

PERSPECTIVE

RESEARCHERS AT ISEAS – YUSOF ISHAK INSTITUTE SHARE THEIR UNDERSTANDING OF CURRENT EVENTS

Singapore | 7 April 2016

Why is the High-Speed Rail Project so Important to Indonesia

Wilmar Salim and Siwage Dharma Negara¹

EXECUTIVE SUMMARY

- The Jakarta-Bandung high-speed rail project is more than just economic aspiration on the part of the Indonesian government. It has been prioritized in order to lure more foreign—especially Chinese—investments into the country.
- The project has significant implications on medium- to long-term development between Indonesia and China.
- For Indonesia, it opens opportunities to accelerate its infrastructure development agenda, with the hope of boosting the slowing economy. It is important though, that the project is properly managed and completed on time. It must also be seen to keep to all the required regulations that are in place to ensure safety, environmental standards, and good corporate governance.
- For China, the project opens opportunities to increase its infrastructure exports, strengthen its economic influence in Indonesia and the region, and secure long term returns. It is also a litmus test for China to convince potential buyers that they can build an integrated and high-quality railway system with competitive prices.

¹ Wilmar Salim is Associate Professor at Bandung Institute of Technology (ITB) and Siwage Dharma Negara is Fellow at ISEAS-Yusof Ishak Institute. The authors would like to thank Leo Suryadinata and Hui Yew-Foong for their valuable comments on the earlier draft of this paper.

INTRODUCTION

Does Indonesia really need a high-speed train to connect Jakarta, its capital city, to Bandung, West Java's capital city? This question has been contentiously debated in the mass media since late September 2015, after the Indonesian government turned down a Japanese bid in favour of a Chinese one to build a 142-km long high-speed railway line connecting the two cities. Japan's proposal was officially rejected because of its condition that the project required a government guarantee. China's counter proposal did not seek Indonesian state funds, and its project would be a wholly private business deal, led by a consortium of state owned enterprises (SOEs) in both countries.

Since then, the Indonesian government has put in an impressive effort to expedite the US\$5.5 billion project, which is mostly financed by loans from the China Development Bank. This includes the enactment of two Presidential regulations. The first one is Presidential Regulation No. 107/2015 on the acceleration of infrastructure and facilities, assigning this so-called 'lighthouse' project to PT KCIC (*Kereta Cepat Indonesia China*; Indonesia-China High-speed rail consortium), a joint venture between four Indonesian SOEs² and China Railway International. The second is Presidential Regulation No. 3/2016 on the acceleration of strategic national projects, which include the high-speed rail project in its list of 12 national strategic projects. To general surprise, President Joko "Jokowi" Widodo attended the groundbreaking ceremony of the project in Walini, West Java, on 21 January 2016. The event was perceived to have been rushed since most of the necessary permits had as yet not been obtained. PT KCIC had not been granted even the construction permit and concession license when the ceremony was held³. It would take almost two more months after the project officially kicked off for the Ministry of Transport to process the construction permit for the first five kilometers of the project (out of 142.3 km).⁴ More worrisome yet is that the main economic, commercial and technical analyses for the project had not been completed.

There was public consternation and puzzlement over the government decision, and the news media highlighted strong differences of opinion among ministers, between supporters and opponents of the project.⁵ This essay aims to shed light on the question why the project was prioritized to such an extent that it was begun even before a study of its social and environmental impact and commercial viability had been completed. In fact, the project was

² The consortium is named Pilar Sinergi BUMN Indonesian (PBSI), comprising of PT Wijaya Karya (38% share), PT Kereta Api Indonesia (25% share), PT Perkebunan Nasional VIII (25% share) and PT Jasa Marga (12% share). See:

<http://finance.detik.com/read/2016/01/12/075516/3116023/4/pengembang-kereta-cepat-jakarta-bandung-suntik-modal-rp-125-t>

³ <http://www.thejakartapost.com/news/2016/02/01/editorial-the-controversial-55b-project.html#sthash.EemHsqKx.dpuf>

⁴ *Kompas*, "Kementerian Perhubungan Terbitkan Izin Pembangunan KA Cepat Jakarta-Bandung", 19 March

2016. <http://bisniskeuangan.kompas.com/read/2016/03/19/115000926/Kementerian.Perhubungan.Terbitkan.Izin.Pembangunan.KA.Cepat.Jakarta-Bandung>

⁵ See *Tempo's* special issue on the high speed railway project, February 14, 2016.

not even in the initial Master Plan of National Railway, and yet it quickly became a national priority programme.

