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INDONESIA'S INFRASTRUCTURE DEVELOPMENT UNDER THE JOKOWI ADMINISTRATION

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Infrastructure is vital for development. Today, the role of physical infrastructure has taken centre stage as a country's international competitiveness is determined by the state of development of its infrastructure.[1] Estache and Fay find that, over the past twenty-five years, there is abundant empirical evidence showing the impact of infrastructure on economic growth, especially at lower levels of development.[2] Investment in infrastructure is perceived as key to improving the efficiency and productivity of an economy, thus supporting the country's economic growth while reducing income inequality and poverty.[3]

The current state of the infrastructure in Indonesia is better than it was after the economy was hit hard by the 1997 Asian financial crisis. However, Indonesia is still struggling to increase investment in infrastructure to a level sufficient to support the high growth rates it saw in the early 1990s. In the thirty years prior to the crisis, infrastructure played a key role in driving growth and poverty reduction in the country.[4] After the 1997 crisis the Indonesian government experienced financial difficulty that forced it to reduce development spending, especially for infrastructure. When Susilo Bambang Yudhoyono (SBY) became President in 2004, the state of Indonesia's infrastructure ranked among the lowest in the region. For several years the lack of investment in infrastructure has been blamed for deterring investors, hence dragging Indonesia's economic growth down from its potential. According to World Bank estimates, Indonesia's dilapidated infrastructure has contributed to a 1 per cent loss of economic growth each year since 2004.[5]

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During his two-term presidency (2004–14), to his credit, SBY managed to restore and maintain political and economic stability in Indonesia's complex democratic environment. Fiscal consolidation was achieved during his first term (2004–9).[6] This set the necessary foundation for Indonesia to move beyond its infrastructure impasse. During SBY's first term, Indonesia hosted several infrastructure summits to attract investors, both foreign and domestic. It was during this time that the country slowly opened up its infrastructure sectors to private sector participation, mainly in power, toll roads, railways and seaports. Several regulations were enacted and institutions established to promote public private partnerships (PPPs). Then, in 2011, the SBY administration unveiled the Master Plan for Acceleration and Expansion of Economic Development of Indonesia (abbreviated as MP3EI).[7] The master plan emphasizes the need for heavy investment in infrastructure and improvement in the investment climate to boost average annual growth to 8–9 per cent between 2015 and 2025.

In view of SBY's ambition to solve Indonesia's infrastructure constraints, the Jokowi administration's infrastructure agenda seems like the same old thing in a new package. In the National Medium-term Development Plan, RPJMN (2015–19), the Jokowi administration promises to build 5,000 kilometres of railway tracks, 2,600 kilometres of roads, 1,000 kilometres of toll roads, forty-nine dams and twenty-four seaports, as well as to construct power plants with a combined capacity of 35,000 megawatts.[8] What arguably differentiates the two administrations is the emphasis given to the type of infrastructure. SBY's administration prioritized land connectivity (mostly roads), while Jokowi pledges to put more emphasis on maritime connectivity.

As was the case for its predecessor, the Jokowi administration will need to face many critical challenges in order to be able to execute its ambitious infrastructure agenda. This chapter discusses the key challenges faced by the Jokowi administration for it to be able to accelerate infrastructure development in Indonesia. Most are not new challenges and arguably some are the legacies of Jokowi's predecessor. The chapter will discuss how the new administration has responded to these challenges. The next section describes the infrastructure situation prior to Jokowi becoming President. It discusses SBY's legacy in setting the basic foundations for future governments to accelerate infrastructure development. The third section discusses Jokowi's infrastructure agenda and what his administration has done since it came to power. The fourth discusses some key challenges to infrastructure project implementation; it touches on the political economy of infrastructure investment. The last section provides concluding remarks and policy recommendations.

Setting the Scene

Crumbling Infrastructure after the 1997 Crisis

The 1997 Asian financial crisis was extremely severe. It not only destroyed much of the development achieved under the New Order regime (1966–98), but also toppled the regime's powerful leader, Soeharto, from power after thirty-two years of authoritarian rule. Most obviously it has adversely affected the condition of Indonesia's infrastructure. The *Global Competitiveness Report 2002* captures Indonesia's dramatic slide in overall infrastructure quality due to political uncertainty after the crisis.[9] The report shows that for most infrastructure indicators, Indonesia's competitiveness ranked near the bottom among its neighbours (Table 1). This was clearly in contrast to the situation before the 1997 crisis. In 1996 Indonesia outranked Thailand, Taiwan, China and Sri Lanka in terms of infrastructure development. By 2002 they had all surpassed Indonesia — which finished sixty-fourth out of eighty countries surveyed.[10]

The 1997 financial crisis caused many planned private and public infrastructure projects to be suspended or cancelled. As the rupiah plunged from Rp2,500 per dollar to Rp10,000 per dollar, the financial viability of active private projects diminished. According to a 2004 World Bank report, public investment in infrastructure fell from US$9.2 billion in 1996 to US$2.2 billion in 2001, a 76 per cent decline. Similarly, private investment also plummeted from US$6.7 billion in 1996 to around US$800 million in 2001.

