





Participants in the Milken Institute Financial Innovations Lab Asian Development Bank, Manila, Philippines, June 27, 2017

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TABLE OF CONTENTS

5 INTRODUCTION

7 ISSUES AND PERSPECTIVES

- 8 Operational Models
- 10 Funding Sources
- **12** Financing a PPP

13 BARRIERS TO INVESTMENT

- 13 Lack of National Plan for Infrastructure
- 13 Lack of Government Capacity
- 13 Project Development Delays
- 15 Political and Corruption Risks
- 15 Local Versus Foreign Financing
- 16 Lack of Robust Capital Markets

17 CASE STUDY: THE LIGHT RAIL 1 PROJECT

18 POLICY SOLUTIONS

- 18 Step 1: Create a National Infrastructure Prioritization Plan
- 18 Step 2: Improve the Procurement Process
- 18 Step 3: Standardize Contracts and Permits
- 19 Step 4: Create an Improved Right of Way Authority
- 19 Step 5: Provide Government Funding for Canceled or Delayed Projects
- 19 Step 6: Create More Effective Tax Exemptions

20 FINANCIAL SOLUTIONS

- 20 Private Equity Funds
- **20** Project Bonds
- 21 Secondary Market Funds
- 22 Tax Increment Financing
- 23 CONCLUSION
- 24 LIST OF PARTICIPANTS
- **26 ENDNOTES**

The time has come to create a more enabling environment in the Philippines for private investment as the government plans for an era of "build, build, build."

INTRODUCTION

The distance from Manila's Ortigas Central Business District to Makati, down Epifanio de los Santos Avenue (EDSA), is just under 6 kilometers, but the drive can take an hour in the bumper-to-bumper snarls of buses, cars, motorbikes, and cabs. In one of the world's most densely populated metropolitan areas, Metro Manila's 12.8 million residents grapple daily with some of the worst traffic across all forms of transport, including roads, trains, and airports. All around the country, transportation infrastructure is falling into overuse and disrepair. The Philippines ranks 112th among 138 countries in quality of infrastructure, well behind many of its Southeast Asian neighbors.

This poses major problems to the country's projected growth trajectory and the vision of increased prosperity for its citizens. In 2016, the Philippine economy rose by 6.8 percent; it is now in its 73rd quarter of uninterrupted growth. Inflation has remained stable, and the national debt has received an "investment grade" rating. However, infrastructure that is deteriorating, that can't move people to and from work, and that can't support a booming manufacturing economy will constrict future growth while increasing social and economic burdens. Just the traffic slowdowns on Manila's poorly maintained roads and bridges alone are said to cost the country \$20 billion a year in diminished productivity and declining health due to air pollution.

The current government of President Rodrigo Duterte has pledged to address this looming economic roadblock by building on the work of previous administrations to increase infrastructure spending. Whether the funding will come from overseas development assistance or from local and foreign banks and investors, improvements of this magnitude will require billions of dollars, both for "greenfield" infrastructure (projects built on "new," i.e., previously undeveloped, land) and for upgrades to existing "brownfield" infrastructure.

Successful PPP structures are based on value-for-money calculations that take into account the greater efficiencies that often exist when a private partner assumes the design, construction, and operation over the asset's life cycle.

For the past decade, the country has also been using public-private partnerships (PPPs) to attract more private participation to infrastructure projects. The PPP structures themselves depend on several factors: the types of projects involved, such as power generation or toll roads; the potential for revenue generation to repay private investors; and the overall costs of raising capital. Not all infrastructure projects lend themselves to a public-private partnership structure, but those that do often run up against barriers—some of them regulatory, some of them a regulatory void—that prevent greater access to the capital that could propel more projects to completion more rapidly.

To this end, the Milken Institute convened a Financial Innovations Lab® in Manila in June 2017, bringing together leaders from private equity funds, commercial banks, development finance institutions and corporations, as well as institutional investors, with the goal of producing specific recommendations on new or improved financing models for investment in Philippine transportation infrastructure.

Lab participants identified several barriers to investment and discussed various partnership models that could mitigate some of the perceived risks. They agreed that stronger capital markets, better policies surrounding project development, and more financial products are essential to attracting private investors. This report summarizes the discussions.

ISSUES AND PERSPECTIVES

The Philippines is made up of more than 7,100 islands, making infrastructure maintenance and development of its roads, rails, bridges, ports, and airports a continual challenge, as they are the lifeblood for the transport of goods and services for nearly 120 million residents, and are essential to the country's continued economic growth.

In the decade since the global economic crisis, the Philippine economy has rebounded with strong growth rates (6.8 percent in 2016) and stable inflation. Foreign direct investment overall has grown steadily since 2010. The country's debt is rated within the range of BBB (investment grade) by all major international ratings agencies, a shift from even four years ago when its debt was classified as "junk." The manufacturing, agriculture, and tourism industries have helped to drive this growth and attract the investment.

Unfortunately, deteriorating transportation infrastructure will hamper future growth. According to the World Economic Forum, the country is well behind other nations in the ASEAN region. As shown in Figure 1, the quality of its roads, ports, rails, and airports is trailing that of Malaysia, Thailand, and Indonesia.