THE INITIAL PLAN FOR HIGH-SPEED RAIL

The railway system in Indonesia was established in the second half of the 19th century under the Dutch colonial administration. Rail was a very important mode of cargo and passengers transportation, and when at its peak in 1939, the total railway length was 6,324 km on Java and 1,833 km on Sumatera. However, 70 years later the figures had fallen substantially to 3,464 km on Java and 1,350 km on Sumatera Island.⁶ Competition with road transport was the primary reason for this decline. Nevertheless, rail is still considered more superior than other modes of transport for a number of reasons: loading capacity, energy and space efficiency, safety, and less pollution and carbon emission. For those reasons, Law No. 23/2007 on railways was enacted to make rail an important mode of transport again.

The law stipulates that a Master Plan of National Railway (*Rencana Induk Perkereta-*apian* Nasional* or RIPN) be formulated to guide the development of the national railway system. The Directorate General of Railway that was created in the Ministry of Transportation then formulated this master plan in 2011. The master plan's strategy is to develop network and services on the major islands. One of several targets to achieve by 2030 is the extension of the network up to 12,100 km in all major islands, including 3,800 km of urban railway network. On Java, the network development plans include: intercity network with double tracks; urban agglomeration area network; urban network in six major cities; railway link to six major airports; railway link to six major seaports; high-speed rail between Merak and Banyuwangi; extension of urban network with electric railway; and revitalization of the old network.⁷

The planned high-speed rail network will connect Merak on the western tip of Java to Jakarta, Cirebon, Semarang, Surabaya, and then Banyuwangi on the eastern tip of the island. As can be seen on the map of high-speed rail network planned for Java in 2030 (Figure 1), the priority is to connect Jakarta and Surabaya, the two largest cities in Indonesia, and then to extend the network from Jakarta to Merak in the west and from Surabaya to Banyuwangi in the east (see Figure 1). There was no plan to build a Jakarta-Bandung high-speed rail. So how did it come into the picture?

⁶ Directorate General of Railway, Ministry of Transportation, "Master Plan of National Railway", April 2011.

⁷ Idem.

Figure 1: Map of high-speed rail network planned for Java by 2030



Source: Directorate General of Railway, Ministry of Transportation, “Master Plan of National Railway”, April 2011, p. 48.

Concurrent with the Master Plan of National Railway, the Coordinating Ministry for Economic Affairs released the Master Plan for Acceleration and Expansion of Indonesian Economic Development (MP3EI) in which economic corridors are to be developed on major islands. On Java, the two main economic knots are Jabodetabek (Jakarta Metropolitan Area) and Gerbangkertosusila (Surabaya Metropolitan Area). These two metropolitan areas are to be connected to each other by a trans-Java toll road and a high-speed railway. The plan does not clearly mention the Jakarta-Bandung high-speed railway although the map vaguely draws a railway line between Jakarta and Bandung.⁸ This was discerned by the Japanese government, which assisted the Indonesian government in drawing up a Master Plan for the Jabodetabek Metropolitan Priority Area (MPA), in which the high-speed railway between Jakarta and Bandung was stated as one of several major priority projects. It is important to note that the proposal considers connecting Jakarta and Bandung via a new international airport to be built at Karawang, West Java.⁹

⁸ Coordinating Ministry for Economic Affairs, “Master Plan for Acceleration and Expansion of Indonesian Economic Development”, 2011, p. 93.