The depth of the crisis can also be seen from the contraction of central government development expenditure. In 1994 the central government spent almost US$14 billion on development; 57 per cent of this was allocated for infrastructure. By 2002 the central government's development spending had plunged to less than US$5 billion, of which only 30 per cent was for infrastructure.

TABLE 1
Indonesia Infrastructure Performance, 2002

Indicator	*Value*	*Regional Ranking*
Electrification rates (%)	53	11/12
Fixed Telephone Lines (%)	4	12/12
Mobile Subscribers (%)	6	9/12
Access to Improved Sanitation (%)	55	7/12
Access to Improved Water (%)	78	7/12
Road Network (km per 1,000 pop.)	1.7	8/12

Source: World Bank (2004), p. 2.

So, in the wake of the 1997 financial crisis Indonesia has suffered from a chronic infrastructure deficit that has adversely affected its growth prospects. Some estimates suggest that in order for the country to achieve an annual growth rate of 7 per cent or higher, it needs to spend at least 5 per cent of GDP on infrastructure.[11] In 1996 Indonesia invested 7 per cent of GDP in infrastructure, but this figure has dropped to below 3 per cent in recent years. In view of this investment gap, Indonesia needs to increase its infrastructure spending by at least an additional 2 per cent of GDP annually to reach its 7 per cent medium-term growth target.

SBY's Legacies

SBY inherited an economy that was just starting to recover from the 1997 Asian financial crisis. His administration managed to solidify economic and political stability in a young democratic country, thus earning the country investment grade ratings from Fitch and Moody's. And due to sound macroeconomic and financial policies, Indonesia managed to weather the 2008 global financial crisis quite well. In addition, the SBY administration also prioritized infrastructure investments to support economic growth. In early 2005 Indonesia held the first infrastructure summit in Jakarta in order to attract investors to various infrastructure projects worth US$22 billion. The summit was attended by more than 500 investors, both domestic and international.[12] In 2006 Indonesia hosted another infrastructure summit. This time more than a thousand participants attended the three-day summit, of whom 350 were representatives of major foreign corporations and investment firms.[13] However, SBY's summits failed to attract private investors to participate in the various infrastructure projects offered.[14] One major factor was the unfavourable investment climate, which deterred investors from entering the sector.

To boost investors' confidence in the government's commitment, in 2011 the SBY administration launched the MP3EI 2011–2025 mentioned earlier. This document provides strategic directions for key development targets, including the estimated financial needs for major infrastructure projects. MP3EI was intended to signal the government's commitment to infrastructure investment, in which the private sector was encouraged to join through PPPs. It offered ninety PPP projects valued at Rp536 trillion (US$47 billion).[15] However, due to a lack of financing and institutional capacity to implement the projects, only three projects had reached the groundbreaking stage by 2014.

To support PPP implementation, the government passed Presidential Regulation No. 13/2010, which was then amended by Presidential Regulation No. 56/2011.

The government also established a series of supporting facilities, including the PPP central unit under BAPPENAS,[16] a risk management unit under the Ministry of Finance, a project-development facility under BAPPENAS and a land-revolving fund under the Ministry of Public Works. Moreover, the government has set up PT Sarana Multi Infrastruktur (PT SMI), PT Indonesia Infrastructure Finance (PT IIF) and the Indonesia Infrastructure Guarantee Fund (IIGF) to provide advisory services, financing and loan guarantees.

Finally, to manage the potential risk of increasing land acquisition costs, the government has set up a land-revolving fund. This fund provides bridging loans for toll road investors to buy land as well as to cover the risk of the increasing cost of land acquisition above a certain level. The government allocated US$154 million for loans under the land fund in 2009.[17]

To expedite the land acquisition process, the SBY government and the parliament ratified the Land Acquisition for Development of Public Interest Law. This law is seen as an important legal breakthrough aimed at solving the frustratingly slow land-acquisition process, especially after decentralization. Notably, the law exercised eminent domain and transferred the authority for infrastructure projects from the local governments back to Jakarta. Jakarta believed that the sluggish land-acquisition process was caused by the poor capacity of local officials; hence, it returned the authority to the National Land Agency (BPN). This central government authority with a history of corruption allegations has been appointed as the champion of land acquisition in the public interest. Time will tell whether the 2012 law proves effective in expediting the land acquisition process.

Overall, during the period 2011–14, around US$73 billion had been spent to finance 383 infrastructure projects.[18] By the end of SBY's presidency, efforts to improve infrastructure in the country had achieved some progress. According to the Global Competitiveness Index 2014–15, infrastructure and connectivity continue to improve, and Indonesia moved up twenty places in the index from 2011 to 2014 as a result of improvements in eighteen of the twenty-one indicators (see Table 2). In terms of the quality of overall infrastructure, Indonesia during SBY's administration managed to surpass Thailand. However, the quality of infrastructure of ports, roads, airports and electricity supply still lag behind neighbouring countries.

