Introduction

Infrastructure as a problem

In early 2005, ninety days into his first term, Indonesia's president, Susilo Bambang Yudhoyono, hosted an infrastructure summit at a premier hotel in Jakarta, the nation's capital. The year before, the World Bank had declared an end to the Indonesian financial crisis that, beginning in 1997, was so severe that it not only wiped out much of the capital accumulation and poverty alleviation achieved under the New Order regime (1966–98), it also helped to sweep the regime's strongman, Soeharto, from power in 1998 after thirty-two years of authoritarian rule. Six years later, in 2004, the Bank's report on the state of the Indonesian economy noted, "Indonesia is turning a corner, from crisis management towards growth. For the first time, after the crisis, Indonesia is able to focus on longer-term development policies. Reversing the trend of deteriorating infrastructure is one of the top priorities."[1] More than 500 representatives of domestic and international capital attended Yudhoyono's summit, eager to learn about the projects on offer and what incentives the government was providing. In his speech, the vice president of the World Bank for East Asia and the Pacific referred to the summit as an "unusual opportunity to help this new Government build a new Indonesia, an Indonesia which fulfills the national hopes and aspirations of all Indonesian people."[2]

Clearly, it was believed that a rapid expansion of the country's toll-road network was key to achieving this lofty goal. The thirty-eight expressways being offered for tender with a total investment value of US$9.4 billion were by a large measure higher than any other infrastructure project category.[3] Investors were expected to bid on and

[1] World Bank 2004, p. 1. See also Shirashi (2006, pp. 42–45). [2] Kassum 2005.
[3] The next highest number being for water supply (twenty-four), but in terms of capital value, it was for electricity generation at US$5.9 billion (PT Data Consult 2005). In the literature, "expressway" connotes a limited-access, high-grade highway that is tolled so is interchangeable with tollways and toll roads. "Highway" is ambiguous, "freeway" less so.

build these projects. After all, Indonesia had some experience in developing tollways. In the 1970s and 1980s, the state toll-road corporation, Jasa Marga, had built a number of relatively short toll roads in the greater Jakarta area and selected major cities, including Semarang, Surabaya, and Medan. By the late 1980s, private investors were coming on board. However, Soeharto's children, notably his eldest daughter, Siti Hardiyanti Rukmana (popularly known as Tutut), dominated the field. Endowed with generous funding from state banks, her company helped to complete the incredibly profitable Jakarta Inner Ring Road (JIRR). Nevertheless, the devastation of the 1997–98 Asian financial crisis scuttled the government's plan to expand nationally the toll-road network in which private domestic capital, in some cases in partnership with foreign investors, was expected to play a leading role.[4]

In addition to Indonesia's "turning of the corner" financially, several factors prompted the pomp-and-circumstance of Yudhoyono's 2005 Infrastructure Summit. The country's physical infrastructure was a wreck.[5] Under Soeharto's New Order regime, high rates of fixed capital investment were crucial to support Indonesia's average annual growth rate of 7 per cent. Improvements to the country's infrastructure, mostly financed by the state, were so profound that two scholars described them as a "quiet revolution." For example, from 1967 to 1985, the length of roads increased roughly two-and-a-half times, and the number of roads deemed to be in "good" condition rose about sixfold.[6] But since the Asian financial crisis, low rates of investment had bedeviled Indonesia. Not until 2005 did foreign direct investment flows into Indonesia return to positive levels; this was longer than any other crisis-affected country.[7] And not until 2009 did relative levels of investment surpass the levels achieved prior to the crisis.[8] Yudhoyono and his advisors could not help but be aware of the effect that the dangerous decline in private and public investment was having on the country's infrastructure. The World Bank noted that in 1996 Indonesia outranked Thailand, China, and Sri Lanka in physical infrastructure. By 2002, all three countries surpassed Indonesia.[9] In global surveys, Indonesia's

[4] For a comprehensive list, see "Jalan Tol Kian Panjang, Perlu Transparansi," *Suara Pembaruan*, February 24, 1997 (library.ohiou.edu/indopubs; last accessed March 19, 2014).
[5] The World Bank identifies physical infrastructure to include the sectors: power (or related energy sources); transport (airports, ports, roads, and railways); water, sanitation, and irrigation; and telecommunications (World Bank 1994, p. 2 [Box 1]).
[6] Dick and Forbes 1992, p. 267.
[7] Aswichayono, Hill, and Narjoko 2010, p. 1087; OECD 2010, p. 46, Figure 1.2.
[8] It reached 31.1 percent of GDP, surpassing the precrisis mark of 30 percent.
[9] World Bank 2005, p. 74.