Figure 1: The Philippines Global Competitiveness Rankings Relative to Other ASEAN Countries

Indicator	Philippings	Singapore	Malaysia	Thailand	Indonesia	Vietnam	Brunai Darus salam	Lao PUR	Myanmar
Quality of roads	106	2	20	60	75	89	41	91	139
Quality of railroad infrastructure	89	5	15	77	39	52	N/A	N/A	96
Quality of port infrastructure	113	2	17	65	75	77	87	132	123
Quality of air infrastructure	116	1	20	2	62	86	84	100	132
Quality of electricity supply	94	2	39	61	89	85	52	77	118
Fixed telephone lines/100	107	29	72	91	86	99	85	73	124
Mobile telephone subscriptions/100 pop.	65	24	27	55	38	40	85	131	135
Quality of overall infrastructure	112	2	19	49	80	85	67	81	135

^{*}Myanmar did not meet survey requirements to be included in the 2016-2017 report; these numbers are from the 2015-2016 report.

Source: World Economic Forum.

This translates to billions of dollars in lost productivity, reduced regional competiveness, less foreign direct investment, and declining tourism as infrastructure declines still further. On the plus side, however, the government has pushed to make infrastructure investment a national priority and has pledged greater funding over the next decade, with oversight of the National Economic Development Authority (NEDA), whose chairman is the country's president.

OPERATIONAL MODELS

The government has been the traditional funder of infrastructure, as well as its operator. In this kind of purely public model, the government uses tax or bond revenues to fund projects. But since 1986,^{vii} the Philippine government has also privatized infrastructure assets; for example, selling a power plant or a telecommunications hub to a private company that will oversee its continued operations and maintenance. This is especially the case for the power-generation sector.

In a public-private partnership, the government contracts with a private investor or group, and awards a concession involving some part of the asset's early development, construction, or operation. Legislation for such partnerships was created in 1990 as Philippine Republic Act No. 6957, popularly known for its build-operate-transfer (BOT) program. The law was amended in 1993 as R.A. No. 7718 to expand the projects allowed, to program across the local governments, and to broaden the scope of solicitation, finance structures, and rates of return. Variations to BOTs—such as build-own-operate (BOO), build-lease-transfer (BLT), or build-transfer-operate (BTO)—were now permissible as well.

The government of Benigno Aquino (2010-16) worked to facilitate more public-private partnerships, including the founding of the PPP Center that coordinates the project development and preparation for PPPs across government agencies and business sectors. Its mission has also been to ease development barriers between the public and private sectors, to provide technical and advisory assistance, and to act as the "hub" for standardizing and monitoring the processes, including legal contracts and land ownership transfers.

To establish a PPP, the implementing agency, such as the Department of Transportation, prepares a feasibility study for what it has determined to be the best operational model of the project. The study undergoes a subsequent review by a technical working group; another review by the Investment Coordination Committee, a group of leaders from various departments and agencies; and finally the NEDA board.*

The goal of the review process is to structure each PPP on the basis of numerous factors, including sound value-for-money returns (its potential future revenues), the costs of capital, construction time, and end-user demand. As shown in Figure 2, this could result in some variation of a build-operate-transfer. For example, the private partner could take on everything from designing to financing and operating an asset. Repayment can come in the form of user fees, such as tolls, or through availability payments (based on the "availability" of the project or service) from the government or offtaker, i.e., the buyer of the delivered asset.

Figure 2: Types of PPPs

PUBLIC-PRIVATE PARTNERSHIP (PPP)					
Contract Type	Design-Build- Finance-Operate (DBFO)	Build-Transfer- Operate (BTO)	Build-Operate- Transfer (BOT)	Build-Own- Operate-Transfer (BOOT)	Build-Own- Operate (BOO)
Construction	Private Sector	Private Sector	Private Sector	Private Sector	Private Sector
Operation	Private Sector	Private Sector	Private Sector	Private Sector	Private Sector
Ownership	Public Sector	Private Sector During Construction, then Public Sector	Private Sector During Contract, then Public Sector	Private Sector During Contract, then Public Sector	Private Sector
Who Pays?	Users or Offtaker	Users or Offtaker	Users or Offtaker	Users or Offtaker	Users or Offtaker
Who Is Paid?	Private Sector	Private Sector	Private Sector	Private Sector	Private Sector

Source: World Bank.

Recently, the government has expressed its preference for a new PPP infrastructure operational model, called an O&M, for operations and maintenance. In this model, the government develops and funds the construction, and then tenders out the operation and maintenance to a private partner. The assumption behind the preference is that the government could obtain the cheaper early-stage financing, and that the more expensive private capital would be used for the later stages, an argument that no doubt is attractive for communities concerned with project expenses that they would have to repay through increased taxes or debt burden.

However, successful PPP structures are based on value-for-money calculations that take into account the greater efficiencies that often exist when a private partner assumes the design, construction, and operation over the asset's life cycle. When it can recover its investment over the long tenure of the project (thus providing it with a longer "runway" to generate cash flows and a longer term to pay off debt), its overall cost of investment capital drops. For this reason, there is some concern that in the long run an O&M model will be neither cost-effective for the government nor financially attractive to investors.

Indeed, each operational model—public, private, or public-private—has implications for the type of financing it can take on. If an asset has little to no revenue potential, such as a non-tolled highway, traditionally the public sector would fund it completely. If a project has the ability to generate user fees or is particularly difficult to operate and maintain, then the private sector may be the more appropriate operator.

