

Spring 2013 Working Paper  
Accelerating Indonesia's Infrastructure Development

Executive Summary

Indonesia is the 16th largest economy in the world, and the largest in Southeast Asia. Growth rates have hit a high mark since the Asian financial crisis, topping 6 percent in 2012. This growth has in large part been fueled by the now 45 million members of Indonesia's consuming middle class, as domestic consumption has been on the rise. The International Monetary Fund projects growth rates in the 6% range for the 2013-2017 period (ranging from 6.3%-6.8%), though rates could be considerably higher if infrastructure development and economic reforms were accelerated. Despite a relatively stable macroeconomic picture, and the ability of the economy to maintain steady growth despite lack of concerted action by the government, weak infrastructure development has the potential to undermine future rates of economic growth and stymie efforts to enhance equity and reduce poverty in Indonesia.

An examination of Indonesia's current road, rail, air, port, and power archipelago uncovers a vast mix of infrastructure investments, from Dutch era legacy projects, to projects made from second-life Japanese materials and equipment, to new large-scale projects financed by Japanese and Chinese soft loans or loans from multi-lateral development banks. Infrastructure projects can be funded from the national budget and government affiliated entities, from regional government budgets, from private sector investment, from bi-lateral and multi-lateral donor funds, or can have a mix of multiple forms of financing, including from bi-lateral governments in the region. Post-independence, private companies which had been developing infrastructure were nationalized and now each sector of development comes with an accompanying State Owned Enterprise(SOE) and sometimes a Regional SOE, which are responsible in varying degrees for the development of the sector and implementation of projects. Some sector SOEs have a monopoly on the market, while others play only a supporting role. The relationship of each SOE with its "parent" Ministry varies greatly, with some enterprises under the thumb of the related sector Ministry with little room for independent thought, others receiving policy guidance from multiple Ministries, and some acting as quasi-independent private companies, albeit to the chagrin of the related Ministry. Not surprisingly, the complexity of Indonesia's infrastructure picture has a direct impact on the progress of its development, offering many opportunities for private sector engagement but many headaches as well.

Infrastructure spending has still not returned to pre-Asian financial crisis levels. According to the World Bank, infrastructure investment has fallen to about 4 percent of gross domestic product from more than 8 percent in 1995 and 1996. The low level of investment is attributed in part to the Government of Indonesia's focus on fiscal consolidation and reducing public debt, as well as the decline in infrastructure spending by the private sector and SOEs. Lack of capacity and clarity as to who has the power to make decisions (and when) at the regional and central government levels also contributes to this trend. Efforts to design market-ready projects are often thwarted by existing low consumer tariff systems and lack of capacity in the Ministries to design such projects. Complex land acquisition procedures have caused suspensions in infrastructure implementation, coordination of projects that cut across Ministerial jurisdictions or involve a number of central and sub-national actors slows decision making, and uncertainty in the legal and regulatory environment serves as a deterrent to private sector investment. These problems thwart the development of an underdeveloped sector and thus cause additional strain on the existing infrastructure system, much of which is poor quality and in need of repair. Private sector companies have noted that policies

and regulatory uncertainties in Indonesia can make infrastructure a risky investment without the potential for high reward. Access to project financing is also a major barrier.

Sustainable infrastructure development demands an excess of resources, both financial and human resources, and the likes of which the Government of Indonesia cannot entirely muster on its own. From a financial perspective, this gap in funding is made worse by weak budget implementation of existing funds. From a human resources perspective, the capacity gaps will require prolonged and concerted efforts towards improvement. To take strides forward on both of these fronts, the government, the SOEs, and the private sector will need to work together and understand each sector's respective capacities as well as limits. The government in particular will need to take some good faith steps to mitigate the economic risk as well as legal and regulatory uncertainty faced by the private sector and take internal steps to improve the capacity of its own bureaucracy. On the financial front, the government faces its own risks, from the domestic consequences of more sustainable spending, to a necessary coming to terms with the memories of financial crises past, now embodied in the government's current aversion to both debt and public spending. The reactions of a fast-growing consumer class can certainly not be ignored with elections on the horizon. Yet the opportunities for infrastructure investment and private sector opportunity loom large, with an even greater potential benefit to Indonesia's long-term economic growth if the acceleration of infrastructure development is conducted in a sustainable way.

Understanding the players and the system is only part of the uphill struggle. For a sustainable future, the government of Indonesia will need to take on a leadership role in infrastructure development, creating a more stable and predictable environment for partnership and investment. It will need to work towards developing market ready and financially viable projects to entice the private sector, better prioritize and communicate its infrastructure needs, consider the bigger picture country wide benefits of a given project's development versus region-specific benefit, and place value on project lifetime cost structures over initial inputs alone. This feat will require a broad investment in human resources and capacity building across the government. In turn, the private sector will need to be more proactive, willing to offer infrastructure solutions, offer training to its Indonesian partners, and think of creative ways to offer the government start to finish project results to fully capitalize on the high-hanging fruit of infrastructure development. The U.S. government has a role to play in stimulating and advancing both government and private sector objectives and is well placed to deliver and reinforce policy messaging, make public-private sector connections, and offer market and sector specific information and analysis for those wishing to engage in infrastructure development in Indonesia.

### Indonesia's Infrastructure Condition

Indonesia ranks 78th out of 144 countries in the World Economic Forum's Global Competitiveness Report for 2012-2013 for the quality of its infrastructure, with a rating of 3.7 out of 7. There have been low to moderate improvements in this rating in the last five years (the 2008-2009 score was 3.0) but the overall condition of infrastructure and lack of accelerated reforms puts the country at risk for backsliding (the 2011-2012 score was slightly stronger than this year's score). Air transportation ranks as the most developed sector in the 2012-2013 ratings, with a rating of 4.2. Electricity, port infrastructure, roads, and finally railroads trail behind with lower rankings. Electrification rates in Indonesia hover at just 65% of the population and an estimated lower rate in rural areas. Per capita MW is among the lowest in the region and power outages at homes and business are not an infrequent occurrence. Poor port infrastructure contributes to lengthy delays and exorbitant costs for inter-island distribution chains. It can take over a week for containers to move through the port in Jakarta. This is the longest time in Southeast Asia, and is an increase from

the five days it took to move containers just a few years ago. The cost of shipping a 40-foot container from the Port of Pontianak in West Kalimantan's provincial capital to Jakarta is approximately twice the cost of shipping one from Jakarta to the United States. Inefficient port capacity and high domestic transportation charges have increased shipping costs for nearly all of Indonesia's products.