⁹ Coordinating Ministry for Economic Affairs, “Jabodetabek MPA Strategic Plan”, November 2012. The proposal was eventually rejected as the government of West Java had already chosen Kertajati as the site of its international airport.

While the Japan International Cooperation Agency (JICA) funded the Jabodetabek MPA study, Japan's Ministry of Economics, Trade and Industry (METI) commissioned a feasibility study on the High-speed Railway Project (Jakarta-Bandung Section), which was concluded in November 2012.¹⁰ The study noted that a high-speed railway between Jakarta and Surabaya, which was examined in 2008, was not practical. Thus, Japan's Ministry of Land, Infrastructure, Transport and Tourism (MLIT) carried out another study specifically for the Jakarta-Bandung section, and as part of METI's feasibility study. In that smaller study, it was assumed that the Jakarta and Bandung section would be the first phase of the Jakarta-Surabaya high-speed railway proposed in the Master Plan of National Railway, which prioritizes the Jakarta-Cirebon section. The Jakarta-Cirebon via Bandung section was examined as an alternative route to the Jakarta-Cirebon section via the coast. The feasibility study also further analyzed the extension of the Jakarta-Bandung section to Gedebage.¹¹

It was concluded that the Jakarta-Cirebon section done via Bandung would give an Economic Internal Rate of Return (EIRR) of 13.6% due to high forecasted demand (3-4 times higher), while the EIRR for the coastal route would be negative.¹² This was despite the technical challenges of constructing railway tracks to Bandung, which involve a steep gradient of up to 30%, and the costly construction of bridges and tunnels. What becomes apparent is that the Jakarta-Bandung high-speed rail was chosen on a loose interpretation of MP3EI economic corridor infrastructure investments and its economic returns. Japan's involvement was also instrumental, and stemmed from ideas conceived by the previous Indonesian government.

FROM NON-PRIORITY TO PRIORITY PROJECT

While his predecessor President Susilo Bambang Yudhoyono (SBY) never considered the high-speed railway a priority in his infrastructure programme, President Jokowi, seemed to be of a different opinion. Since taking power in October 2014, his key concern had been to boost the Indonesian economy, which had been declining since the end of the commodity boom. One of his strategies was to attract more investments, especially for infrastructure. It is estimated that Indonesia needs around US\$450 billion to realise its infrastructure development plan, consisting of building roads, railways, ports and power plants¹³. He therefore embarked on several bilateral meetings the two Asian powerhouses—China and Japan. In March 2015, he visited both Tokyo and Beijing. In Tokyo, Jokowi met Prime Minister Shinzo Abe and secured 140 billion yen (US\$1.2 billion) in loans for railway projects, including one for Indonesia's first mass rapid transit (MRT) system, in Jakarta¹⁴.

¹⁰ Yachiyo Engineering Co., Ltd. and Japan International Consultants for Transportation Co., Ltd., "Study on the High Speed Railway Project (Jakarta-Bandung Section)"

¹¹ *idem*, pp. 1-2.

¹² *Idem*, p. 12.

¹³ Bappenas, The National Medium Term Development Plan (RPJMN) 2015-2019.

¹⁴ Natalie Sambhi, "Jokowi's trip to Tokyo and China", 30 March 2015.

<http://www.aspistrategist.org.au/jokowis-trip-to-tokyo-and-china/>

Similarly, in Beijing, Jokowi met Chinese Premier Li Keqiang and secured deals for various infrastructure projects, including the high-speed rail project linking the capital city to Bandung. During that trip, China promised him more money, raising the total to US\$ 68.4 billion in support of Indonesia's infrastructure needs¹⁵. Then as a follow up, Indonesia's Minister of State Owner Enterprises (SOE), Rini Soemarno, and China's Chairman of the National Development and Reform Commission (NDRC), Xu Shaoshi, signed an MoU in Beijing for the Chinese to start feasibility study costing US\$5 million, on the high-speed rail. From then on, the role of the SOE Minister has been critical in shaping the final government decision.¹⁶ While the reason for her strong support for this project is unclear, Minister Rini action seems to have good backing from Jokowi himself, who once mentioned that "...we live in the era of competition. A country that acts quickly will win"¹⁷. In contrast, the response from Minister of Transport, Ignasius Jonan, is more cautious. Delay in construction for the project has been mainly caused by his concern about the contractor's ability to provide the required supporting documents.