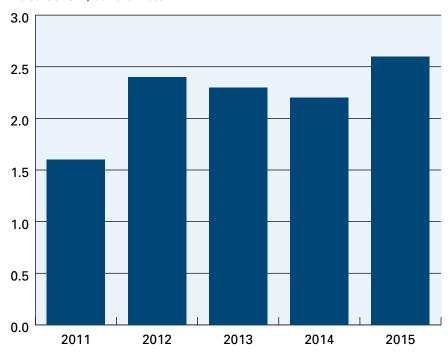
Once an operation model is designed, the project developers can look to raise capital to get construction underway. The funding landscape in the Philippines is uniquely robust with a variety of stakeholders—such as the government, local banks and industry conglomerates, overseas development assistance initiatives, and foreign investment firms—who are interested and able to finance new projects.

Funding Sources

For years, government spending on infrastructure was minimal, but public funding has grown over the past decade, starting with the Aquino administration. In early 2016, the last year of Aquino's term, spending reached 5 percent of GDP, or roughly \$15 billion.xi The Duterte administration, which assumed office in June 2016, has pledged to raise this to 7 percent, or \$168 billion, by 2022, through what it bills as its "build, build, build" program.xii

Figure 3: Government Spending in the Philippines, 2011-2015 Actual Infrastructure Spending

Percent of GDP, Current Prices



Source: DBS Bank.

President Duterte's push to improve infrastructure includes partnerships with foreign governments that have pledged overseas development assistance (ODA). China and Japan have provided infrastructure ODA for years but have recently committed significantly more funding. ODA represents a relatively inexpensive form of financing via low-cost loans or grants that can have very favorable interest and repayment terms. This kind of capital doesn't come without cost, however; there are geopolitical implications to consider. Also, long-term contractual commitments could obligate recipient countries to use materials, labor, or equipment from donor countries, in effect reducing the value of the ODA.

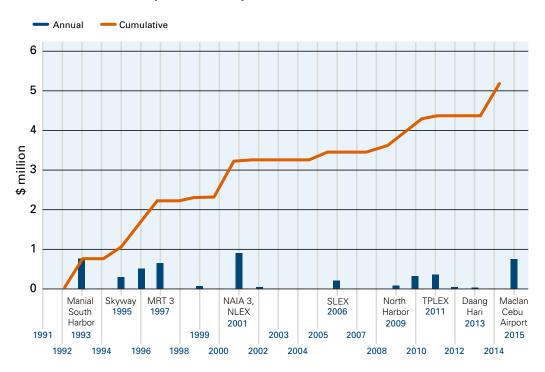
Late in 2016, China pledged \$24 billion in ODA assistance for projects across a variety of sectors, including transportation, and in January of 2017 made a specific pledge of \$3.7 billion for 30 infrastructure projects, including railways around the islands, as part of its Belt and Road Initiative that means to expand connectivity across Asia and into Europe.xiii Japan has also pledged \$9 billion in ODA for 11 projects across the Philippines.xiv Concerns have been raised in local media over the amount of ODA funding coming in, particularly in the form of debt, and notably from China—that even with favorable rates and geopolitics aside, assistance at the pledged levels could bankrupt the country during another economic crisis.xv

Development finance institutions (DFIs) can offer a less restrictive form of assistance. These institutions—examples include the World Bank's International Finance Corporation (IFC), the Asian Development Bank (ADB), and the Japan International Cooperation Agency (JICA)—provide loans, equity, and loan guarantees or subordinated capital as financial incentives, which can make riskier investments more attractive to investors. The ADB, for instance, provides guarantees on loans and bond issuances to give investors more assurance that they will be repaid should the project be delayed or fail.

Outside of government funding and ODA, much of the infrastructure spending deficit was made up by the local private sector. Figure 4 shows the growth of private participation in projects from 1991 to 2015. The domestic banking sector is highly liquid, with the top four banks each with assets of over Php1 trillion (US\$19 billion).xvi BDO, BPI, MetroBank, and the Land Bank of the Philippines, are all dominant players in infrastructure financing. There are some hurdles, however, as domestic banks are expected to be fully compliant with Basel III, the latest round of bank regulatory reforms dictating capital requirements and new leverage ratios, by 2019.xvii

The government has also imposed a long-standing 25 percent single borrower's limit (SBL) for banks, which is meant to reduce exposure to risk of investing too much into one project. In 2010, the Aquino government loosened restrictions on local banks to be able to use more of their balance sheets to finance infrastructure projects, allowing an additional 25 percent in loan volumes, if it was for PPP projects. However, the Duterte administration chose not to continue the allowance and as of January 2017, banks are now limited to the 25 percent SBL.

Figure 4: Private Investment in Infrastructure, 1990-2015
Private-Sector Participation in Transportation Infrastructure, 1990-2015



MRT-3 = Metro Railway Transit-3, NAIA 3 = Ninoy Aquino International Airport 3, NLEX = North Luzon Expressway, SLEX = South Luzon Expressway, TPLEX = Tarlac-Pangasinan-La Union Expressway.

Source: World Bank Private Participation in Infrastructure Database.