Roads are the predominant mode of transport in Indonesia, with subnational roads comprising of 91 percent of the primary road network. Indonesia, like many other emerging nations, relies on the development of toll roads for the delivery of the expressway system. In the case of Indonesia this reliance is particularly heavy; 100 percent of Indonesia's expressways are toll roads. The roadway system suffers from congestion, overloading, and distortions due to fuel subsidies. The under-developed road system also suffers from persistent damage from flooding; rains and stagnant water continuously erode the asphalt cover. Road infrastructure inefficiencies are further pronounced in Jakarta, a city that is currently contributing 17% of Indonesia's total economic growth. Traffic in Jakarta has become some of the slowest in Asia as more and more people enter the consuming middle class and can afford to buy new cars and motorcycles. Domestic vehicle sales rose 23 percent to 1.1 million units in 2012, according to data compiled by PT Astra International, the nation's biggest car seller. January 2013 sales were even higher, increasing 26.5% from January 2012 sales, with an estimated 1,000 vehicles added to the already burdened roads system every day. Heavy government subsidies for the cost of fuel have enabled the expansion of vehicle consumers by keeping the price at the pump low and middle class constituents appeased. In 2012, the fuel subsidies made up 14.3% of total government spending (inclusive of both the central government's budget and budget transfers to the regional governments), though the budget allocated only 8% of its funds for this purpose. With the inexpensive options for personal transportation, bus use has declined and other forms of urban public transportation are non-existent.

Inefficient road systems contribute more than just long commutes and increased final product costs. Food transportation is dominated by trucks in Indonesia, and longer than expected journeys help contribute to the 40% spoilage rate of food that fails to make it to market. While detailed information on the make-up of commodities carried by road and where they travel to and from is not readily available, existing statistics suggest that railway systems are predominantly used for passenger transport leaving few other options for food transport than the road system. According to a World Bank 2010 report, passengers account for 85 percent of train movements. Indonesian rail infrastructure is largely a legacy of the colonial period. The network, all of which is 1,067 mm gauge, consists of four unconnected subsystems, three in different parts of Sumatra, and one extending throughout Java. The railway system suffers from lack of network capacity, and limitations on train weight and dimension create inefficiencies in the system. Lack of competition in the sector provides little incentive for technological advances and investment in new equipment. Signal damage is a major cause for train delay. Capacity limitations bear particularly heavily on rail freight operations and train paths for the movement of freight by rail are the first to be sacrificed as traffic approaches system capacity. Poor rail access to port terminals is another major issue and hits at the broader lack of multi-modal transport systems in Indonesia.

Undeveloped sewer systems and overburdened canals are common in the urban infrastructure picture and have plagued Jakarta year after year during rainy season. According to the Indonesian Chamber of Commerce, flooding in mid-January of 2013 cost businesses in the capital at least \$3 billion. Dredging the canals would help reduce the incidents of flooding by 40 percent, according to the Country Director for Indonesia at the World Bank, though the government hasn't yet fully focused its efforts here. Businesses have long complained that poor infrastructure costs the city in

a myriad of ways, not least by creating bottlenecks along the roads and at the overburdened seaports and airports. Officials and academics regularly discuss whether Indonesia's capital should be changed to a less-populated region beyond the island of Java. Poor infrastructure can also have an effect on Indonesia's credit rating. Global assessments giant Fitch Ratings commented in the first quarter of 2013 that poor infrastructure and rampant corruption continue to hold Indonesia back from earning a higher sovereign credit grade, and may even prompt a downgrade. Fitch last affirmed its existing rating for Indonesia, BBB- with stable outlook, in November 2012.

### Infrastructure Affiliated Ministries and State Owned Enterprises

There are a large number of Ministries and government affiliated entities whose focus is on the planning, financing, coordination, and implementation of infrastructure projects. These entities often have overlapping and not closely coordinated mandates, strategies, and implementation plans for infrastructure development. It is not uncommon for multiple Ministries to feel that they have the lead on a particular policy or area of operation. The existing framework has also felt the effects of decentralization and emerging inconsistencies between central and regional governments on who holds the decision making power and how it can be used. At the central government level, there have been efforts to coordinate the work of various Ministries and strive for better alignment of policies and project prioritization. The Coordinating Ministry for the Economy is charged with coordinating various economic and infrastructure efforts across several Ministries, including the Ministry of Trade, Agriculture, Finance, and Industry. It also was the lead body in assembling the Master Plan for the Acceleration and Expansion of Indonesia's Economic Development for the 2011-2025 (Master Plan) to be discussed in the next section, and oversees a number of working groups that address various aspects of the Master Plan, from connectivity to human resource development.

Another coordinating player, the National Development Planning Board known as BAPPENAS, provides national-level planning and budget oversight for funding of any major infrastructure project and many forms of foreign assistance. USAID and other donor assistance is coordinated with BAPPENAS. BAPPENAS co-chairs the connectivity working group as part of the Master Plan's steps towards implementation and it is also charged with rubber stamping ready-for-implementation projects under the Master Plan (or rather projects that other line Ministries see as ready-for-implementation). Unfortunately, both the Coordinating Ministry and BAPPANAS do not harbor the levels of political leverage or pull necessary to either give policy direction or influence policy decision making in the other line Ministries. Thus, sector specific policy decisions and the power to direct implementation of these decisions lies with other Ministries. The power of the purse, perhaps the most sought after power in any government, lies with the Ministry of Finance.

The Ministry of Finance (MoF) is the keeper of the coins for the central government and is also the source of financing approval or disapproval for initial and additional funds. The MoF also holds two instruments that serve to benefit long-term infrastructure needs. The Indonesian Investment Agency sits in the MoF and has the ability to provide additional financing for infrastructure development to local governments, enabling multi-year financing and longer-term infrastructure planning. In the future, the MoF is also expected to have the power to stamp a yes or no on requests for central government funding through the Viability Gap Fund mechanism (VGF), a new financing entity to be discussed in the financing section of this paper (at the time of writing this paper, the VGF had not yet received its final approval). The MoF keeps a close eye on the budgets of all the other line Ministries, offering pressure and direction to Ministries who are unable to disburse their allotted budgets as well as those it sees as ineffectively spending the budget prescribed. The section on financing for infrastructure will touch upon this topic in greater depth. Budgets aside, it

is also important to note the functions of the various sector specific Ministries to help shed light on Indonesia's broader infrastructure quandaries.

Lack of integrated transportation planning and programming is a major hurdle for the government. To begin, the Government of Indonesia (GOI) has a two-prong land transportation chain of command. The Ministry of Transportation covers Land Transportation, Sea Transportation, Air Transportation and Rail Transportation. The regulatory standards and planning for ports, airports, and railways sit with this Ministry. Roadways however, including planning, implementation, and maintenance are not covered by the Ministry of Transportation, but rather by the Ministry of Public Works. With the highest level of expenditure for 2011, the Ministry of Public Works is responsible for all national roads. The Public Works Ministry also covers primary and secondary irrigation-related infrastructure and main-line canal systems. The Ministry of Agriculture, perhaps surprisingly, covers grain storage and handling but not irrigation infrastructure (covered by Public Works). Energy related infrastructure is covered by the Ministry of Energy and Mineral Resources, including traditional energy generation from coal-fired power plants, but also planning and strategy for renewable energy resources and power generation. The Ministry of Industry handles the development of industrial zones, information and communication technologies, airport equipment, seaport equipment, dry dock facilities, rail and mass transit networks equipment, power and energy equipment, water supply, sewage, and waste management systems and equipment, equipment to support traffic management systems for road and rail, and finally green industry development. Other Ministerial bodies with a role to play in infrastructure include BKPM, Indonesia's Investment Coordinating Board, tasked with creating an investment climate conducive to private sector engagement (a necessary component of infrastructure development under the Master Plan). BKPM works on investments advocacy as well as plays the matchmaker for prospective investors. BULOG, the national logistics agency, also has a role to play in many infrastructure initiatives and often works with agriculture focused project implementation. Further increasing the web of infrastructure players is the Ministry of State Owned Enterprises which has oversight over the SOEs and Regional SOEs.