In contrast to his first term, however, in the second term of his presidency SBY appeared to lose focus on his infrastructure agenda. To his critics SBY was seen as becoming an overly cautious leader who failed to show strong leadership when the country needed it the most. SBY was reluctant to implement many of the stipulations contained in his eminent domain decrees. Davidson argued that SBY

TABLE 2
Global Competitiveness Index Rankings of Infrastructure in Select Countries, 2014

Quality of Overall Infrastructure		*Quality of Ports Infrastructure*	
1	Switzerland	1	Netherlands
2	Hong Kong SAR	2	Singapore
5	Singapore	4	Hong Kong SAR
20	Malaysia	19	Malaysia
72	*Indonesia*	54	Thailand
76	Thailand	*77*	*Indonesia*
Quality of Roads Infrastructure		*Quality of Air Transport Infrastructure*	
1	United Arab Emirates	1	Singapore
2	Portugal	2	United Arab Emirates
6	Singapore	3	Hong Kong SAR
19	Malaysia	19	Malaysia
50	Thailand	37	Thailand
72	*Indonesia*	*64*	*Indonesia*
Quality of Railway Infrastructure		*Quality of Electricity Infrastructure*	
1	Japan	1	Switzerland
2	Switzerland	2	Hong Kong SAR
10	Singapore	6	Singapore
12	Malaysia	39	Malaysia
41	*Indonesia*	58	Thailand
74	Thailand	*84*	*Indonesia*

Note: Ranked out of 144 countries.
Source: World Economic Forum, Global Competitiveness Index 2014–2015.

feared appearing abusive in a way that would recall New Order practices. Thus, his hesitancy was a way to align his policy approach with the values of a new democratic Indonesia.[19] Overall, as Hill argues, infrastructure is a major area of under-performance for the SBY decade.[20] Despite various efforts to attract investors, SBY had few significant achievements. Most importantly, his administration failed to improve the investment climate that is crucial to attract investors.

Jokowi's Infrastructure Agenda

President Jokowi has stated his ambition to increase investment in infrastructure to a level sufficient to support an annual GDP growth rate of 7 per cent over the next five years. His vision has been officially translated into the RPJMN

2015–19.[21] The RPJMN is a technocratic document prepared by BAPPENAS to provide strategic development guidelines for state agencies, local governments and other stakeholders. It indicates key development priorities and financing plans. It states that Indonesia will need around Rp5,519.4 trillion (US$400 billion) for infrastructure investments over the next five years. As indicated in Figure 1, electricity, sea transportation and roads are the three top priority sectors for infrastructure investment.

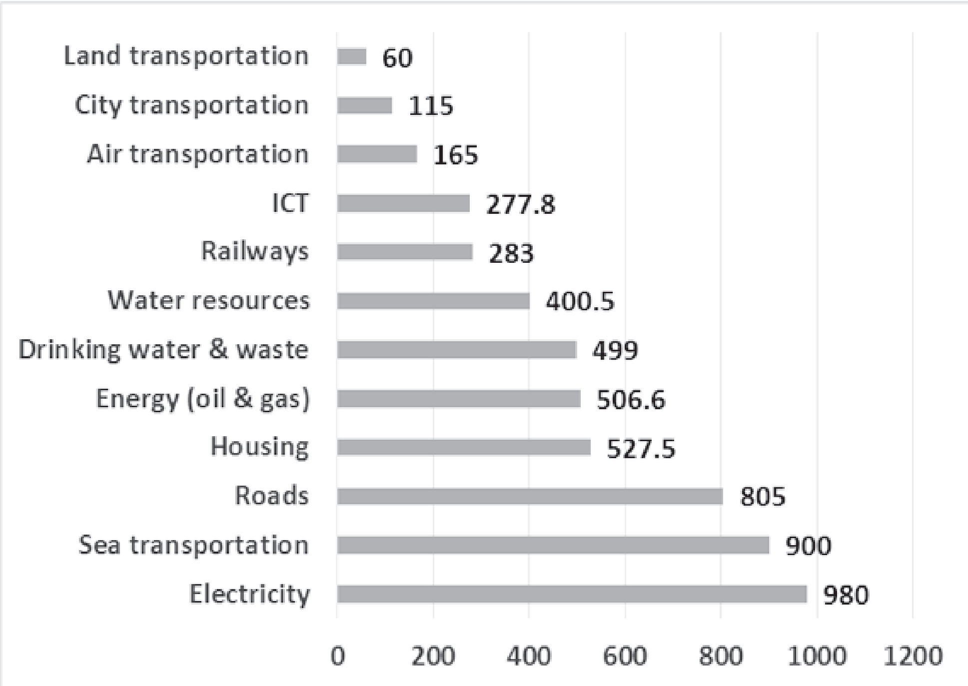
The following section discusses four key sectors that have been marked as Jokowi's main priorities. The first is the *maritime sector*. Jokowi has stated that Indonesia has been neglecting its maritime potential for decades. As an archipelagic country, Jokowi believes that Indonesia should turn its vast sea resources into its economic strength. During the 2014 East Asia Summit in Naypyidaw, Myanmar, Jokowi presented his vision to transform Indonesia into a global maritime fulcrum. This maritime fulcrum covers five pillars: (i) revitalizing maritime culture, (ii) improving the management of oceans and fisheries, (iii) developing the maritime economy, (iv) strengthening maritime diplomacy and (v) reinforcing maritime defence capacity.[22]