Local industry conglomerates are also dominant players in infrastructure finance. Family-owned corporations have large stakes in numerous sectors, from real estate and agriculture to consumer goods, and they maintain a strong presence in infrastructure. Ayala Corporation, for example, is the country's oldest conglomerate and its wealthiest landowner, and thus well positioned to support and own infrastructure projects. The conglomerates are also well capitalized; the top five control roughly \$85.8 billion in assets. XXIIII Banks and the conglomerates compete to bid for PPP projects; they even compete in the buying and reselling of infrastructure projects that are up and running in order to refinance other projects.

Other local investors have begun to participate in infrastructure, and they could do more if only a few hurdles were lifted. Local pension funds, as an example, are constrained by regulations that favor liquid investments like public equities, and that mandate otherwise conservative portfolio allocations. Because infrastructure investments can lock up capital for years and even decades, despite comparatively safe rates of return, this makes investing in the sector difficult.

There are also very few financial products and platforms in which investors can allocate capital, and until recently, virtually no private equity funds. This has started to change, with the creation in 2012 of the Philippine Investment Alliance for Infrastructure (PINAI), a \$625 million equity fund that was capitalized by the Government Service Insurance System, the country's largest pension fund; the ADB; the Dutch firm Algemene Pensioen Groep (APG), a pension fund manager; and Macquarie Infrastructure and Real Assets (MIRA), a global manager of infrastructure fund, which manages this fund as well.xix

With local banks, conglomerates, and investors directing capital into infrastructure projects, there has been little room for foreign capital in the market. However, as the need accelerates and more projects are targeted, there will be a need for additional financing. Global pension funds have begun looking into partnerships, and there is already a foreign bank and investment presence in the form of such institutions as the British multinational HSBC and Australian firm Macquarie. Foreign firms can join PPPs when local banks hit their SBL limits (and comply with Basel III requirements), but they too face a cap—their participation is now capped at 40 percent ownership of an asset. This has stifled investment and remains a hurdle, though there have been talks recently to raise the cap on foreign ownership.

Financing a PPP

PPP infrastructure projects are traditionally financed through a mix of equity and debt. The planning and early operational phases tend to receive funding from a local private equity firm or conglomerate that acts as the project "sponsor;" there are likely also development assistance grants from ADB or other institutions. During the early stages, the sponsor also arranges for long-term loans to sustain the financing through to operations and maintenance once the project has begun to generate cash flows to service the debt payments. This financing can come from local and foreign banks, or from investors through debt funds, and corporate and project bond issuances. Investors can exit by refinancing or trading the securities on capital market platforms; however, most investors recognize that PPPs are long-term investment opportunities.

BARRIERS TO INVESTMENT

Lab participants agreed on two major themes: the importance of adopting new models to broaden the channels for allocating capital toward infrastructure, and the need to address barriers that impede rolling out more PPPs across the country.

Lack of National Plan for Infrastructure

Despite efforts by both the current and former administrations to expand infrastructure spending, there is not yet an official national plan that prioritizes projects, their funding models (government versus ODA versus public-private), or their structures (e.g., public, BOT, O&M). Without a national plan, potential investors and developers find it difficult to know which projects will move forward. Nor is there an incentive for ministries to work together or with the private sector. Without a national plan for prioritizing and funding models, the PPP Center will never become fully empowered to facilitate partnerships.

Lack of Government Capacity

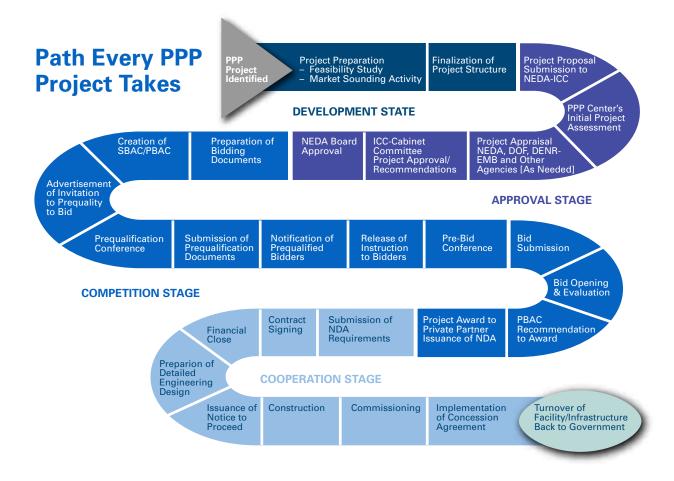
The respective partners to a successful PPP have extensive knowledge of infrastructure financing, design, and operation to execute successfully. This expertise is difficult to come by, as projects are bespoke and can take years to develop; and government ministries may find it daunting to build up human capital to propose, solicit, and evaluate infrastructure assets. Engineers working in transportation may well understand how to build a bridge, but it also takes accountants and finance experts to structure funding and repayment packages for that construction, as well as lawyers to frame the legal contracts to work with private firms and labor.

During the Aquino government, individual agencies or ministries put their PPPs out for bid through the PPP Center's review process. However, the Duterte administration has opened PPPs to allow for unsolicited proposals. This has run into some glitches; respective agencies and ministries lack adequate staff to review the complex proposals, exacerbating the already lengthy process of moving projects from idea to implementation.