While each Ministry has its own responsibilities for strategic planning, budget oversight, policy and regulatory development, and standard setting of its respective competencies, the Indonesian SOEs hold the rights to project development and implementation, and have budgets of their own. While the SOEs fall under the Ministry of State Owned Enterprises chain of command, they can receive policy and budget direction from the affiliated sector-specific Ministries, and the Ministry of Finance which has a vested interest in effective and efficient budget implementation. The relationship of the SOE to the policy affiliated Ministry or in some cases Ministries can vary as can the level of control the SOE has over implementation and direction of a given sector. In the energy sector for example, the SOE has a very clear role and relationship to the Ministry of Energy. PLN, the state-owned energy company, holds almost a complete de facto monopoly on the energy sector and is the exclusive provider of electricity for consumers connected to the national grid. Non-national grid providers do exist, but face pricing restrictions set by PLN, a deterrent for the development of any large-scale power projects. In PLN's case, and with Ministry of Energy direction, they have complete control over geographical areas of focus and development. Absent a legal monopoly by PLN, regional governments could create their own SOE for electricity, but none have arisen to date. Other SOEs have a looser hold on their respective sector, such as the state owned enterprises for air transportation, AP I and II. Out of all the sectors, airports and airport affiliated industry has the highest level of private sector involvement.

There are four state-owned port operators, all referred to as PT Pelabuhan Indonesia, Pelindo I, II, III, and IV. The "Pelindos" cover different geographical focus areas and operate very differently,

with Pelindo II closing in on more private sector-esque activities and following Ministry of Transport guidelines less devotedly than the other Pelindos. State-controlled construction firm PT Pembangunan Perumahan Persero is often responsible for construction of ports. Recent regulatory reform eliminated the SOE monopoly over ports, at least on paper, but private sector involvement is still limited. Managing railway facilities and infrastructure is assigned to PT Kereta Api Indonesia (KAI) Persero, the only rail operator that currently operates on the Java network. SOE monopoly over railways is fairly comprehensive. In addition to the sector specific SOEs, the GOI has also created two infrastructure-specific SOEs to assist in the acceleration of infrastructure development and provision of infrastructure financing. PT SMI (Sarana Multi Infrastruktur), which is 100% owned by the Ministry of Finance, provides mezzanine and equity financing for infrastructure projects in rupiah, and the Indonesian Infrastructure Guarantee Fund, another 100% MoF owned SOE (and locally referred to as PT PII), provides guarantees to infrastructure lending and infrastructure advisory services. Both of these institutions will be further discussed in the infrastructure financing section. While efforts have been made to coordinate Ministries and SOEs, there are still clearly many overlapping competencies in the various infrastructure sectors. The Master Plan is one such attempt to better coordinate efforts, create a country-wide strategy, and compel infrastructure project implementation.

#### The Government's Master Plan:

Though infrastructure development was not the sole impetus for its creation, the Coordinating Ministry for the Economy launched a Master Plan for the Acceleration and Expansion of Indonesia's Economic Development for 2011-2025 in May of 2011 to coordinate the various Ministry and SOE efforts in economic development. The Master Plan targets investments of up to \$500 billion in infrastructure, manufacturing facilities, major public works projects, science and technology development, and human resources. Of this amount, \$250 billion is marked purely for infrastructure development (according to an April 2012 discussion with the Coordinating Ministry). The plan, commonly known as MP3EI, is based on three strategies: (i) fostering centers of growth in each major island group by developing leading resource-based industrial clusters; (ii) building synergies between those centers of growth, including international connectivity for trade and tourism; and (iii), complementing connectivity by improving human resources capabilities and increasing investments in research and development. Implicit in the MP3EI is the need for greater economic development off the island of Java. Java is home to more than half of the country's population despite comprising less than 15% of Indonesia's land mass. Government policy has long been to encourage outward migration from overcrowded Java, and a better distribution of economic activity across the archipelago.

The majority of the investments under the MP3EI are expected to come from public-private sector partnerships (PPPs). Private sector investment is expected to deliver close to half of total spending, with state-owned enterprises, various levels of government, and regional donors providing much of the remainder. The government has some funding to allocate towards the MP3EI but not enough to cover the total costs. According to a presentation by the Coordinating Minister for the Economy in March of 2013 in New York, there is a remaining 41% funding gap from the private sector. Of the anticipated 25 priority projects to begin by 2017, the government wants 16 of the 25 to come from PPPs. Under the MP3EI, the government sees its role more as the creator of macro-economic and regulatory conditions conducive to the acceleration and expansion of investments, rather than the financier of public works projects. Business enterprises will need to take on a central role in economic development, particularly in generating investments, creating employment opportunities, and fostering innovation under this plan. The plan has been criticized for being more of a wish list of projects rather than a concrete actionable plan with accompanying strategy and realistic

prioritization for implementation. The government's expectation that the PPP model can implement half the total plan of investments in Indonesia is also widely criticized as unrealistic. Donors have commented that a very high ratio of PPPs to total infrastructure investment, even in developed countries where regulatory and legal environments are predictable and stable, would only be 20-30%, and even these levels are somewhat rare. In addition, the existing institutional arrangements, as described in the preceding section, do not appear well-designed to support the implementation of such a plan.

The MP3EI received quite a large amount of attention and interest from the private sector when it was first released as companies looked into opportunities and investment possibilities in Indonesia. However, over time, this momentum has dwindled as models of public-private partnership under the plan have failed to come to fruition and experience in working with the government to bring deals to closure have deterred outside investors. A now sometimes referred to example of the government's lack of consistency in partnering for the PPP model is the \$2.47 billion seaport project in Kalibaru, north of Jakarta. The project was initially open to the private sector, including foreign companies, in early 2011. After going through a review process and short listing five companies in the prequalification stage, the GOI cancelled the potential for private sector involvement in the project in January 2012 and handed it to state-owned port company Pelindo II. Media reports said consortiums had already spent 1 to 2 million dollars on feasibility studies by the time the tender was cancelled. Since the initial move to cancel private sector involvement, Pelindo II has decided to use the private sector to build some of the initial terminals. In this example, the shifting goalposts of when and how the private sector can invest in the seaport is indicative of the broader picture of uncertainty faced by the private sector in investing in the infrastructure market, to be discussed in the next section. Private sector input has been very limited to date and implementing the MP3EI has proven more difficult than perhaps initially anticipated. How to make the PPP model work, or whether it is the right model, and how to attract private sector participation are two key themes in accelerating infrastructure development and will appear again in this paper.