CHINA-JAPAN COMPETITION

Japan and China have been competing to win the high-speed rail project in Indonesia since April last year. The project is touted as the first high-speed rail for the Southeast Asia region and could for the winning contractor potentially open up possibilities for future rail projects, including one linking Kuala Lumpur and Singapore¹⁸. Japan started the project's feasibility study in 2011, at a cost of more than US\$4 million¹⁹. This initial study showed that the project would cost 726.4 billion yen (US\$6.4 billion)²⁰. To Japan's surprise, Indonesia then decided to invite other countries to submit counter proposals.²¹ China came up very quickly with a comprehensive feasibility study and offered Indonesia a better deal. *Table 1* compares the proposals from both China and Japan. In comparison with Japan's proposal, China's offers lower cost, shorter time for project completion (finish within three years), and an easier financing scheme.

In early September 2015, Jokowi decided to turn down both proposals, arguing that the project was not technically and financially feasible. Technically, the distance between Jakarta and Bandung was too short for the high-speed train to achieve its maximum speed of 300 km per hour. He suggested a medium-speed rail instead, as being cheaper and more

¹⁵ <http://www.japantimes.co.jp/news/2015/03/30/business/economy-business/jokowi-returns-jakarta-74-billion-business-deals/>

¹⁶ <http://ekonomi.rimanews.com/bisnis/read/20160204/259805/DPR-Nilai-Menteri-Rini-Buru-Buru-Putuskan-Proyek-Kereta-Cepat->

¹⁷ <http://www.scmp.com/news/asia/southeast-asia/article/1913995/discontent-indonesia-over-high-speed-rail-project-jointly>

¹⁸ Francis Hutchinson, "The Kuala Lumpur-Singapore High Speed Rail: Costs, Contracts and Complications", *ISEAS Perspective*, No.7, 17 February 2016.

¹⁹ Tempo, "Sayonara to the Shinkansen", 18 October 2015.

²⁰ JETRO, "Study on the High Speed Railway Project (Jakarta-Bandung Section)", November 2012.

²¹ See the Appendix.

reasonable for the short distance.²² Financially, the project would further burden the state budget substantially.²³ This argument is in line with priority changes in economic development made by the government, to focus instead on infrastructure development on other islands, and not on Java; and on the maritime sector. It makes sense to spare the state budget from a project which is not prioritized, and which is not even in the Master Plan of National Railway. However, China did not leave things at that. It soon presented a new proposal that does not require Indonesian government funding or guarantee. On 22 September 2015, a limited cabinet meeting decided to accept this new proposal given how it freed the government from providing any guarantee. Japan also present a revised proposal, but this still called for a government guarantee. Its flexibility thus won China the project and brought in its wake big disappointment for Japan²⁴.

Clearly, Japan has a comparative advantage in terms of technology, operational experience, and safety standards. However, China managed to surpass these in terms of financing and deployment of funds, and this proved critical. The financing scheme that China offered was more attractive in that it involves loans from the China Development Bank to Indonesia's state-owned banks (BUMN)²⁵. The providing of loans to state-owned banks should be seen as part of its larger strategy to develop its investment portfolio in Indonesia, and thus in the region. Currently, China is the 10th biggest investor in Indonesia, and its investment figures are clearly dwarfed by Singapore, Japan, South Korea, the United Kingdom, the United States, Malaysia, the Netherlands, the British Virgin Islands, and Hong Kong²⁶.