Project Development Delays

Infrastructure PPPs often take years to design and develop—a lengthy process that includes coordination within and among multiple ministries to gain approvals and permits, land acquisition (called right of way, or ROW), legal contracts for the partnership parties, and compliance with regulatory standards. All this requires research and legwork, and thus capital—and the first shovel hasn't yet hit the ground. Figure 5 details development of a hypothetical project.

Figure 5: PPP Project Development



Source: PPP Center.

To date, despite the PPP Center's ongoing efforts, there is little standardization around the PPP design process. From contracts to tender processes to ROW, no formal template explains how the various ministries can implement their projects. This is a cause of confusion and delays, and consternation among investors.

Lab participants outlined key issues within the development phase of a project:

- Right of way: A critical step in the PPP development process is acquiring land, or right of way (ROW), on which to build. Participants agreed that the government needs a more coordinated effort by a ROW authority that can fast-track applications for land transfer and perhaps give priority status to projects within a national plan. In fact, under the Duterte administration, the PPP Center has been "supporting legislative changes that facilitate expeditious acquisition of—and just compensation for—the required right of way (ROW)."xx
- Procurement process: Whether through solicited or unsolicited proposals, the
 tender system has issues of its own. Many participants suggested an approach
 that clearly outlines which projects are slated for PPPs, their operational models
 (BOT, O&M, etc.), and guidelines to help developers design projects to match the
 government's needs.

- Contract standardization: There is ongoing work to standardize contracts across
 agencies, ministries, and local government units, but more could be done to
 create simplified, uniform legal contracts across ministries between the public and
 private sectors, as well.
- Unsolicited proposals: Most Lab participants agreed that unsolicited proposals
 actually hinder infrastructure investment rather than encourage it. This is because
 development companies or project sponsors can spend too much time creating
 projects that will never be considered for implementation.
- Compensation for removed bids: Without a national plan, and with unsolicited proposals still in place, there's a significant risk that project sponsors and developers will spend time and money to submit applications and bids—even though there is a chance that the project may stall. In other countries, governments provide compensation for bids for projects that were canceled or delayed. As yet, the Philippines lacks a concrete policy for such a compensation system, though this would help to mitigate some of the development risk.

All of the challenges in the development phase add to the delays when trying to get a project up and running.

Political and Corruption Risks

Public-private partnerships are inherently political; the public aspect of the project requires participation by government entities. This opens each greenfield development or existing brownfield asset to the risk that new administrations will come in with different priorities, and even risks of corruption. This is especially true in the absence of a long-term national infrastructure plan that can ensure that priorities remain constant across administrations. According to research by the Transparency and Accountability Network, founded in 2000 in Manila, corruption can add 10-30 percent to a project's total cost.xxi Even when reports appear to be largely anecdotal, they serve as red flags to private investors, and actual corruption itself is far more damaging in this regard.

Local Versus Foreign Financing

The funding and financing landscape is unique because there is no shortage of liquidity in the market. Local banks and conglomerates have financed most of the country's PPPs thus far. They have also had little competition, given the restrictions on foreign ownership of both greenfield or brownfield works. However, local investors don't have endless supplies of capital to fund the increasing numbers of projects coming through the bidding process. This anticipated growth may require foreign private investment, but the 40 percent minority stake rule will remain a challenge, especially because international funds tend to deploy large amounts of capital into projects. The smaller deal sizes available to them, and the restrictions on ownership, offer fewer opportunities to allocate the capital amounts they generally prefer.

Local investors have another advantage: most projects are financed in pesos. Foreign investors generally prefer U.S. dollar-denominated projects because the currency risk is considered lower. Again, it's worth noting that PPP projects may take years to get up and running, and the concession agreements may be based on decades of operation of the asset. This means that financing is on a long-term basis. Investors can hedge currencies to give themselves some insurance against peso fluctuations, but it is prohibitively expensive to try to hedge currency on 15- to 20-year contracts. For this reason, local investors, who don't need to hedge and who are more attuned to the winds of local politics, will see less risk than their foreign counterparts. They also won't require a greater financial return to justify their risk, making their costs of capital lower. The project developers will in turn prefer the local investment capital, which will cost them less overall.

Lack of Robust Capital Markets

Lab participants discussed key issues for infrastructure financing that arise because of the lack of capital market activity:

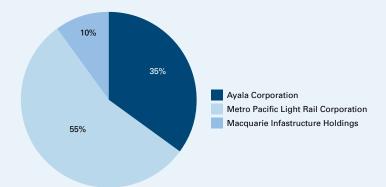
- Bond market: To date, there have been relatively few project bond offerings and a comparatively shallow corporate market for government issuances. Part of the historical challenge has been that trading platforms lacked specific guidance and policy for PPP project bonds. However, the Philippine Dealing System Group (PDS), which maintains the trading platforms for fixed-income and foreign exchange markets, announced in January 2017 that it would consider rules to allow for more PPP fixed-income trading on its platform. *xxiii This follows moves in 2016 by the Philippine Stock Exchange (PSE) to ease restrictions for raising equity, eliminating the requirement to show three years of cash flow as proof of creditworthiness before being allowed to list on the exchange.*xxiii
- Credit rating agencies: Philippine sovereign debt has been rated by international rating agencies; however, its Securities and Exchange Commission requires that corporate bonds be reviewed by either an international firm or by the Philippine Rating Service Corporation (PhilRatings), the domestic ratings agency.xxiv Given the limited use of corporate bonds, PhilRatings has had little experience in assessing this type of debt, especially for infrastructure projects; as such, many Lab participants question the quality of any local rating.
- Blending peso-dollar-denominated loans: Before the Asian financial crisis of the 1990s, infrastructure debt was financed in U.S. dollars. Then when the markets crashed and their currency depreciated, projects became expensive for Filipinos. Lesson learned, and as the country's growth rebounded, financing became increasingly structured in pesos—cheaper for local companies, but less appealing for foreign investors. Because the government is now encouraging more foreign investment partnerships in PPPs, Lab participants discussed the idea of blended currency financing that would accommodate both local and international investors.