ranking in infrastructure quality fell from 46 out of 142 countries in 2001 to 78 in 2012.[10]

How much investment in infrastructure, then, does Indonesia need? To achieve a growth rate of 7 per cent and above, the government would need to spend an estimated 5 per cent of its gross domestic product (GDP) on infrastructure, based on a benchmark established by international financial institutions (IFIs) for developing countries. However, the Indonesian government had budgeted only around 3 per cent for 2000, with the level of investment improving to just above 4 per cent in 2009. During this period, the figures for Thailand, Vietnam, and China were each likely over 7 per cent.[11] In 2011, the head of Indonesia's Coordinating Board for Investment estimated US$200 billion in infrastructure spending would be required over the next five years to achieve 7 per cent growth. But the government seemed only capable of supplying about one-third of that.[12] So, even as post-Soeharto administrations steered a course of fiscal responsibility, they had already begun to hint that outside help was needed – and was even expected – to close this yawning investment gap, as exemplified by the 2005 Infrastructure Summit. The buzz-acronym in Indonesia, as elsewhere around the world, was PPP – public–private partnership. PPPs promise private investors special benefits and cost advantages; in return, the government gets infrastructure developed with a lower burden on its own finances.[13]

Despite the pressing problem of an investment shortfall and a decline in the infrastructure stock, optimism in Yudhoyono's administration was high. State officials were confident they could capitalize financially on the former army general's 2004 election, the first direct election of an Indonesian president. In October 2004, a month following that historic election, Yudhoyono's predecessor, Megawati Soekarnoputri, signed into law a new road bill that was broadly in line with the pro-market and pro-foreign direct investment policy orthodoxy "best practices" of the World Bank and International Monetary Fund (IMF). Prior to this, Megawati had tried to jump-start private investment in toll roads. Domestic and foreign investors, who frown upon their competitor also acting as their regulator, showed no interest in putting money into projects in the absence of long-sought-after reform of the dual developer-regulator functions of Jasa Marga, as practiced under the

[10] Schwab 2012, p. 16, Table 5. The rankings are surveys of perception, not physical measurement.
[11] World Bank 2012, p. 15. [12] Dachlan 2011.
[13] I follow Delmon's definition of PPP as "in its most inclusive form, to mean any contractual or legal relationship between public and private entities aimed to improving and/or extending infrastructure services, but excluding public works contracts" (2011, p. 2).

New Order. At the end of her term, Megawati therefore put through a law stripping Jasa Marga of its regulatory function, establishing a separate toll-road regulatory agency. (One might argue that Megawati's administration learned the hard way to avoid the mistakes of the expressways privatization programs in Latin America. There, the "privatize now, regulate later" approach led to distortions of and disappointments with these projects.)[14] Officials were thus fitting themselves to a model of regulatory capitalism that the IMF had imposed on Indonesia after the 1997–98 crisis as part of its attempt to restructure the country's economy in exchange for multi-billion dollar loans.

A tangible expression of the type of regulatory capitalism the IMF had in mind was the establishment of independent regulatory agencies (IRAs). Indeed, starting in 1998, the IMF insisted that the Indonesian government form IRAs in a number of key sectors.[15] According to the Organization for Economic Cooperation and Development (OECD), IRAs help to depoliticize economic management. As particular governmental powers are transferred to regulatory bodies – staffed by non-elected technocrats rather than politicians or political appointees – those powers become protected (at least in theory) from political pressure. The credibility of government commitment to policies is thereby enhanced.

This was what was hoped for in Indonesia. In so-called difficult environments where rule of law institutions are weak (for instance, compromised or politicized judiciaries that cannot be relied upon to enforce property rights and contracts impartially), IRAs are also expected to have a wider institutional role. They are seen as a means to help instill a rule-based "good governance" program that enhances accountability, transparency, and predictability in economic policymaking.[16] In short, for good or ill, Indonesia was being dragged into the era of regulatory capitalism.[17]

In addition to the establishment of a toll-road IRA, Megawati's 2004 Road Act contained an automatic toll-rate-adjustment mechanism, something that foreign and domestic investors in Indonesia, including Jasa Marga, had long sought. The law mandated raising toll rates every two years based on inflation. For license-holders and operators, this was a leap forward in transparency and predictability from the way rates and their increases were determined under the New Order, which was on the whims of President Soeharto. Investors and market liberalizers also appreciated that these reforms were introduced through a parliamentary law of higher

[14] Engel *et al*. 2003.
[15] They included the Upstream Oil and Gas Regulatory Agency and the Business Competition Commission (Pangestu *et al*. 2002; Davis 2008).
[16] Jordana and Levi-Faur 2004; Levi-Faur 2005. [17] Braithwaite 2008.

legal standing than a presidential decree. In a democracy, in theory, acts of parliament are harder to change or discard than a presidential order. The passage of this law was expected to impart greater predictability and certainty to Indonesia's tollway sector, thereby inspiring greater investor confidence and resulting in the construction of new expressways held by private concessionaires.