Specifically, on the third pillar, Jokowi plans to develop a "sea toll" project to improve inter-island connectivity across the archipelago. Studies show that a lack of regular inter-island freight services and inefficient port handling are the main factors behind the high logistics costs that lead to huge price disparities in Indonesia.[23] Basically, the sea-toll project provides regular freight services connecting the western and eastern parts of Indonesia. The goal is to reduce the price disparity between the two regions.

As can be seen from Figure 2, the sea-toll project provides freight services connecting the two largest ports in Java (Tanjung Priok and Tanjung Perak) and some key ports in Maluku and Papua. To support this sea-toll project, the government plans to build twenty-four seaports across the archipelago.

Second, Jokowi has stated that Indonesia will attain food self-sufficiency within three to five years. For that, the government will increase its investment in infrastructure and services to support the *agriculture sector*. Over the next five years the Jokowi administration plans to build forty-nine dams and develop nine million hectares of agricultural land (mostly outside Java).[24] In addition, the government will increase development spending for infrastructure in rural areas, through the "village fund". As will be seen later in Table 4, the government plans to more than double its transfers to regions and the village fund in 2016. This trend reflects the government's new emphasis on initiating development in the peripheries.

FIGURE 1
Indonesia's Infrastructure Investment Plan, 2015–19 (Rp trillion)

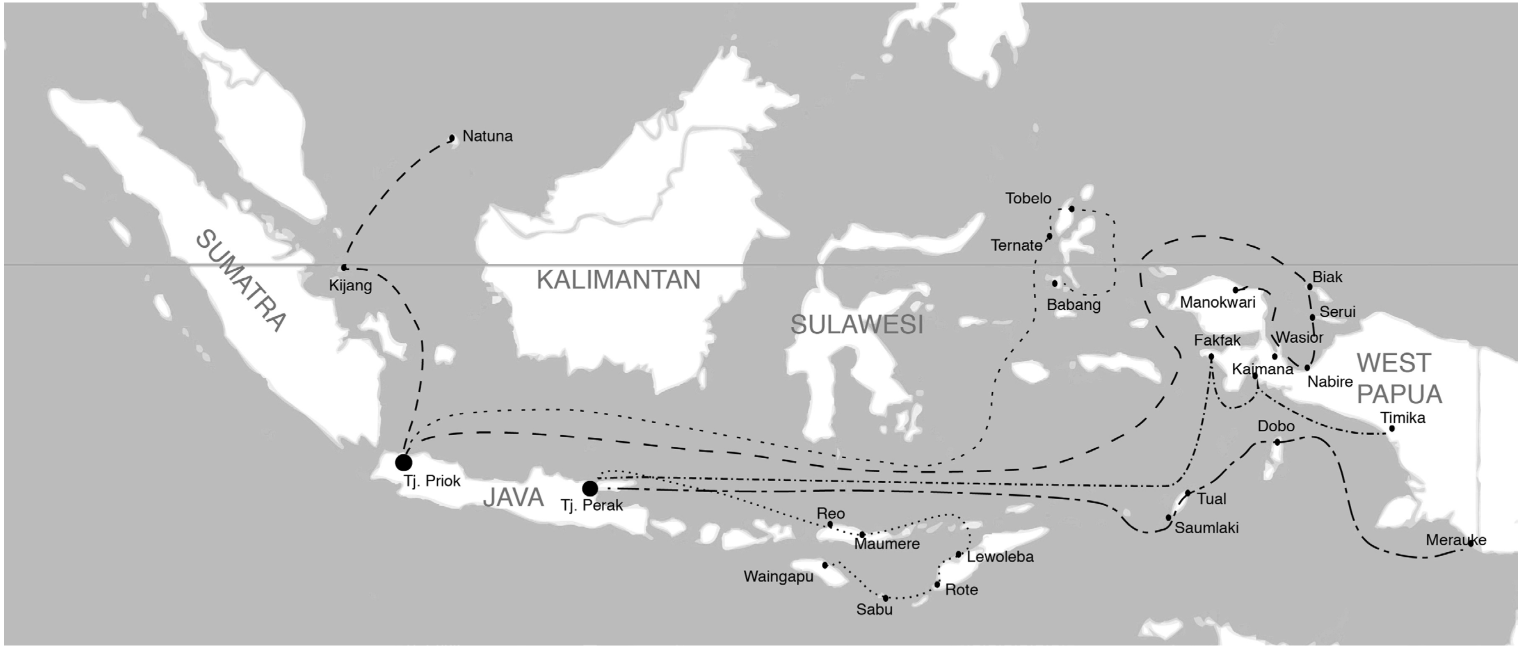


Source: RPJMN (2015–19), Bappenas, Bank Mandiri.