While the MP3EI and other high level plans are helpful in providing useful overarching guidance for priorities and the harmonization of strategies, there needs to be clearer expectations on the roles and expected contributions of various Ministries, SOEs, donors, regional players, and the private sector. Coordination with the regional governments is another essential component to effective infrastructure planning. With the advent of decentralization, efforts have been made to devolve political power to the 33 provinces and even to the regency (county) level. While generally a positive development post-1998, this can cause a lack of clarity on which institutions and levels of government hold the power and have the right to make decisions. It can also result in the political authorities at local levels having their own priorities for economic and infrastructure development that do not always synchronize to central planning. Regional level bodies may also move at a varied pace from that of the Jakarta bureaucracy.

Still, the Coordinating Ministry for the Economy was able to set up several committees connected to the MP3EI that focus on coordination across topics; BAPPENAS now heads the connectivity committee. Though both the Coordinating Ministry and BAPPENAS lack the ability to dictate action to the other Ministries, their coordinating functions serve a role in bringing Ministries, SOEs, and other outside actors together to set the stage for action, and at the very least share information and ideas. Working with the players of the relevant committees and keeping them informed of potential projects is a smart move for those involved in infrastructure development. Understanding the bureaucratic, regulatory, and political constraints of accelerated progress is another key component to the broader infrastructure picture and has a very real impact on private sector involvement.

## Institutional, Regulatory, and Political Hurdles to Infrastructure Development

Complicated budget revisions and administrative delays often compound with a changing legal and regulatory environment and will certainly affect the implementation of any major infrastructure endeavor. There are several key bureaucratic and institutional roadblocks, including restraints in human resources that slow down and often prevent progress in infrastructure development. Many development actors report a chronic lack of bureaucratic capacity with public servants who are poorly-equipped and unfamiliar with managing large-scale infrastructure tenders. Line Ministries may lack familiarity with new sector technologies and concepts, such as in renewable energy development. These capacity issues, in turn, contribute to poor project preparation. Ministries also have a hard time disbursing their budgets. In January 2013 the Public Works Ministry announced its plans to open bidding for 22,736 infrastructure contracts worth 73.41 trillion rupiah (\$7.62 billion) in 2013 despite having only disbursed about 77 percent of its 75 trillion-rupiah 2012 budget as of early December of 2012 (at the time of writing this paper, there was no update on this announcement). The Ministry of Finance has in turn insisted on spending existing budgetary allotments first, and before accepting outside sources of finance. Development actors in the region have reported that some Ministries have turned down desired funding for fear of penalization by the Ministry of Finance for not spending the full amounts of their own budgets. Some efforts have been made to address these budget issues, such as the recently revised spending rules to speed up disbursement. According to Vice Finance Minister Anny Ratnawati, the new rules allow Ministries to hold tenders in November for projects to be implemented in the following year and provinces, regencies, and ministries must also prepare disbursement of their budgets every month.

Much of the bureaucratic delay in spending existing budgets is the inability of government entities to identify and formulate new projects. Government priorities for high cost infrastructure projects have a habit of shifting within a short period of time, sometimes after members of the private sector have started to analyze the cost-benefit of a given project or even in the implementation phases. BAPPENAS and the Coordinating Ministry for the Economy may be able to provide guidance and strategy for project development, but much of the power still lies in the hands of the SOEs with direction from the relevant Ministries. Ministerial direction is often politically driven.

While institutional inefficiencies and heavy bureaucracy are often a source of delay in implementing infrastructure projects in Indonesia, this is not often the source of complete project suspension. The legal and regulatory environment in Indonesia can help shed some light on causes for a complete stall in the implementation of infrastructure plans. As stated by Richard Tan, the executive board chairman at the Indonesian Chinese Entrepreneur Association, "We want to see less legal uncertainty in the country. If you are businessman, legal changes are the number one thing you should be worried about." Land acquisition and permit issues are a major source of complaint from both the private sector and state owned companies. The media has reported that PLN plans for construction of a new power plant to be completed in 2016 would now be pushed back to operation in 2017 given delays in land-acquisition and related permits that were expected to be settled in October of 2012. Indonesia's Parliament recently approved a land-acquisition bill in December that will allow the government to accelerate road, port and airport projects, which serves as an update to the 1961 law which states that only the President can seize land if owners refuse to sell. The maximum completion time is now set at 583 days for the land acquisition process for public projects. Implementation of the law may take a much longer period of time and it is not always clear when and under what circumstances the new law will be enforced. The implementing agency also suffers from institutional capacity issues.



Regulatory shifts within these short periods can have detrimental effects on business and government alike as actors try to learn the consequences of a change in regulation, only to have it change again a few months or a few short years later. A solid case example can be found in regulations surrounding private sector involvement in the power sector. In 2002 the government enacted a new Electricity Law allowing the private sector to participate in designated competitive areas of electricity generation; the law also connected electricity tariffs to the market. A short two years later, in 2004, the Constitutional Court ruled the 2002 law to be unconstitutional, noting that electricity was a social necessity and that the right of delivery should sit with the state owned enterprise alone. In 2005 the government passed new public private partnership legislation to try and stimulate private sector investment in infrastructure, including the power sector, but it was met with little success. In 2009 the government again revised the Electricity Law to allow for private participation in the electricity supply business, but only in conjunction with support provided within a PPP framework. The law came with 13 implementing regulations in 2010. In 2012 the government announced new geothermal tariffs, again as part of the effort to stimulate investment. While the efforts of the last 8 years to try and soften the blow of the 2002 Electricity Law reversal are not necessarily negative, the constant cycle of changes and adjustments to the system and how and when private sector can invest and how they are incentivized to invest creates great levels of uncertainty for business. This uncertainty can contribute to low levels of investment, in not just the power sector but in every sector that suffers the same start-stop regulatory progress.

Regulatory changes, if properly implemented, can provide a source of positive development for medium and long-term progress in Indonesia. Reform to the land acquisition regulations was a much needed step in easing the burden on the state and state entities to develop and build new infrastructure. This must be weighed however with the more immediate consequences of causing further delay to existing and ongoing projects as public and private sector actors must learn how and if the new law or regulation affects them and then implement their own internal changes based on that analysis. In the eyes of the business community, new laws can be changed or revoked at any time and implementation and enforcement are not always immediate. This can cast a gray cloud on the overall investment climate in the country and should be recognized as a hurdle to greater private sector involvement in infrastructure. In addition to the nature of the legal and regulatory environment in a country of operation or potential operation, the private sector will want to know about opportunities for financing, particularly for large-scale infrastructure projects.