However, this did not happen. Yudhoyono's 2005 Infrastructure Summit flopped. As of 2010, not a single project on offer at the extravaganza was in operation.[18] By mid-2014, not one of the thirty-eight tollway proposals had been completed.

This book details the mighty struggles of a democratic yet weakened central government to implement regulatory reforms. It explains the summit's failures despite the efforts of state officials to lay the foundations of a reasonable regulatory framework. It highlights the obstacles that the government – in a country with a deeply authoritarian history – has faced in trying to acquire the land needed for tollway construction from angry citizens. This contextual study examines the trail of broken promises to invest in turnpikes made by license-holders. Some concessionaires have desperately clung to their licenses; others have obtained sizable rents by reselling their concessions. This book documents government infighting over the role of the private sector in the economy and over how much and by what means public funds would contribute to the building of new expressways. It shows how the courts failed to mediate between competing public and private interests. It also recounts the threats from an increasingly populist parliament to tamper with the 2004 Road Act, including its key provision, the automatic tariff adjustment, over increasing frustration with the poor operational standards of the country's existing expressways, particularly in the greater Jakarta area.

Empirically, this monograph aims to explain the steady yet exasperatingly slow pace of the construction of an approximately 620-km toll road connecting Jakarta and Surabaya, the country's two industrial centers located on almost opposite ends of the island of Java.[19] The "anatomy of ambition" of state officials and politicians to complete this expressway arose from several sources.[20] First, there were the mesmerizing effects of the "megaproject." Creating engineering marvels, despite huge cost overruns, has lured and transfixed government officials from Boston to Copenhagen to Beijing. Second, there were the pressures to complete

[18] Business Monitor International 2011 (Q4), p. 10.
[19] Reports on the distance varies, depending on whether existing links or those beyond Surabaya are taken into account.
[20] Flyvbjerg *et al.* 2003.

unfinished business. Detailed plans for Java's end-to-end expressway were first laid out in the early 1970s, although licenses for eighteen inter-urban segments that comprise the Trans-Java Expressway were not doled out until just prior to the onset of the 1997–98 Asian financial crisis. Third, state elites have been sincere in their belief that this road promises crucial multiplier effects that will encourage investment beyond infrastructure.[21] They maintain that it will boost the island's manufacturing competitiveness by dramatically lowering the cost of moving goods and services. Fear in government circles of falling behind India, China, Vietnam, and other low-wage producers has been pervasive. Transport bottlenecks threaten economic growth because about 75 per cent of the country's traffic of inter-district and inter-city goods are trucked on Java's narrow roads.[22]

To say that the construction of this tollway, which should cut by half the nearly three-day travel time needed to go from Jakarta to Surabaya, has been easy would be a gross misstatement. Complications and attendant risk have been profound. Illustratively, Megawati's 2004 Road Act permitted many renowned New Order-era rentiers such as Aburizal Bakrie and Jusuf Kalla to retain their licenses. (Arguably it would not have been lawful for her government to summarily cancel rightfully obtained licenses that lacked expiry dates.) That rent-seeking through the selling or flipping of these licenses prevailed has surprised few observers.

The great difficulties in appropriating private land serve as an even more outstanding example of the complexities involved in realizing this vital development task. Java's extreme population density is one factor. Java is roughly the size of the state of New York, but its population density is more than five times that of New York's and more than twice that of New Jersey, the state of the United States with the highest population density. Java's population of about 118 million approximates the combined population of Texas, California, Florida, Pennsylvania, Ohio, Illinois, and New York.[23]

Java's extreme population density is only part of the problem resulting in sluggish land acquisition; the messiness of implementing eminent domain powers that rest on weak and incoherent land laws has also been critical. Weak law enforcement allows inter-ministerial dissension and

[21] The term multiplier effect connotes temporary impact. But benefits should accrue from the increased productivity of the land that will be connected to the expressway permanently. I use the term because of its dominant use in the local discourse. I thank Ross McLeod pointing this out (email communication, September 12, 2011).
[22] Direktorat Jenderal Perhubungan Darat, 2005, p. 44.
[23] See indonesianembassy.org.uk/transmigration-7.htm (last accessed March 19, 2014). These seven states comprise nearly 40 per cent of the US electoral college.

recalcitrant license-holders to take little heed of official land use and ownership warnings, so hampering the financing of the government's eminent domain claims (often on behalf of private license holders). Moreover, the construction of this expressway, which cuts across three provinces and over two dozen now-autonomous districts and cities, sheds light on the general difficulties of implementing decentralization in post-Soeharto Indonesia.