Third, Jokowi also plans to invest more in *road and railway infrastructure* to improve distribution networks across Indonesia. The administration plans to continue building 2,700 kilometres of new roads and 1,000 kilometres of new toll roads. Obviously, these are not new plans but are simply continuing what SBY's administration had initiated. What the new administration wants to do is to accelerate the execution of many planned projects. The investment in roads is expected to improve distribution networks for many agricultural and manufacturing products, thus reducing the notoriously high logistics costs in the economy. In addition to road investment, the government also aims to build a 3,258-kilometre railway network outside Java.[25] This includes the 595-kilometre Trans Papua Railway, which will connect Sorong and Jayapura.

Finally, securing the country's *energy supply* (including electricity, oil and gas) is the highest priority in the five-year development agenda. As demand for electricity continues to exceed supply, it is estimated that the high-growth regions

FIGURE 2
Indonesia's Sea Toll Transportation Project



Source: Created by Kathleen Azali, a Research Officer with the ISEAS–Yusof Ishak Institute, using data from <http://finance.detik.com/read/2015/11/02/132755/3059614/4/ini-peta-6-rute-tol-laut-jokowi>.

of Java and Bali will soon face a power crisis. Considering future energy needs, within the next five years the government has projected the need to develop more power plants with a total capacity of 35,000 megawatts. Otherwise, the country will suffer shortages in power and will experience frequent blackouts. This will become a serious bottleneck for industries and will adversely affect the investment climate in Indonesia. Together, the power plant projects are estimated to cost about Rp1,120 trillion ($88 billion).[26]

What the Jokowi Administration Has Done

State Budget Allocation

The first thing that Jokowi did when he came to office in October 2014 was to cut fuel subsidies. This was a move that his predecessor tried to avoid due to its high political risk, but Jokowi realized early on that the fiscal burden of fuel subsidies would put his infrastructure plans in limbo. To Jokowi's credit, this decision saved the state budget about Rp240 trillion (US$17.8 billion) in 2014 and around Rp65 trillion (US$4.8 billion) in 2015. As a result the government can free some fiscal space to support its infrastructure, health and education programmes. Compared to the SBY period, the allocation of public spending for infrastructure as a proportion of GDP during the Jokowi administration has increased quite dramatically, rising from 1.8 per cent of GDP in 2014 to 2.7 per cent of GDP in 2015. Table 3 shows that the SBY administration never reached the 2 per cent benchmark, as the state budget was constrained by the rise of fuel subsidies.

As Table 4 shows, in the revised 2015 state budget, capital expenditure for infrastructure projects increased to Rp290.3 trillion (US$20.9 billion). This increase represents a more than 90 per cent surge from expenditure in 2014, the largest amount dedicated to the infrastructure sector since 1997.

In the 2016 state budget the government has increased infrastructure spending to Rp313.5 trillion (US$22.6 billion). Of this amount, the Public Works and Public Housing Ministry is set to receive the largest allocation, amounting to Rp101.2 trillion, or about 32 per cent of total infrastructure spending. Table 4 also indicates the dramatic increase in the amount of transfers to regions and the village fund (*dana desa*). In 2016 the total amount of transfers to the regions and village fund will amount to almost double the figure for 2015. This trend is in line with Jokowi's vision to develop the country from the peripheries, i.e., putting the regions and villages at the centre of the country's development.

TABLE 3
Trend of Infrastructure Budget in Indonesia, 2010–16

	2010	*2011*	*2012*	*2013*	*2014*	*2015**	*2016**
Infrastructure	99.4	114.2	145.5	155.9	177.9	290.3	313.5
Total budget	1,126.1	1,320.8	1,548.3	1,725.2	1,876.9	1,984.1	2,121.3
GDP	6,446.9	7,419.2	8,230.9	9,087.3	10,094.9	10,569.4	11,129.5
Percentage of total budget	8.8%	8.6%	9.4%	9.0%	9.5%	14.6%	14.8%
Percentage of GDP	1.5%	1.5%	1.8%	1.7%	1.8%	2.7%	2.8%

Note: * Planned figures.
Source: Ministry of Finance.