### Financing for Infrastructure

For large infrastructure projects, financing plays an especially significant role in the decision-making process. Unfortunately there are still major political hurdles to the government offering full financing services for infrastructure development in Indonesia and as discussed in prior sections, the tariff system in Indonesia can make investment in certain sectors unattractive to private sector participation. Tariffs in power and water are deeply ingrained into Indonesia's current system and it remains politically undesirable to transcribe real-time costs of these products and services to the consumer. This hesitation contributes to the government's growing challenge of creating commercially viable infrastructure projects. It is furthered by the excess scrutiny given to the receiving and spending of budgets, thanks to a very attentive Parliament and active anti-corruption body, a general aversion to dependence on foreigners and their financing, and a fear of taking on too much debt and unbalancing the current macroeconomic stability. All of these issues may also contribute to the lack of a long-term vision for sustainable infrastructure implementation, which often require addition time and resources upfront. Inherent in the PPP model is the expectation that the government would not need to provide the entire project financing package, but unfortunately the model comes without a clear method for revenue collection to make up for the

project costs and provide profit to the private sector. There is a widespread view that most projects proposed under the PPP model are not market-ready and lack the levels of financial feasibility for private sector involvement, if the government is not willing to offer more to its side of the financing balance. A lack of bankable projects is thus a major deterrent to the model's success in Indonesia. Still, PPPs are the preferred mode of procurement for the Master Plan in the eyes of the government and existing planning continues to highlight the model as the way forward.

The aforementioned broader aversion to taking on additional debt in providing financing for public sector infrastructure projects is apparent even if loans are readily available from other regional and multilateral donors. This reasoning is in part tied to memories of the Asian financial crises of the 1990's and its repercussions, but is also closely aligned with internal domestic political concerns as greater scrutiny comes from Parliament and the Corruption Eradication Commission (KPK). Outside borrowing and loan disbursements may draw attention to particular GOI entities and trigger extralegal Parliamentary examination of the purpose and spending plans of the incurred debt. A quick look through any given week's Indonesian press clips will highlight the level of attention on corruption and anti-corruption measures in Indonesia's political system. Aversion to new borrowing is partially a debt policy decision but also displays an aversion to internal domestic political risk. The Asian Development Bank and other multi-lateral entities have capitalized funding pots and offered financial support for projects in the past but are sometimes met with an unwillingness to borrow. Jakarta's current governor has made public statements about the central government's over-willingness to take additional loans with unfavorable borrowing conditions from the World Bank, Jica, and other foreign lenders. Though these expressed sentiments may be only political in nature they unearth a variety of other potential concerns: existing frustration over the impediments to disbursement of existing budgets, pressure from the MoF to effectively spend existing budgets before turning to outside lending, concerns over the perception of corruption in handling large amounts of money for projects, and aversion to foreign borrowing. Projects generally lack financing, but it is more an issue of the political viability in accessing outside funds, combined with the lack of market ready projects, rather than availability of funds that is the core problem.

The spending scrutiny from the MoF filters down from the Ministries to the SOEs, who are also hesitant to borrow large sums of money from foreign donors present in Indonesia, though SOEs do regularly raise capital on international bond markets with seemingly few political repercussions. A turn to bonds as an alternative to seeking tangled infusions from the national budget is oftentimes more straightforward. While raising financing from the bond market is not new news amongst the SOEs, this avenue of obtaining finance has not been utilized by regional and local governments. This may in part be due to the lack of knowledge and understanding of this option. Absent central government funding, unfortunately local banks are not a viable alternate route for financing of infrastructure. Given their high rates of return on consumer and other commercial lending, they appear to have little interest in the less rewarding market for public infrastructure. The average return on equity in Indonesia is 23 percent for the five banks with a market value of more than \$5 billion, according to recent press. Returns are driven by net interest margins, the difference between what banks charge for loans (an average of 12 percent, according to the central bank) and what they pay for deposits. The average margin for the country's largest banks is 7 percentage points, higher than any of the other 20 largest economies in the world, according to available data compiled by Bloomberg at the time this paper was written.

To address the disconnect between existing budget sourced financing and the ability of the PPP to show potential profit for the private sector, the MoF drafted a decree for a new source of funding, known as the Viability Gap Funding Mechanism. This mechanism plans to provide funding from the

central government to cover upfront project costs and reduce the budget impact for the regional government. Approved funding would come in the form of a grant and pay for part of the project costs. In turn (in theory) the private sector would also have a smaller financing burden and thus increase the financial feasibility of the project. The MoF has stated that this funding can cover no more than 40% of the project costs. The initial draft proposal is a positive development in addressing the challenge of project financial feasibility but the final decree has not yet been signed. While a good short to medium term development, the fund again highlights an underlying reluctance to transfer the cost of infrastructure projects in particular sectors to the consumer, which will be necessary over time for more sustainable development. In the short-term, the GOI sees the purchasing power parity of the middle class as still developing and thus low tariffs and other methods of support are used to incubate this development and block the full blow of project costs to the consumer.

While the Viability Gap Funding will be the newest mechanism in trying to stimulate greater private sector involvement in infrastructure, there are several other existing entities of note that play a role in infrastructure finance: the 100% state-owned Indonesia Infrastructure Guarantee Fund (IIGF), the quasi-independent entity referred to as PT IIF, Indonesia Infrastructure Finance, and the 100% state owned PT SMI (Sarana Multi Infrastruktur). In addition to the Indonesia Investment Agency nestled in the heart of the MoF, this system of financing is referred to in the government as 3+1 (IIGF, IIF, PT SMI + IIA). In February of 2010 the Ministry of Finance created PT SMI to serve as a catalyst in the acceleration of Indonesia's existing infrastructure development program and to provide project financing. PT SMI's current capitalization is \$400 million and it works closely with another MoF creation, PT Indonesia Infrastructure Finance (PT IIF). PT IIF was created in August of 2010 to stimulate the growth of the PPP model in infrastructure projects. PT IIF is funded by its founding shareholders: PT SMI, the Asian Development Bank, the International Finance Corporation, and DEG (Deutsche Investitions- und Entwicklungsgesellschaft mbH). The newest shareholder is SMBC Bank (a Japanese bank). The IIF is quasi-independent; the largest shareholder is PT SMI, though its multi-lateral development bank shareholders seem to exert a concerted influence, resulting in the use of multi-lateral development bank environmental, social, and procurement standards to assess potential new projects. The IIF itself recognizes the restraints of having such standards in Indonesia. It may be part of the reason it only had 1 approved project in 2012, a toll road project. In practice, PT SMI and the IIF have very similar areas of focus, have comparable capital bases for lending (the IIF's balance sheet is also \$400 million), and receive direction from the MoF.

In continuing the struggle to address the problems associated with the PPP model, the GOI created the Indonesia Infrastructure Guarantee Fund, IIGF. The IIGF was established by the Ministry of Finance in December 2010 to catalyze and accelerate the participation of private sector investors in the development of infrastructure through PPPs by providing contingent support and guarantees for the risks caused by the government's actions or inaction. In theory, the IIGF protects against certain types of risk, including: land acquisition delay and failure; licenses, permits, approvals delay and failure; financial closing delay and failure; changes in laws and regulations; breach of contract; failure to integrate with network; failure to enforce against illegal activity; and project termination among other issues. To date the fund has only approved one transaction, involving a power plant. Fund leadership recognizes that most project proposals received are neither well-designed nor financially feasible for the private sector. A lack of infrastructure experts and the inherent weakness in the Indonesian bureaucracy to prepare projects that are commercially viable and ready for market implementation has made providing guarantees more difficult. For most proposed projects, there is an apparent disconnect between the initial project development and pre-feasibility studies and the real time market viability of the project. Project proposals that come

to the IIGF often require reconfiguration, sometimes up to a 60% reconstruction of the project model, design, and plan. The poor quality of the proposals requires the IIGF to hire outside consultants to fix the flaws and prepare the project for potential implementation.