PPP CASE STUDY: THE LIGHT RAIL 1 PROJECT

Light rail in Manila opened in the mid-1980s, taking passengers the 50 kilometers from Paranaque City to Quezon City. Subsequent route expansions during the next three decades mean the line now accommodates nearly a half a million people per day.*** Those decades have also brought wear and tear that is difficult to repair; overall operations and maintenance suffered as well. In 2014 the original owners of what is known as LRT1, or the Green Line, created a tender to bid out operations and maintenance of the existing line and to award a concession for the railway's expansion. The goal of the expansion is to allow for an increase in daily passengers to nearly 800,000, and to cut travel time down from outer provinces to downtown Manila by half or more.***

The winning concessionaire is Light Rail Manila Corporation (LRMC), which has private-sector financing, as shown in Figure 6, from the Ayala Corporation, the Metro Pacific Light Rail Corporation, and Macquarie Infrastructure Holdings.

Figure 6: LRMC Ownership Structure



The consortium is expected to invest roughly \$832 million in the \$1.3 billion project, with the government making up the difference, or approximately \$533 million, much of which will come from ODA provided by the Japan International Cooperation Agency.xxvii

Source: Light Rail Manila Corporation.

As Figure 7 illustrates, the concession agreement extends over 32 years, with fare adjustments allowed annually, but with a government-mandated price cap.

Figure 7: Light Rail 1 Project Terms

Project Details	
Asset Name	Light Rail Transit 1
Concession Period	32 Years
Concessionaire	Light Rail Manila Corporation (LRMC)
Regulator	Department of Transport
Payment Structure	Merchant Payment

Source: Light Rail Manila Corporation.

The project's development took considerable time: the bidding process stalled; fare hikes were not granted; and Japanese trains, which were a condition of JICA's ODA funding, were not available at the agreed-upon pricing—all of which required penalty payments from the government to LRMC. XXVIII Right of way problems also plagued the project. These issues, as well as sensitivities around each fare hike, demonstrate the challenges PPPs can face.

POLICY SOLUTIONS

After reviewing the major barriers to increased infrastructure investment, participants outlined policy steps the government could take to facilitate more investment in project development and implementation.

STEP 1: CREATE A NATIONAL INFRASTRUCTURE PRIORITIZATION PLAN

The lack of a national infrastructure plan to identify need and prioritize action was seen as a major hindrance. Consequently, most discussion focused on the need for a government initiative that would coordinate projects and facilitate greater investment from the private sector.

STEP 2: IMPROVE THE PROCUREMENT PROCESS

The government could then implement a "decision tree" approach (graphing out options and their likely outcomes) to help determine which projects to make public, private, or public-private, and the operational models for each. A decision tree can also help streamline other aspects of a project, like the steps in the tender and bidding processes, and steps to allow for community engagement early on to promote cooperation from all sides. The approach could also include structuring the PPP payment; for example, user fees versus availability payments.

To date, very few projects have been structured with government payments, and because user/ridership is difficult to predict, private-sector participants often prefer some combination of user fee and availability payments to support more sustainable revenue.

STEP 3: STANDARDIZE CONTRACTS AND PERMITS

As discussed earlier, legal contracts have not been standardized across ministries and local governments. In particular, the local government overseas permitting processes need attention—but there is no standardization, and virtually nothing is digital.

Participants agreed that creating standard contracts would be useful, as would creating a "one-stop shop" that parties could turn to for acquiring permits, e.g., for construction permits that could be used on both a local and national level, and could be managed through an online database. The right-hand column in Figure 8 illustrates the duties a one-stop shop could assume.

Figure 8: Creating a One-Stop Shop for Contracts and Permits

Problem Identified	Best Practice Identified	Proposed Changes
Applicant has to contact a large number of government agencies to apply for a permit.	Setting standards for the requirements and procedures for evaluating construction-related permits. Building permit to be released within five days of payment.	LGUs are only involved with: Application form Facilitating or providing assistance for inspection Payment of fees and changes Creating a one-stop shop will aid applicant to procure: Receive application and documents for building permits Issue building permits Coordinate and facilitate technical reviews Coordinate joint inspections by the OBO and BFP Payment collection Payment paid to one-stop shop

Source: USAID (2014) "Streamlining of Building and Occupancy Permitting Processes: Investment Enabling Environment (INVEST) Project."

One example toted by Lab participants was the delivery unit within the Malaysian government's Private Finance Initiative (PFI) program. In creating a stand-alone group tasked with helping to shepherd each project from idea to implementation, the government has tried to overcome some of the barriers of human capital, as well as the common issues of governance and transparency. Some Lab participants suggested that this type of approach, in not just helping with development but actual implementation, could help in the Philippines.

