalam Rangka Mendukung Peningkatan Ekonomi Nasional* (Vol. 3, Issue 1).
- Jiangqin, H. (2023). *What is the story behind the China-Indonesia joint construction of the Jakarta-Bandung high-speed railway?* Retrieved from: http://news.china.com.cn/2023-10/08/content_116730396.shtml
- Mahardhika, L. A. (2023). *Konsesi Kereta Cepat Jakarta-Bandung Jadi 80 Tahun, Ini Respons MTI*. Retrieved from: <https://ekonomi.bisnis.com/read/20230411/98/1645864/konsesi-kereta-cepat-jakarta-bandung-jadi-80-tahun-ini-respons-mti>

- Rahayu, J. T. (2019). *Bor raksasa kereta cepat tiba dari Tiongkok*. Retrieved from: <https://www.antaraneews.com/berita/816375/bor-raksasa-kereta-cepat-tiba-dari-tiongkok>
- Railway Technology. (2021, May 25). *Sinohydro concludes track slab precasting work for Jakarta-Bandung railway*. Retrieved from: <https://www.railway-technology.com/news/sinohydro-concludes-track-slab-precasting/?cf-view>
- Rostanti, Q. (2015). *Target Penumpang Meleset, Kereta Api Cepat Diyakini akan Bebani APBN*. Retrieved from: <https://ekonomi.republika.co.id/berita/nu3tak349/target-penumpang-meleset-kereta-api-cepat-diyakini-akan-bebani-apbn>
- Setiawati, S. (2023). *Satu Dekade OBOR China: Dunia Ikut Untung atau Buntung?* Retrieved from: <https://www.cnbcindonesia.com/research/20230915072010-128-472641/satu-dekade-obor-china-dunia-ikut-untung-atau-buntung>
- Setya, D. (2022). *Sejarah Kereta Api Indonesia, Dimulai sejak Masa Kolonial Belanda*. Retrieved from: <https://www.detik.com/edu/detikpedia/d-6317129/sejarah-kereta-api-indonesia-dimulai-sejak-masa-kolonial-belanda>
- Wong, D. (2022). How China built the world's largest high-speed rail network. South China Morning Post. Retrieved From <https://multimedia.scmp.com/infographics/news/china/article/3200811/high-speed-railway/index.html>
- Yongkun, L. (2022, September 5). *Indonesia's "Jakarta-Bandung high-speed railway" in sight*. <http://www.cicir.ac.cn/NEW/opinion.html?id=79ffd458-3b05-4569-81f2-befbdb1c7ee4>
- Yuen, Y. W. (2023). *Ten Years On, How is the Belt and Road Initiative Faring in Indonesia?* Retrieved from: <https://jamestown.org/program/ten-years-on-how-is-the-belt-and-road-initiative-faring-in-indonesia/>