This weakness exposes competing incentive structures between central government officials and local government officials. The former – in charge of toll-road policy – have wanted a rapid land purchase process, while the latter – who had been responsible for involuntary land acquisition under decentralization – dragged their feet. Underpaid and with little to gain in the short term from the completion of tollways, local officials often retreated in the face of angry citizens, emboldened by a greater awareness about rights and willingness to protest in democratic Indonesia. Unlike the New Order era, the army no longer acts as the state's enforcer of land expropriation, and the penalties for grassroots resistance are substantially lower. Citizens are now armed with much stronger rights-based consciousness. That said, as trust in the Indonesian government among its citizens ebbs to alarmingly low levels, we have to move analytically beyond the dualism of the heavy-handed, rapacious, land-grabbing state versus repressed "little people" who resist capitalist development on class- or morality-based grounds, as similar land battles under the New Order were described. The Trans-Java Expressway is unlike a shopping mall, tourism complex, golf course, or luxurious gated housing community, as this infrastructure project is seen to promise genuine developmental benefits.[24] Moreover, a diversity of views and behaviors among landowners regarding forced relocation exists. While some have steadfastly refused to sell and many more are not pleased about being dispossessed, thousands of citizens have willingly released their rights to their land provided that they receive what they see as fair compensation. This means as close to market price as possible. After all, in such countries as India, merely accepting market rates is increasingly considered a "raw deal."[25] However, in shortsighted fashion, the Indonesian government has been reluctant to accede to this demand, resulting in delays which, in turn, inflate long-run project costs.[26] In other words, I have found it painstakingly difficult to make generic statements

[24] Of course, its construction can spawn such projects, but that is a different matter.
[25] Balakrishnan 2013, p. 805.
[26] Other obstacles, such as reliance on short-term bank loans, will be addressed in later chapters.

regarding the moral implications of involuntary land acquisition for the Trans-Java Expressway. After all, since 2004 the president, and since 2005 district executives (*bupati*) and mayors – officials with the most authority over land matters in a decentralized post-Soeharto Indonesia – have been democratically elected to office.

Infrastructure as a political problem

Accounting for the serious problems state officials have encountered in institutionalizing a new regulatory regime to secure private investment for this megaproject, on the one hand, and explaining the construction's marked progress, on the other, offers several empirical and conceptual puzzles. One particular question animates this book: Under conditions of considerable uncertainty – political, economic, legal, and the like – how does a weakened democratic government with a checkered past of enforcing property rights and contracts establish a regulatory framework to promote private sector investment in infrastructure? Economic history is littered with examples of the catalytic role of infrastructure in economic growth and development, from the canals and roads of the UK during the Industrial Revolution to the railways at the turn of the twentieth century and highways after WWII of the US. Puzzlingly, infrastructure's significance for economic growth was lost in the din of post-WWII debates over trade policy and financial liberalization.[27] Significantly, in its well-publicized 1993 report on the role of the state in economic development, the World Bank overlooked the pivotal contributions infrastructure played in the economic success stories of the East Asian Tigers.[28]

Today, the role of physical infrastructure has rightly retaken center stage. Globally, governments are building new airports and expanding existing ones,[29] while leading newspapers routinely spotlight the infrastructure bottlenecks that are crippling once fast growing economies, including that of the US and India.[30] Over the past twenty-five years, abundant empirical findings have underscored infrastructure's impact on economic growth, especially at lower levels of development.[31] One key

[27] Writing in 1990, Haggard stated that the "most important debate in development studies over the last two decades has concerned the appropriateness of market-oriented policies for solving the problems of backwardness" (1990, p. 268).
[28] Mody 1997, p. xi. Exceptions included a (modernization theory-infused) specialized transport literature. See Wilson *et al.* (1968), Owen (1987), and on Indonesia, Leinbach (1983).
[29] See www.airport-technology.com/projects (last accessed March 19, 2014).
[30] Baker and Schwartz 2013; Haberman 2014; Bagri 2014.
[31] Estache and Fay 2007, p. 6.