Moreover, China's proposal is also more comprehensive in what it is willing to do. For example, according to the Minister of SOEs, Rini Soemarno, China agrees to carry out the high-speed rail project under a business-to-business scheme, and as mentioned, with no state budget or government guarantee involved. In addition China will together with Indonesia jointly produce train cars not only for the high-speed train but also for electric and light trains, which will be developed in Indonesia. And finally, China will also build an aluminium plant in Indonesia to support the train manufacturing programme.²⁷

²² <http://www.thejakartapost.com/news/2015/09/04/why-government-cancels-high-speed-railway-project.html>

²³ <http://m.tempo.co/read/news/2015/09/04/078697695/alasan-jokowi-batalkan-proyek-kereta-cepat-jakarta-bandung>

²⁴ *Tempo*, "Sayonara to the Shinkansen", 18 October 2015. Jokowi sent the National Development Planning Minister, Sofyan Djalil, to Japan to inform PM Shinzo Abe that Indonesia could not accept Japan's proposal.

²⁵ <http://finance.detik.com/read/2016/03/01/194505/3155168/5/benarkah-china-bisa-ambil-alih-bank-bumn-jika-gagal-bayar-utang>

²⁶ Prashanth Parameswaran. "China Is Now One of Indonesia's Top Ten Investors," <http://thediplomat.com/2015/04/china-is-now-one-of-indonesias-top-ten-investors/>

²⁷ Kompas, "Setelah KA Cepat, Rini Ajak China Kerja Sama di Industri Aluminium", 22 January 2016,

http://bisniskeuangan.kompas.com/read/2016/01/22/094900026/Setelah.KA.Cepat.Rini.Ajak.China.Kerja.Sama.di.Industri.Aluminium?utm_source=WP&utm_medium=box&utm_campaign=Kknwp

Table 1: Comparing Chinese and Japanese Proposals

	<i>China</i>	<i>Japan</i>
Total cost	US\$5.5 billion (IDR 74.3 trillion)	US\$6.2 billion (IDR 83.7 trillion)
Government commitment	No guarantee from government or state budget Business to business deal	Government guarantee (50% of project value) and financing from the state budget Government-to-government deal
Business concept	25% equity, 75% loans from CDB Loan terms: 40-year, 10-year grace period	75% loans from JICA, 25% state budget Loan terms: 40-year, 10-year grace period
Financing	60% US\$, 2% interest per year 40% RMB, 3.46% interest per year	100% Yen, 0.1% interest per year (government loan)
Construction	Excavation 16.6 km Landfill 40.5 km Raised 70.5 km Tunnels 22.9 km	Excavation 24.22 km Landfill 34.58 km Raised 39.2 km Tunnels 42.14 km
Railway track	150.5 km of track Route: Gambir – Gedebage 8 stations The revised version: 142.3 km of track Route: Halim-Karawang-Walini-Tegalluar (4 stations)	140.14 km of track Route: Dukuh Atas – Gedebage 5 stations
Speed	350-380 km per hour	320 km per hour
Ticket price	IDR 200,000 (US\$14.8)	IDR 200,000 (US\$14.8)
Time frame	Begin construction 2016 Completed 2018 Operational 2019	Begin construction 2017 Completed 2019 Operational 2021

Source: *Tempo*, 14 February 2016.

The Indonesian government's decision to have China build the high-speed rail may also signal its dissatisfaction with the slow progress in Japan's infrastructure investment in

previous years²⁸. Japan was perceived to have been too rigid and overly cautious, which resulted in a long time gap from planning and implementation of the project²⁹.

In any case, public reactions to the decision have been strong. The fact that the project was not a priority to start with, but also in particular fear over the risk of increased China's investments in infrastructure projects, were major points that have been discussed.³⁰ China's track record in infrastructure projects in Indonesia is mixed. There are negative reports with regard to Chinese infrastructure projects in Indonesia, for example the 10,000 MW electricity project from the SBY era. About 90 percent of that project was conducted by Chinese contractors, and the Indonesians had complained about the low quality of Chinese equipment, unqualified Chinese contractors, poor service maintenance and delayed completion³¹. At the same time, there were also complaints from the Chinese contractors that the bidding price set by the Indonesian government was too low by international standards. This had to result by extension in quality reduction³². With regards to the delay, they drew attention to Indonesia's notoriously lengthy land acquisition process, and argued that the Indonesian government had failed to ensure land provision on time and this was what caused the construction delays.