TABLE 4
Infrastructure Spending Breakdown, 2015–16 (Rp trillion)

Description	*APBNP 2015*	*RAPBN 2016*
Economic Infrastructure	**280.0**	**302.3**
1. Ministerial Spending	196.4	167.5
Ministry of Public Works and Public Housing	111.1	101.2
Ministry of Transportation	59.1	47.2
Ministry of Agriculture	8.9	6.2
Ministry of Energy and Mineral Resources	8.1	3.6
2. Non-Ministerial Spending	6.8	5.1
Viability Gap Funding	1.2	1.1
Grants	4.5	4.0
3. Transfers to Regions and Village Fund	41.0	79.4
Special Allocation Fund	29.7	57.2
Village Infrastructure Fund	8.3	18.8
4. Payment Funding	35.7	50.3
Government Infrastructure Investment	5.1	9.2
State Capital Injection	28.8	40.2
Social Infrastructure	**6.5**	**6.5**
Ministry of Education and Culture	4.4	6.1
Ministry of Religious Affairs	2.1	0.5
Infrastructure Support	3.9	4.7
Ministry of Agrarian and Spatial Planning	1.3	1.6
Ministry of Industry	0.3	0.5
Total	**290.3**	**313.5**

Source: Public Works Ministry.

Inviting Investors

To achieve the ambitious infrastructure targets, the government has realized that the capacity of public financing is insufficient to the investment needs. It is estimated that Indonesia will require around US$300–400 billion over the period 2010–20.[27] Meanwhile, the government would only be able to finance about 20 per cent of the total investment needed. Given such a huge financing gap, the government needs to encourage more private investment, both local and foreign.

During his first official overseas trips in November 2014, Jokowi invited China and Japan to increase their investment for development of the country's infrastructure.[28] In Tokyo, Jokowi secured Japan's support for fresh investments in energy, transport and infrastructure. Japan also promised about US$1 billion in loans for railway projects, including the mass rapid transit system that is currently under construction in Jakarta. During the APEC CEO forum in Beijing, Jokowi offered various infrastructure projects and pledged to provide incentives and government support to investors. As a result of this visit, China and Indonesia signed an MOU on cooperation to build a high-speed rail project linking Jakarta and Bandung, as well as energy, maritime and other infrastructure projects.

In addition, Indonesia under the Jokowi administration has decided to join the China-led Asian Infrastructure Investment Bank (AIIB).[29] In June 2015 in Beijing, Indonesia, along with fifty-six other countries, signed the articles of agreement for the establishment of this new multilateral development bank. For Indonesia the AIIB is seen as complementing the Asian Development Bank (ADB) and World Bank, two traditional development partners that have invested significantly in infrastructure development in the country for several decades. The AIIB has the advantage that it is designed to give financial support, not only to governments, but also to private institutions for the development of infrastructure projects. In addition, the AIIB can provide loans for coal-based power plant projects, which the ADB and the World Bank try to avoid due to the perceived environmental implications.[30] As Indonesia plans to build more coal-fired power plants over the next five years, the AIIB could be the needed source of financing.

Showcasing Progress

Expectations are high for the Jokowi administration to show progress of what it has promised. Responding to these expectations, the government has demonstrated its commitment through the groundbreaking of ten key infrastructure projects in 2015 (Table 5). The first groundbreaking took place in April 2015, when the government launched the second stage of the 2,700-kilometre Trans-Sumatra toll road. This project covers a 150-kilometre highway connecting four parts of the southern section of the Trans-Sumatra highway (Terbanggi Besar–Pematang Panggang, Pematang Panggang–Kayu Agung, Palembang–Tanjung Api-api and Kisaran–Tebing Tinggi).

Then, in August 2015, Jokowi attended the groundbreaking ceremony for the long-delayed 2,000-megawatt coal-fired power plant project in Batang, Central Java.[31] The construction of this power plant was initially planned to commence in 2011 but it was delayed because of protracted land issues. In November 2015 the Ministry of Trade and Transportation officially launched Jokowi's sea-toll project.[32] The service will initially run only three freighters plying three routes between the two largest ports in Java (Tanjung Priok seaport in Jakarta and Tanjung Perak seaport in Surabaya, East Java) and major ports in Maluku, Papua, and the

TABLE 5
Ten Quick-Win Infrastructure Projects, 2015

	Project	*Location*	*Investment Value (Rp trillion)*
1	Bontang refinery	East Kalimantan	60
2	Batang power plant	Central Java	40
3	Drinking water treatment system (SPAM)	Semarang, C. Java	765
4	Trans-Sumatra highway construction stage II	Sumatra	30
5	Balikpapan–Samarinda highway	Kalimantan	11.4
6	Soekarno-Hatta Int'l Airport express train	Jakarta	24
7	Revitalization of three airports	Labuan Bajo, NTB; Radin Inten II, Lampung; Mutiara, C. Sulawesi	NA
8	East Kalimantan railway network	Kalimantan	20
9	Sumatra transmission 500kV	Sumatra	35
10	Sumatra-Java high voltage direct current	Sumatra, Java	20

Note: NA = Not available.
Source: Bappenas.