study found that East Asia's superior infrastructure accounts for one-third of the difference in output between that region and Latin America.[32] In another, the economist Pranab Bardhan cites the "dazzling difference" of responsible financial management of large-scale infrastructure projects in China as compared to India as a main cause of the different rates of economic growth in these two countries.[33]

This is a lesson that has not been lost on top Indonesian policymakers. In 2010, during his first major interview, Indonesia's newly appointed finance minister pinpointed weak infrastructure as a chief obstacle to the sustainability of growth in Southeast Asia's largest economy.[34] In the same year, the trade minister similarly maintained that the keys to growth promotion were "infrastructure, infrastructure, infrastructure."[35] This was five years after the 2005 Infrastructure Summit was to address these issues. Why, then, have officials seemed powerless to prevent the continuing crumbling of the country's infrastructure and the persistent delays of projects despite their anticipated benefits?

According to World Bank literature, upgrading infrastructure is primarily a technical matter. Policy elites identify bottlenecks and parliament passes competition-inducing legislation to encourage private investors to fix the bottlenecks. The government establishes strong institutions capable of regulating the sector to prevent market failure or capture by predatory interests. The essence of this technical approach is captured by a leading World Bank scholar who wrote: "After nearly 20 years of experience, countries have no excuse for most errors in the design and implementation of concessions and related regulations."[36]

This book takes issue with this technocratic and apolitical view. In its stead, I conceive Indonesia's "errors" as the outcomes of intensely political contests burdened by the past and saturated with new power dynamics. This monograph chronicles mistakes Indonesian officials have made. But against the technocratic literature's propensity to emphasize choice in the selection of policy and design,[37] I show how historical precedent and evolving social conflict weigh heavily on policymakers and other key actors. These "stakeholders" are not unencumbered players free to choose from and apply a range of policy options and practices. They are pushed and pulled by the political institutions, competing interests, and power struggles in which they are embedded. While some technicists do acknowledge the importance of politics,[38] they view it as something

[32] Calderón and Servén 2003, p. 113 [33] Bardhan 2010, p. 54.
[34] "Agus Martowardjo: Saya Tak Akan Pilih Kasih," *Tempo*, July 11, 2010, pp. 133–35.
[35] Lee 2010. [36] Guasch 2004, p. 9. [37] Vives *et al.* 2006.
[38] Estache and Fay 2007, p. 25.

exogenously imposed upon infrastructure provision rather than a condition intrinsic to the process.

A central proposition of this book is that the burdens state officials have encountered in rectifying Indonesia's crumbling infrastructure are the result of what are principally political and not technical or administrative problems. Explanations of processes that undergird infrastructure traverse a landscape fraught with conflict and contestation. A country's evolving institutional architecture, uneven relations of private and public power, conflicting interests, and complicated and opaque policy and legal undertakings number among the most significant of these features. State officials also must grapple with diverse and often contradictory ideas about development and growth, with complex decisions requiring the investment of hundreds of millions of dollars in projects whose returns will be spread over many years, and with the rent-seekers, reformers, and ordinarily poor citizens whose lives will be impacted directly by infrastructure investment – for good or ill. By conceiving infrastructure investment as a political endeavor, this account foregrounds historical, institutional, and sociological factors and intermediate causal mechanisms typically overlooked in economic analyses that stress efficiency and desirability of outcome. I will attempt to meet Timothy Frye's provocative dictum that, "satisfying explanations should account for the processes by which outcomes are achieved rather than just for the outcomes themselves."[39]

By considering the development of physical infrastructure as a means of economic growth promotion in post-Soeharto Indonesia, this study will provide insights into debates on the country's political economy. These range from the impact of decentralization on economic growth, the effect competitive elections have had (or not had) on policymaking, to enduring patterns of rent-seeking and the form of regulatory capitalism that is taking shape in the country. This detailed study of infrastructure development in the world's third largest democracy also provides a useful prism for understanding the provision of quasi-public goods in comparative perspective. Intellectually, I draw from a research tradition that recognizes the complexity and contested nature of the political economy of infrastructure development. The post-WWII construction of modern ports, airports, and highways that transformed bustling metropolises like Los Angeles, New York, and Tokyo into mega-centers of world trade and development was the product of bruising political battles. As Steven Erie wonderfully describes in his account of the rise of Los Angeles, Robert

[39] Frye 2007, p. 941.