The role of the IIGF has turned more to project preparation and conducting market consultations then providing guarantees. IIGF leadership has noted their ability to bring investors and the government together to discuss potential projects and review the possibilities for implementation. The Fund has noted that setting the right framework and a model for future project development can be their main value-add, rather than the guarantees themselves. In 2012, the IIGF and OPIC signed an MOU to co-ordinate their activities and seek mutual cooperation in promoting private sector infrastructure investment in Indonesia, by inter alia, defining opportunities to co-guarantee, co-insure and reinsure investments in such projects that meet the eligibility requirements of both Participants.

Set in the broader context of financing infrastructure in Indonesia, and keeping in mind the total infrastructure financing needs, the 3+1 system has yet to create a sizable dent in compelling accelerated project implementation. The available financing from the “3” is quite limited and is dwarfed by the potential (albeit perhaps underutilized potential) of the Ministries and SOEs. It is also quite small in comparison to what other regional actors and donors can bring to the table. Both the World Bank and Asian Development Bank offer financing options for infrastructure development, though support usually is routed through the MoF as budget support pending certain policy reforms or in reward for policy reforms. The World Bank recently provided Indonesia with a \$100 million policy loan for implementing the connectivity elements of the Master Plan. The largest actor in the realm of donors is Jica (the Japanese development agency). Jica has focused its attentions on select Metropolitan Priority Areas (affiliated to the Master Plan’s “centers of growth”) in and around the Jakarta region. A total of 45 projects have been identified as fast-track and priority projects which Jica seeks to help implement with the GOI by 2020. Projects range from roads to rail, to water and sanitation, to energy projects and ports. Jica’s total portfolio of funds sits at approximately U.S. \$13 billion and a full range of services are available through Jica, from conducting initial project feasibility studies, to project management and construction, to specific project technical assistance. This \$13 billion in funding will help cover almost 30 percent of the estimated financing for the identified MPA projects but funding will also need to come from the government and private sector to fully implement the MPA’s strategy and identified projects. While the government affiliated contracting agent will still provide the overall direction and Ministry backing for project implementation, the significance of other financing actors in Indonesia’s infrastructure sector should be clearly recognized and opportunities for partnership with these actors duly considered.

### American Competitiveness in Infrastructure

Despite the stop-start progress of many major infrastructure projects in Indonesia, continuously changing political priorities for projects, and shifting laws and regulations, which can occur over the lifetime of a single project, many companies are having success and making a profit off of infrastructure in Indonesia; untapped opportunities in the sector are even greater. While American companies do make up some of the pool of those profiting from the infrastructure sector, regional competitors from China, Japan, and South Korea can often be more aggressive and sometimes more successful in implementing large scale infrastructure projects in Indonesia. There are several key deterrents and disadvantages for U.S. companies in the system, but also clear comparative advantages and opportunities for advancement.

A build-in disincentive for all private sector companies looking into infrastructure development is that many projects in Indonesia are simply not high-yield profitable projects. For U.S. companies specifically, construction and engineering firms in the U.S. make considerable profit in the stable cost-recovery American market and may have little interest in exploring the riskier market of Indonesia, particularly given the issues outlined in the sections above. Regional competitors, India as one example, are often more familiar with working in riskier investment markets and thus aren't as dissuaded by Indonesia's operating environment. These competitors can also bring risk and financial guarantees from their host country governments to cover their exposure. Oftentimes the structure and approach of the U.S. private sector can serve as a disadvantage in the Indonesian system. U.S. companies offer many sector and service-specific comparative advantages, and thus look to provide individual products or services for parts of an infrastructure project rather than one-stop-shop start to finish options. Given the bureaucratic complexities in the coordination of Ministerial infrastructure players, the SOEs, and the regional governments, the GOI at every level often looks for a simpler package deal with the full spectrum of necessary services to get the task done (with financing included in the deal), and may be more responsive to the more aggressive competitor with a single source answer. The Japanese, Chinese, and Korean models can give this comprehensive turnkey approach, and the financial backing (often at below market rates).

The lack of U.S. Engineering, Procurement, and Construction (EPC) firms offering turnkey solutions in Indonesia contributes to the complications for greater U.S. competitiveness in the market, and creates a gap for existing U.S. firms looking to build out partnerships for a given project. However, the lack of one-stop-shop options should be balanced against several distinct resiliencies of the U.S. multi-package approach. A multi-package approach of multiple companies and pieces of the solution to an infrastructure project can stimulate the growth of trained local staff and the development of local manufacturing. As particular companies offer specific approaches to human resource development and training of local hires they contribute to the sustainability of the project and the infrastructure sector writ large in a way that EPC firms often don't. Foreign firms that offer the turnkey approach will often have all related project products designed and procured from the international market, failing to focus on local development. This local development of human resources however, provides a necessary piece of the long-term sustainability of any given project, from project management, to maintenance, to operational oversight perspective. While government entities may still lean towards the one-stop shop approach, the sustainability aspects of the multi-package approach should be emphasized and leveraged when approaching the GOI.

As previously highlighted, financing is also a key determining factor for a project to go forward, and regional competitor governments often offer public financing with their private sector company solutions. Competitor full package financing may appear as a combination of soft loans from the government, tied aid which usually means Japanese, Chinese, and Korean companies won't have to compete with other providers to win a project deal, and a competitor government selection of private sector "winners" from amongst the national corporate conglomerates in the respective countries to take on the project. Incentives for the private sectors of these competitors are high. These companies often have a long-term outlook on the region and can visualize the benefits of maintaining control over certain resources and supply chains. They may foresee preferential trade arrangements in the future or see links to other potential business opportunities they expect to win down the road. There are a number of offsets such as these that early involvement in a sector, and sometimes involvement without great short-term financial reward, may bring in the long-term. These companies are often protected from risk by their respective government backers and bring with them relatively inexpensive and easily obtainable export-credit financing. Chinese and other regional banks can provide below market financing. The Jakarta Globe recently reported that the loan provided to build the Indramayu coal-fired power project carries a 0.01 percent annual

interest rate, with a 40-year repayment period and a grace period of 10 years, courtesy of Jica. There is also a level of willingness amongst some regional competitors to operate in an environment that offers less than fully transparent governance. While perhaps not as “flexible” as the Chinese system, legal and regulatory private sector advisors have commented that the Japanese legal environment is more flexible to what companies do overseas than the tough U.S. overseas business operating code. Politics also plays a key role in the winning out of projects. During FAST Track I, PLN used money from a Chinese loan to pay a Chinese contractor to build a coal fired power project. The Indonesia government guaranteed PLN’s repayment of the loan to China, a virtually unheard of arrangement, but thanks to behind the scenes political finagling. Though a rare example, it showcases how politics can play a major role in making private sector involvement work.