STEP 4: CREATE AN IMPROVED RIGHT OF WAY AUTHORITY

The process of acquiring land is a continual challenge for project developers and communities alike. Policies around title and deed transfers could be made easier for both parties to facilitate easier transitions. As shown in Figure 9, best practices from countries like Canada and Australia could be used to help inform regulations in the Philippines. These include developing land exchanges, sharing appraisals at an early stage, and providing fair and adequate compensation for landowners.

Figure 9: ROW Best Practices

ROW Lessons from Successful Case Studies					
Australia	Share appraisals with property ownersDevelop eligibility criteria for land exchanges	 Enhance cooperative relationship with property owners to facilitate timely property acquisition 			
Canada	 Land exchanges offered when land is available Examples of incentives provided to acquire ROW: Inconvenience allowance Bonus 	Ensure just and appropriate compensation to provide sufficient incentive for smooth ROW acquisition			

Source: U.S. Federal Highway Administration (2009), "Streamlining and Integrating Right-of-Way and Utility Processes with Planning, Environmental and Design Processes in Australia and Canada."

STEP 5: PROVIDE GOVERNMENT FUNDING FOR CANCELED OR DELAYED PROJECTS

Because no mechanism exists to compensate bidders if a project is canceled, Lab participants discussed how the government could create a pool of capital for disbursement to a sponsor or developer if there's a delay on an awarded bid. This would ease cash flow pressures.

STEP 6: CREATE MORE EFFECTIVE TAX EXEMPTIONS

One final policy recommendation is to improve the tax environment for infrastructure investors. This could include favored tax statuses for investors willing to support PPP projects, as well as for the companies doing the construction. This type of legislation was suggested by NEDA late in 2016 but has to be finalized. It would allow for tax exemption for PPP projects that have national significance.***xxxx**

FINANCIAL SOLUTIONS

The Lab conversation focused on new ways to finance public-private partnerships in order to attract more private capital from local or foreign sources. The Lab didn't try to answer the question of whether or not to use ODA spending in lieu of private capital, but instead reviewed models that could leverage public funding or ODA to attract greater private investment. Thus, it was not an "either/or," but rather a conversation of *when* private capital is effective and what models to best allocate this financing to infrastructure projects.

PRIVATE EQUITY FUNDS

It is important to remember, when structuring how a PPP will be financed, that early-stage equity can be the hardest type of capital to access. Projects consume equity first, long before they begin to generate cash flows; and because this is more expensive capital, it doesn't require regular interest payments, as normal debt would. However, equity is riskier than debt for PPP investors because there are no means to secure the investment. Firms like the Macquarie Group have been leading the market in raising private equity for infrastructure in the Philippines. This is good for Macquarie; but the Australian firm has little competition, either from local firms or other large international investors like Blackstone or KKR, who are significant investors in infrastructure globally.

Structuring new private equity funds with a mix of private capital and ODA is just one potential innovation. Historically, agencies like the Japan International Cooperation Agency (JICA) and the Asian Development Bank (ADB) have provided concessional funding that didn't require a market rate of returns; in this case, investors seeking higher returns could split more of the internal rate of return (IRR) because the ODA providers wouldn't be looking for an equal share.

With the potential influx of capital from China and elsewhere, Lab participants debated whether some of that ODA could be used as a subordinate equity, that is to say, as a "first-loss" tranche to attract other investors, including foreign investors. These structures have been used in other countries to make projects with lower return profiles more attractive to private equity investors.

There were some questions, however, as to whether this would be feasible. As discussed earlier, ODA often comes with conditions, e.g., that the construction and labor be sourced from the donor country. Depending on an ODA's terms, it could be used as more of a subordinated tranche of capital for new PPP projects.

Next Steps: Model a potential private equity fund that would include ODA concessional equity financing, combined with market-rate equity from investors.

PROJECT BONDS

Conglomerates in the Philippines can raise corporate bonds to help finance infrastructure projects. This debt is rated and priced based on the health of the company's balance sheet. The proceeds of the bond then go to support a new infrastructure PPP.

Project bonds are securities that are issued by either a corporate or a special purpose vehicle, but the rating and pricing is based on the financial health of the project and not the larger company. The credit worthiness of the project is determined through analysis of the future cash flows and the credit worthiness of the partners.

The country has seen very few such project bonds, however, in part because of the absence of formal policy governing the trading of such securities. With movement by the Philippine Dealing System Group to allow for such instruments, more of these bonds could be issued. With more bonds issued, there could be eventual movement toward standardization of terms and structure.

Lab participants agreed that project bonds should be utilized more often to support infrastructure projects, especially as banks face the single borrower's limit and Basel III compliance. These securities also offer an option to engage the capital markets and diversify the types of investors participating in deals.