Riau Islands. For these pioneering routes, the government will initially subsidize the freight rates charged by the state-owned shipping company, PT Pelni, as the operator of the routes covered under the programme. The subsidy is needed for the services to run regularly as the load factor is very low. The subsidy will be removed once the regular freighter service is able to attract shippers, traders and manufacturers to use the routes, i.e., when the load factor can cover the operational costs.

The launch of several key infrastructure projects in 2015 is a promising sign amid a wave of gloomy stories over past years about delays to many public works programmes. Going forward, implementation of these projects is expected to strengthen investors' confidence in Indonesia's infrastructure programmes, thus attracting more private investment.

Current and Future Challenges

There are some lessons from the previous administration that can hopefully lead to improvement under the Jokowi administration. First, *good and effective* *leadership* is needed, and often this means making unpopular decisions, trading short-term gains for longer-term benefits, such as cutting fuel subsidies to increase development spending. Leadership is needed to coordinate many stakeholders involved in the infrastructure sector. Learning from past experiences, weak top leadership has caused poor project implementation as agencies and different levels of government work without coordination. Good and effective leadership can mitigate this type of coordination problem and minimize excessive and often conflicting regulations.

In addition, effective leadership needs strong public support. For this, the Jokowi administration needs to seek political support from the public and the parliament to implement its infrastructure development agenda. The challenge is that infrastructure investments will take a long time to have any meaningful outcomes, while often opposition parties and activists demand quick results. In view of this challenge, Jokowi's commitment will be tested on the ability of his administration to allocate the required public funds. This will not be easy given the complex executive–legislative relations in the vibrant yet flawed democracy of Indonesia. An example of the challenging situation was illustrated by the 2016 budget deliberations. In October 2015 the government proposed to increase state capital injections to twenty-four state-owned enterprises (SOEs) responsible for most of the infrastructure development projects in the country, amounting to Rp40.4 trillion ($2.96 billion) (see Table 4). The opposition parties rejected the government's proposal to increase state capital injections to the SOEs without offering any solid reason.[33] Pending parliament approval means that these SOEs will see a delay in budget disbursement, leading to delays in the implementation of some infrastructure projects. Going forward, in order to secure parliamentary support to allocate the needed fiscal resources to complete the existing and new infrastructure projects, the government will need a strong political will to fight through the many competing interests and deal with power struggles.

Second, infrastructure projects, by their very nature, require long-term financing, up to twenty, thirty or even forty years. Therefore, *securing sustainable long-term financing* is important to ensure that most of the projects can be completed. Commercial banks cannot finance long-term infrastructure projects due to the mismatch between the time horizon for their sources of funding (short-term) and the financing requirements for infrastructure projects (long-term). In this context, it is important to diversify the funding sources of commercial banks to include longer-term financing, either by issuing global bonds or through long-term borrowing from international banks. The previous administration was reluctant to borrow for infrastructure projects due to the overly cautious policy of maintaining a fiscal balance. While it has some merits, this overcautious policy could hurt economic growth. It is important for the Jokowi administration to loosen fiscal policy, as room for this exists since Indonesia's ratio of public debt to GDP is sound.[34] While at the same time, Indonesia must carefully seek the best alternatives for long-term financing sources. AIIB offers an attractive financing source, but Indonesia should find the best strategy to mix various multilateral financing sources.

Third, there is a serious challenge in terms of *human resources and institutional capacity*. Currently, there is limited human and institutional capacity available within the public sector to support quick implementation of infrastructure projects. This manifests itself in slow capital expenditure realization. Poor human and institutional capacity has caused the backloading of project spending to the last quarter of the year. As of October 2015, the Ministry of Public Works and Public Housing had spent less than half of the Rp118.6 trillion ($8.72 billion) earmarked for the ministry. This meant the ministry had to speed up its spending in the last two months of 2015. The practice of backloading project spending to the last quarter of the year may adversely affect project quality. Also, the government's plan to transfer more public resources to the regions and rural areas will be less effective without human resources and institutional capacity to implement the programmes. In view of this, additional funding must be given in tandem with capacity building for local governments, local institutions and local people.

Limited human and institutional capacity within the public sector also causes poor project preparation. Investors complain about the lack of "bankable" and "investable" projects.[35] Public institutions have failed to provide detailed designs, feasibility studies and environmental- and social-impact assessments for proposed PPP projects. Indeed, the lack of bankable and investable projects has discouraged private investors from participating in PPP projects. In this case, the government should seriously improve its human and institutional capacity in terms of project planning and preparation, budget disbursement, procurement and the tendering process. It remains to be seen whether Jokowi's instructions to accelerate the tenders and formulation of contracts for project construction and to protect project managers from criminal prosecution for state losses resulting from maladministration will improve project execution and reduce the number of project delays.