Another straightforward reason for the success of regional competitors is lower project cost. Chinese projects are often less expensive than U.S. products and services, which is problematic in the “lowest cost wins” environment of Indonesia. U.S. companies have noted that rather than looking at the life cycle of a project cost, the government and state owned enterprises look too much at the initial cost or go for the less expensive option without factoring in lifetime quality and sustainability. To use an aviation example, the GOI may look at two possible engine options, an engine that is 10 percent more fuel efficient and a less efficient but cheaper engine. The life-cycle cost of that first engine over a 15-year operating time frame is much better but the GOI still goes for the initially cheaper option. Unfortunately most government procurement standards and regulations encourage the SOEs to buy at the lowest initial cost. There is also an accompanying mindset in the government that wants to get the most for their money today. Capacity building within government entities to understand the lifetime cost efficiency model is one target approach. Much of the decision making is politicized and the same aversion to taking on debt holds true in taking on additional upfront project costs. There is no easy solution to this problem but advocacy for the life-cycle cost approach should be a staple item of every sales pitch.

There are several trends witnessed by foreign competitors that may also be of benefit to the U.S. private sector. One is the interest of the GOI in pushing through the logjam of regulations and bureaucracy for high level politically significant infrastructure projects. Coordinating Economic Minister Hatta Rajasa noted to the press in early 2013 that he would form a team to help clear the logjams constraining the planned 2,000 -megawatt (MW) coal-fired Batang plant in Batang regency in Central Java. The much-anticipated US\$4 billion power plant project is being jointly developed by publicly listed PT Adaro Energy, Indonesia’s second biggest coal producer and Japan-based Electric Power Development (J-Power) and Itochu Corp. The willingness on the part of the government to push through on signature projects has been corroborated by multi-lateral organizations with heavy experience in Indonesia, legal and regulatory watchers, and other regional development players alike. There may be a greater band of opportunity in the future to capitalize on GOI political will on specific projects. This does involve risk of its own, as an identified challenge in the Indonesia market is the changing focus of what projects are priority projects and which are not. This approach would take careful analysis and a following of government discussions and decision-making.

In addition to finding and following political trends for infrastructure, specific sectors have shown great potential for private sector investment and growth. Business in the energy sector is expected to grow exponentially. U.S. companies also have distinct comparative advantages that should be capitalized across sectors. An approach in winning infrastructure related deals that has met with some success has been to showcase the U.S. product or service as the best in class on the market. Identifying and advocating for completion of specific pieces of a given project where the U.S. is

known for its comparative advantages, such as in architecture and design, project management, high tech industries, products and services, and in some more complex construction efforts, can be an effective solution. These advantages should be identified and advocated for by sector; in port infrastructure for example, U.S. companies have advantages in dredging, project management, IT overlays, and port security. To find success, the private sector must also be prepared to offer solutions to identified problems rather than ask the government what it wants or needs. Making the case for both the problem and the proposed solution is a necessary element in making progress in Indonesia. While the best in class approach still works in many scenarios, and a multi-package approach favors local human resource development and local manufacturing, there is still a concerted interest from the GOI in seeing a start to finish approach. In the current environment, the private sector will need to be more aggressive in going after opportunities and work more effectively with the Indonesian government to leverage the distinct advantages that U.S. companies have to offer.

### Looking Ahead: Alternative Models and Forums for Success

There are a number of ongoing discussions on possible models for attracting greater private sector involvement in the expansion of Indonesia's infrastructure system. In the quest for public private partnerships, there is often a built-in tension between the government and the private sector entity in who holds the control over project development and operation, particularly in Indonesia's state-centric investment environment. Developing a BOT (build, operate, and transfer) scheme is one approach to address this tension. In this model the private investor builds and operates [a facility] and later on the private sector investor hands control over the facility to the government. This approach could provide the private sector the initial control over the project costs while assuring an eventual hand-over to the government, which would be a favorable outcome in the eyes of the GOI.

Another frequently discussed approach is the development of private sector "aggregators." A private sector aggregator (or sometimes called an integrator) brings in multiple sector and service players to offer a multi-package integrated solution to the government for a given infrastructure project or problem. In this scenario the aggregator could either "bundle" multiple private sector companies and services to implement one project, or bundle a number of potential projects lead by various private sector contributors to offer a broader infrastructure solution to the government, for an industrial center for example. In recent discussions with the ADB it was suggested that "bundles" of projects could be brought by the aggregators to the MDBs for co-financing alongside private sector banks. As discussed in the last section, when conducted by an experienced aggregator this approach can offer more options for local procurement of materials and equipment as well as development of local human resources. This builds greater sustainability into the project or projects being implemented. To take this model one step further, the GOI could actually identify a list of prequalified local manufacturers, vendors, and other partners which would need to be included in the offered package solution. Though these models are not currently the norm in the Indonesian infrastructure market, they can help address some of the identified weaknesses and challenges for U.S. companies in the system as well as address the need for sustainability in infrastructure development.

Alternate models for financing projects are also being explored by the U.S. government and regional donors. USAID is starting to have limited success in rallying private bank interest in small-scale renewable energy projects. There is also work being done on mobilizing private debt and equity financing for small-scale projects, which will be a key component of MCC's Green Prosperity program. Indonesian banks currently enjoy some of the highest profit margins in the world thanks

to a large and growing consumer loan portfolio, thus it will be an uphill battle in expanding these portfolios to riskier, longer-term project financing in sectors that are often poorly understood. Still, a focus on small simple projects may be able to make some gains in the realm of private banks. Other development actors have had great success in working directly with local municipalities on small projects. AusAID for example started a program of small grants for bus infrastructure that went directly to the municipalities for implementation. While initially skeptical of this approach, the Ministry of Transportation eventually threw its full support behind the project when interlocutors explained that the Ministry would still have full control over monitoring the projects and in standard setting. Another possibility being discussed is to create regional corridor development authorities that would be responsible for designing, directing, and implementing regional infrastructure plans. There is much to be learned from current and past donor and regional partner experiences in infrastructure development in Indonesia and an effort should be made to frequently discuss and share information with these players in addressing the plethora of constraints and challenges in infrastructure implementation in Indonesia. Work with other regional partners falls not just to coordination of programming, but in reinforcing policy messaging to the various entities of the GOI, on legal and regulatory reforms, on implementation of existing standards and procedures, on expanding opportunities for infrastructure financing, and advancing higher degrees of selectivity and consistency in the government's infrastructure focal projects.