Bond guarantees could be yet another solution. The ADB and ASEAN +3 countries (ASEAN + China, South Korea, and Japan) created the Credit Guarantee and Investment Facility (CGIF) in 2010 to provide a financial product that would act like insurance and make local-currency, corporate-issued bonds in ASEAN countries more attractive to investors. The guarantee, part of a pooled trust fund managed by ADB, covers up to \$140 million of a bond's issuance, with CGIF's strong credit rating allowing the securities greater flexibility in tenure (time to maturity) and rates.**

Recently, CGIF launched a construction period guarantee (CPG) that provides "irrevocable and unconditional guarantees" of as much as \$140 million as insurance on project bonds for early-stage construction of greenfield infrastructure, often the riskiest time for the project. The guarantee lasts only during this phase; afterward, the bond's rating is based on the project's general operation and financial risk.**xxxii

Lab participants discussed that it might be possible to use ODA funds as similar bond guarantee funds to help support more issuances for the Philippine capital markets. As a type of insurance, this could help local government units (LGUs) in particular, providing a credit enhancement to municipalities that otherwise would struggle to use their own balance sheets to provide guarantees. This would require a greater understanding of the conditions of such funding, such as whether it could be used to support a trust fund rather than a specific project. However, participants suggested that any model that could be created to reduce the risk of LGUs falling behind on contingent liabilities would be beneficial.

Participants also discussed the ability to hedge foreign exchange (FX) risk by creating FX-linked bonds, products that link interest payments to a currency index. This would give foreign investors more comfort when buying peso-denominated project bonds.

Next steps: Structure a national pool of capital as a trust fund to use for guarantees. This fund could include guarantees for up to \$150 million of a project bond offering, to determine if this would make investors more comfortable with securities that could match risk/return profiles.

SECONDARY MARKET FUNDS

Infrastructure projects are by definition long term; once they are operational, they can generate cash flows for decades. Some investors may want to relinquish their stakes early, and many countries offer opportunities to sell off equity or loans through their secondary markets. If the Philippine Dealing System allows trades of more PPP fixed-income securities, this would help facilitate more project bonds, as well as the resale of the debt to new investors.

A secondary market debt fund either sells off assets or portions of an asset's debts to other investors, and recycles the capital back into the fund over the longer term. Examples include the International Finance Corporation's Managed Co-Lending Portfolio Program (MCPP) and India InfraDebt Ltd., an infrastructure debt fund whose asset-backed portfolios refinance debt for qualifying PPPs that, among other conditions, have been operational for at least a year.xxxiii

A critical component of these funds is the standardization of the portfolio's projects because when bundling existing debt into a security, the terms and structure of each debt item must be consistent. As discussed earlier, this kind of standardization does not yet exist for Philippine public-private partnerships, but it is vital to put in place if PPPs will one day be eligible for refinance and trading in the secondary market.

Lab participants broke into working groups to explore scenarios in which standardization could be possible, and what kinds of financing options, including a secondary market debt fund, would be feasible. This could be fully underwritten and managed by a private company or a mix of partners, much like PINAI. In fact, PINAI itself could create a secondary fund when more projects are up and running.

Next Steps: Creating a template for developing standardization of project structure and terms, both to make the tender process more effective and to allow for ease of securitization once there is a receptive environment for a secondary market.

TAX INCREMENT FINANCING

Attracting private capital to transportation projects is a particular challenge because of the relatively low profit margins. Toll road and rail line revenues, for example, depend on the volume of traffic and the ability to raise fares. The revenue isn't guaranteed, either—roads can close due to any number of circumstances or disasters that are difficult to predict. To counter this perceived negative, the government could guarantee availability payments, but even these are subject to national, state, or local budgetary concerns.

Innovative financing mechanisms, such as tax increment financing (TIF), could help local governments redirect future tax revenues from elsewhere (e.g., property taxes) to pay off infrastructure contract debt, on the premise that the new infrastructure will improve a city or region, pushing up the property values and property taxes. That future revenue is used as the basis for today's lending or financing, as shown in Figure 10.

BASIC TIF MODEL Revenues diverted for TIF-eligible purposes: · Pledged to support bond **ANNUAL TAXES GENERATED NEW TAX** debt service · Pledged to develop note **BASE** · Fund infrastructure Revenues flow **INCREMENTAL TAXES** to normal taxing bodies **EXISTING TAX BASE** Revenues continue to flow to normal taxing bodies. STATUTORY LIFE OF TIP DISTRICT

Figure 10: Tax Increment Financing

Source: Urban Land Institute.

No regulations are on the books yet to allow for such fundraising. However, new types of financing mechanisms should be explored to help bolster revenues and potential payments to the private sector.

Next Steps: Because tax increment financing would be new to the Philippines, develop guidelines that contain best practices from other countries and regions. They could also outline the sequencing of policy to enable this method of financing across local government units.

CONCLUSION

With its 6.8 percent growth rate in 2016, the Philippines is earning recognition as a rising Asian tiger, with economic influence across the region and the world.xxxiv Yet the country continues to lag behind its ASEAN neighbors in the quality of its infrastructure; and as infrastructure degrades, future gains will stall.

Lab participants gathered in Manila to explore policy and financial solutions that could alleviate many of the barriers preventing infrastructure expansion. From the need for a national infrastructure plan to more granular policy recommendations pertaining to rights of way and the tender process, more must be done to attract private investment.

At the same time, and despite the liquidity in the local banking and corporate sectors, the expectation is that infrastructure expansion will proceed on a level that requires even greater capital, and this is what foreign and institutional investors can supply if the returns are attractive. From more project bonds to secondary market funds, the time has come to create a more enabling environment for private investment as the government plans for an era of "build, build, build."

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