Fourth, Indonesia's financing needs are huge. While the public sector is still expected to retain an important financing role, the role of the private sector remains important (for construction, operation and financing), and perhaps will become more so. A lesson learnt from the previous administration shows that big summits and master plans were not enough. It is more important that the government provides *a conducive business climate* to attract private investors into the sector. Today, Indonesia is still struggling to provide such an environment. There are interconnected impediments to the wider opening of the economy to the private sector, including weak and fragmented state institutions captured by predatory elite interests, inefficient bureaucracy, weak rule of law and poor governance, among others.[36] In January 2015 the Indonesia Investment Coordinating Board (BKPM) launched a single platform for investors to apply for permits online, eliminating the past coordination problems between different ministries or institutions.[37] This is a positive step, but further steps still need to be taken to eliminate regulation overlaps and to shorten the business application timeline.

In addition, interagency coordination is difficult given Indonesia's high level of decentralization. Decentralization and the autonomy of local governments and legislative councils have been commonly blamed for complicating the implementation of various infrastructure programmes. Many projects brought in by the central government stalled, as some local institutions were not able to provide supporting services or facilities, or even complicated matters through various measures concerning taxes or land concessions. In response there has been a recent trend of re-centralization of policymaking, from local officials to the central government, including the 2012 Land Law. However, going forward there is a need to align the interests of central and local governments. Local governments should not be treated as mindless implementers of national policy. Instead, learning from China's experience, it should be seen that given the right legal and tangible incentives, provincial governments have been playing important roles in China's phenomenal infrastructure development.[38] In short, a better investment climate can only be achieved if there is a good alignment of incentive structures between central and local officials to support national infrastructure development plans.[39]

Fifth, several studies show that the most binding constraint to investment in infrastructure is difficulty in *land acquisition*.[40] Investors are waiting to gauge the effective implementation of Law No. 2/2012. Subsequent revisions to the law, through Presidential Regulation No. 30/2015, have facilitated timelier funding for land acquisition. Under the new regulations, private investors do not need to wait for state budget disbursement and can provide funds at an early stage, confident that these funds will either be refunded directly or through revenue arrangements as the project proceeds. The effectiveness of the 2012 land law will be tested in the case of the Batang power plant project along the north coast of Central Java. This project has been delayed for more than four years due to difficulties in acquiring the remaining 20 per cent of the project land. In fact, the long land acquisition process had caused one of the foreign partners to call it quits. For effective implementation of the law, the government should improve the institutional capacity of BPN and the courts to enforce eminent domain claims.

Last but not least, the government needs to carefully assess and effectively respond to the *social and environmental impact* of various infrastructure projects. Most importantly, the development of infrastructure should benefit the local community through direct job creation, technology transfer and local capacity building. The Jokowi administration has to ensure that the distribution of benefits is right. For example, when thinking about the compensation and relocation of affected families with regard to the construction of dams, roads and power plants, the government also needs to think beyond just financial compensation; it needs to consider their future job and livelihood prospects. In the case of the Jatigede dam in Sumedang Regency, West Java, poor assessment of the social impact of the project has delayed the project for decades. The construction of the dam, planning for which was initiated in 1963, was finally started in November 2007. This US$467 million project has still not been fully completed, and the government is yet to finish paying compensation and cash assistance to the families affected by the constuction. Of the 10,924 families considered eligible for payments, only 8,238 have received compensation of Rp122 million ($8,690) and cash assistance of Rp29 million per family.[41] These sorts of problems could be mitigated if the state institutions are good.

Concluding Remarks

SBY's government had set in place valuable foundations for the Jokowi administration to be able to solve Indonesia's infrastructure problems. Laws, regulations, institutions and planning documents are all there. It is up to the current administration to execute them. Jokowi's administration can learn from the success and failures of its predecessor. Learning from SBY's experiences, it can be seen that big ambition per se is not enough. It requires good and effective leadership with a strong political will to implement the plans. And often there is a need to make tough calls that may be unpopular in order to achieve long-term development goals. Jokowi will also need to deal cleverly with Indonesia's messy democratic political system to be able to execute his infrastructure development agenda.

As public debt relative to GDP remains sound, the government should not be overly cautious in loosening fiscal policy to beef up growth. Financing infrastructure projects can have significant multiplier effects on the economy, creating more jobs and demand for local products and services. To ensure project sustainability until completion, it is important to find the best long-term financing sources to complement Indonesia's limited fiscal space. In this respect the AIIB represents an attractive source of financing, but Indonesia should find the right balance between various multilateral financing sources and domestic ones.

To ensure quick and smooth implementation, the government must seriously improve human and institutional capacities in terms of project planning and preparation, budget disbursement, procurement and the tendering process. At the same time it is important for the government to provide a business climate conducive to attracting private investors to the sector. Complex land acquisition processes have deterred many potential investors from entering the infrastructure sector. In light of this the Jokowi administration must showcase their capacity to implement the 2012 land acquisition law. Effective socialization will be crucial to reduce public resistance from uninformed landowners. Finally, the government must ensure that the development of infrastructure will create benefits for the affected local communities through direct job creation, technology transfer and local capacity building.

Notes

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