Finally, it is also important to consider the multi-lateral forums in which infrastructure development is being discussed to help connect thinking on domestic development of infrastructure with inter-regional infrastructure discussions. The first 2013 Asia-Pacific Economic Cooperation (APEC) Senior Officials Meeting (SOM) announced that two main deliverables for the APEC summit this October in Bali will be the establishment of the APEC Connectivity Framework to facilitate economic activities and promote regional integration and a partnership on infrastructure development and investment through public-private partnerships. On the sidelines of the APEC summit, Indonesia will host the international Infrastructure Conference and Exhibition. The event aims to develop the industries that are supporting the government's MP3EI. The three-day conference will be held at the Jakarta Convention Center, and is expected to attract up to 7,000 visitors. Didik Suwondho, the deputy chairman of the Indonesia Chamber of Commerce and Industry (Kadin), said the aim of the event is to provide a "friendly facility" for foreign investors exploring opportunities in Indonesia. Bastari Panji, the deputy for public-private partnerships at the National Development Planning Agency (BAPPENAS), told the press that the government plans to provide updates on the progress of infrastructure development at the event as well. APEC is arguably too large and too broad a forum to create a deep impact on advancing infrastructure development in Indonesia, but its sideline events and focus areas will attract additional attention to the market and hopefully provide some fresh momentum for Indonesia's infrastructure future.

### Summary Conclusion

This paper has sought to provide a comprehensive overview of the condition of infrastructure in Indonesia and the growing need for accelerated infrastructure development to help sustain the pace of economic growth and address the needs of a growing middle class while at the same time improving equity. It has highlighted the vast number of actors in the system, from government Ministries, to the state owned enterprises, the private sector, select donors, and key regional players and forums. It has covered both the government's Master Plan to address its infrastructure weaknesses as well as the challenges in implementing this plan. A plethora of bureaucratic, regulatory, and institutional constraints to progress in the infrastructure picture have been identified as has access to project finance. Where America company competitiveness fits in, in comparison to other regional partners, and what models have worked in the system set the stage



for a discussion of potential new routes for success in infrastructure project implementation. While the issues, major players, and potential solutions outlined in this working paper will likely exist for many years to come, it is important to note the short-term reality that Indonesia is shifting its focus to the approaching Presidential elections and subsequent victor (whoever that may be) in 2014. The next year should not be written off in terms of making progress in infrastructure, but the shift in focus will likely limit the prospects for heavy hitting economic, fiscal and institutional reform and there is no guarantee that the shelf life of recent reforms or the MP3EI will last beyond the end of Yudhoyono's administration. Several important themes which have surfaced over the course of this discussion can be used help guide the new government leadership and to help provide private sector companies operating in Indonesia with information on essential trends in the system and models for success.

A central theme throughout this paper has been the need for greater institutional readiness, including but also beyond finance, in preparing for infrastructure projects. Institutional readiness ranges from the wider regulatory and legal environment to specific project preparation issues. The government will need to develop increased technical capacity and the necessary know-how to develop market-ready, financially feasible projects that offer not only an incentive to the private sector but increase the chances of success for the PPP model. A focus on human resource development is central to this progression. At the same time, the GOI will also need to come to terms with a slow but sustainable way to increase infrastructure spending to pre-Asian financial crises levels. Existing tariffs schemes are a major stumbling block on both fronts. Current tariff arrangements make many projects unfathomable to the private sector and create a heavy budget burden on the government. As a short-term solution, a modest but important step by the MoF to create Viability Gap Funding to partially cover project costs should in theory help to create a potential profit for a private sector partner. The final steps for its operability need to be taken. There is still potential in the PPP model, but success will likely be found in simpler and smaller projects. The government contracting agents will also need to become familiar and comfortable with designing and selling their projects to the private sector if there is a true desire for the PPP model to work in the long-term. A change in mind-set will be necessary to achieve this feat and the political will for these smaller projects will need to grow. Current political perceptions which equate small projects to corruption will need to be met with better safeguards for corruption concerns and the building of trust into the system, not an easy journey given Indonesia's past and still present environment. Alternative models for partnership and private sector involvement should be further explored to diversify the routes for implementing infrastructure projects, including "build, operate, transfer," working with regional governments directly, and using private sector aggregators. The importance of using local manufacturing and procurement, and the development of local human resources should be a central piece to any future PPP project to encourage and build sustainability. The government's procurement system is also a major stumbling block and will require revisions in regulation and mindset to forgo the lowest cost denominator model of procurement and instead favor the model of total lifetime project cost.

In addition to the highlighted structural changes in the system, a change in mindset is needed at the Ministry level to understand and embrace the positive national implications of infrastructure development rather than focusing on the specific benefit of a single project to a given city or region. This will require leadership and commitment from the Ministries and an increase in efficient infrastructure expenditure over time. The Coordinating Ministry for the Economy and the National Planning Agency, BAPPANAS, lack the amount of political power necessary to support a strong project development processes. The MoF has proven a willing and interested partner in improving the project development process, but the sudden change in leadership may divert its attention. While transitions are inevitable in the coming year, what is clear is the future will need to harbor a

compelling force from the central government to drive progress and maintain the long term sustainability of infrastructure and project development in Indonesia. Many in the donor community in Jakarta have targeted technical assistance to the Ministry of Finance, BAPPENAS, and even Bank Indonesia to help the GOI better access and use its own budget, and to create and implement key legal and regulatory reforms. Technical assistance and capacity building in BAPPENAS and the infrastructure affiliated line Ministries in proper project identification, formulation, prioritization, and implementation combined with awareness-raising and advocacy for the creation of market-ready projects that will be attractive to the private sector will continue to be necessary element of infrastructure promotion in the years to come.

While the government has the primary role to play in advancing infrastructure development and stimulating reform in the system (and has taken some significant steps already) the private sector must also be prepared and flexible to a changing system and know its comparative strengths and weaknesses to effectively compete in the market. The level of infrastructure development necessary in Indonesia will require heavy involvement from the private sector and there are many opportunities available under the Master Plan, in working with the SOEs and regional governments, and in working with other donors. There are numerous agencies of the U.S. government which have technical and programmatic experience and distinct comparative advantages to assist U.S. business overseas. By working collaboratively, these agencies can support U.S. business engagement in Indonesia, from helping the GOI create the right environments for investment, to working with the host government and regulatory bodies on key reforms, to building partnerships and frameworks for long-term success. In combination with the existing work and body of knowledge on infrastructure development, this paper serves to provide both a foundation for continuing this effort, as well as a guide and resource for the U.S. private sector in taking advantage of business and commercial opportunities in Indonesia's infrastructure sector.

#### Recommendations for the U.S. Private Sector in Infrastructure Development

- Aggressively advocate on behalf of individual company strengths and comparative advantages, opportunities for company investment in local human resources, technological know-how and experience, and sector-specific advantages with government entities at all levels.
- Work with government Ministries and SOEs to build capacity of those involved in project execution through both on-the-job and classroom training.
  - Leverage the ability to provide this training as a comparative advantage for U.S. companies when engaging the government.
- Engage early in the project identification and development process and look for long-term success in the market.
- Consider building partnerships to create a private sector aggregator model or bundle services and projects as a start to finish option for the government.
- Think flexibly about models for transferring operation of projects to the government over time and consider opportunities with both local government and key donors.
- Follow shifts in the political arena which change the focus on signature projects and target political interest in specific projects to advance implementation in the system.
- Take advantage of USG support for the private sector: State, Commerce, USAID, MCC, OPIC, Ex-IM, USTDA, among others.