Nevertheless, not all Chinese investments had been criticised. Some infrastructure projects built by China have been successful, for example the Suramadu bridge linking East Java and Madura. Given the mixed results of Chinese projects, and considering the future potential for economic cooperation between Indonesia and China, a special team established to handle China's investments and concerns may be necessary.³³

CONCLUSION

The high-speed railway project was initially planned for connecting Jakarta and Surabaya and beyond, and with Japan's assistance, the Jakarta-Bandung section was accepted as a more economical route compared to the coastal route to Cirebon. However, Japan's proposal relied on government investments and loans, to which President Joko Widodo was strongly opposed. The investment opportunity was immediately taken by China who offered a more acceptable proposal.

²⁸ <https://asiainsight.mni-news.com/posts/china-burnishes-image-with-indonesia-deals-puts-japan-in-shadow-9832>

²⁹ Interview with Mr Juraku Masahiro, Representative, Japan International Cooperation Agency (JICA), Indonesia Office. 10 August 2015.

³⁰ *Tempo*, "Selamat Datang Buruh Cina", 6 September 2015.

³¹ Interview with Mr. Nasri Sebayang, Director of Construction and Renewable Energy, PT PLN (Persero). 13 August 2015.

³² Interview with Mr Wang Liping, Minister Counsellor, Chinese Embassy Jakarta. 14 August 2015.

³³ <http://www.thejakartapost.com/news/2016/03/01/eyes-asian-powerhouse-china-expands-investments-ri.html>

Moreover, China has been keenly showing a desire to support Indonesia's infrastructure development. Indonesia does need a lot of infrastructure to be built, and China is able to offer the required technology, expertise and money. Indonesia has also expressed hope that China will increase its investment and participation in various infrastructure projects in the country. Given these mutual interests, China is likely to become one of the top investors in Indonesia, alongside Singapore, Japan and South Korea.

Observing the shift in global finances, Indonesia has decided to lure China to invest more in Indonesia. The high-speed rail project can be seen as a precondition for attracting more Chinese investment into the country. Therefore, the high-speed rail project cannot be understood merely from the economic angle alone.

Connected to the high-speed rail project are plenty of other opportunities for investment in Indonesia. The urban railway networks which include links to airports or seaports would be the most needed in some cities in Java which are struggling with traffic jams on a daily basis. Currently only Jakarta has started the construction of a mass rapid transit (MRT) system, with Japanese funding. Bandung and Surabaya have done studies for building light rail transit (LRT) systems, but no construction has started yet. Other large and metropolitan cities will soon need similar transit systems, and the Jakarta-Bandung high-speed rail, which uses a business-to-business scheme and without government funding may be replicated for projects to build these.

<p>ISEAS Perspective is published electronically by:</p> <p>ISEAS-Yusof Ishak Institute 30 Heng Mui Keng Terrace Pasir Panjang Singapore 119614</p> <p>Main Tel: (65) 6778 0955 Main Fax: (65) 6778 1735</p>	<p>ISEAS-Yusof Ishak Institute accepts no responsibility for facts presented and views expressed.</p> <p>Responsibility rests exclusively with the individual author or authors. No part of this publication may be reproduced in any form without permission.</p> <p>Comments are welcome and may be sent to the author(s).</p> <p>© Copyright is held by the author or authors of each article.</p>	<p>Editorial Chairman: Tan Chin Tiong</p> <p>Managing Editor: Ooi Kee Beng</p> <p>Editors: Lee Poh Onn and Benjamin Loh</p> <p>Assistant Editors: Vandana Prakash Nair, Veena Nair and Michael Yeo Chai Ming</p>
--	---	--