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Assessing Duterte's China Projects

**Governance, White Elephants, and
COVID-19 in the Build, Build, Build Program**

Jerik Cruz and Hansley Juliano

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Assessing Duterte's China Projects: Governance, White Elephants, and COVID-19 in the Build, Build, Build program

Jerik Cruz¹ and Hansley Juliano²

Abstract

Since its unveiling to the public last April 2017, the Duterte administration's Build, Build, Build (BBB) program has stoked fierce discussion and debate. Yet of the various facets of the program's implementation, few issues have achieved the same salience and staying power as that of the implications of its China-funded projects. From the administration's "pivot to China", concerns have been often raised concerning the "debt trap" risks of China-funded infrastructure, as well as their putative linkages with worsened corruption, social, and environmental dynamics.

This paper examines the development of the Duterte administration's present and prospective China-funded projects, focusing specifically on the risk of generating 'white elephant' projects. While the drivers underlying the selection and implementation of unviable projects have cut across administrations, the economic bureaucracy's limited absorptive capacity to meet the demands of an infrastructure spending surge, along with 'exceptionalist' procedures in the procurement of China-assisted projects, have amplified the risk of generating white elephant megaprojects in the Duterte administration. The advent of the COVID-19 pandemic has further underscored the need for shifting away from unviable megaprojects towards more cost-effective and resilient infrastructure for the foreseeable future, which may require deferring some of the largest prospective China-funded projects. There is likewise scope for institutional reform in infrastructure governance processes, such as by involving third-party experts for independent verification and auditing of project approval and implementation procedures.

Keywords: Infrastructure governance; Chinese official development assistance; Build, Build, Build; white elephants; mega-projects; COVID-19

¹ PhD student, Massachusetts Institute of Technology. Email: jpcruz@mit.edu.

² Doctoral Candidate, Graduate School of International Development, Nagoya University. Email: juliano.hansley.adriano@k.mbox.nagoya-u.ac.jp; hjuliano.aux@gmail.com

ABOUT THE AUTHORS



Jerik Cruz is a PhD student at the Massachusetts Institute of Technology focused on political economy and methodology, and a recipient of the MIT Homer A. Burnell Presidential Fellowship. Prior to his studies at MIT, he was a development economist and lecturer at the Department of Economics at the Ateneo de Manila University, and has co-authored policy studies commissioned by the Asian Development Bank, the International Labour Organization, the United Nations Development Program, the Friedrich Ebert Stiftung, Singapore's ISEAS Yusof-Ishak Institute, and the United Nations Research Institute for Social Development.



Hansley A. Juliano is a D1 Doctoral Candidate under the Graduate School of International Development (GSID), Nagoya University, under the Japanese Government (MEXT) Scholarship Program. Prior to this, he served as faculty of the Department of Political Science, Ateneo de Manila University from 2013-2020 and has participated in civil society/sectoral movement advocacy and research for the same time period.

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INTRODUCTION

Since its unveiling to the public in April 2017, the Duterte administration's Build, Build, Build (BBB) program has stoked fierce discussion and debate. Billed as "the boldest infrastructure development program in recent Philippine history" (Diokno 2017), the infrastructure drive has aimed to invest between PhP 8- to PhP 9 trillion across nearly five thousand projects until 2022, including in 104 large-scale flagship ventures³. Not only is this boost in infrastructure poised to accelerate growth and drive job creation through aggressive infrastructure spending; it has also dramatically expanded the scale and ambition of its flagship projects. Indeed, based on estimates by observers in 2017, the average cost of flagship ventures of the Duterte administration (~PhP30-billion) has been nearly three times those undertaken by the government of Benigno Aquino III (~PhP 11 billion), with a greater chunk of high-capital projects being dedicated to region-linking transport and mobility initiatives such as highly-anticipated railways in Luzon and Mindanao (Mendoza and Cruz 2017). In the same vein, rather than being dampened by the COVID-19 pandemic, the public health crisis has further highlighted the administration's commitment towards undertaking the program: given the toll of lockdown measures on both businesses and households, the administration's economic managers have consistently underscored the central role of the BBB program in government's 'bounce-back' efforts for restoring long-run economic growth (DOF 2020; Cordero 2020).

Yet from the very beginning, BBB has also attracted a disproportionate amount of controversy. Since being announced to the public, the program has drawn scrutiny for its shift away in its financing modes from Public-Private Partnerships (PPP) towards domestic public financing and international loans (Galang 2017), as well as reports of amplified corruption in the program's procurement dynamics (Mangahas and Ilagan 2018a). Of the salient facets of BBB's implementation, however, few issues have elicited as much concern as the repercussions of its China-funded projects. Like in other Southeast Asian countries, concerns have been raised by policymakers and observers alike over the potential 'debt trap' risks of China projects (de Lima 2019; Tan-Mullins 2018), the alleged collateralization of Philippine natural resources (Carpio 2020), their negative social, environmental, and governance impacts (Lecher et al 2020; Gamboa 2020), as well as the suboptimal contribution of China-funded projects on the Philippine economy, due to conditionalities on the use of Chinese contractors and employees (Romero 2019). But in the longer term, these issues are also linked to speculation as to whether China-funded ventures in BBB's portfolio are at risk of becoming "white elephants"—mega-projects that generate larger burdens and costs for their host economies rather than benefits (Mendoza, Bertulfo and Cruz 2018). Among others, China-linked flagship projects that have been explicitly identified by analysts to be prospective white elephants have included the PhP 83 billion Mindanao Railway Phase 1 project, the PhP 45 billion Subic-Clark Railway, and the PhP 12.2 billion Kaliwa Dam project (Manhit 2017; Chanco 2018; Cruz 2019).

This paper examines the development of the Duterte administration's present and prospective China-funded projects. Focusing on priority infrastructure projects that have

³ Though there were originally 75 BBB flagship projects which were unveiled in the April 2017 "Dutertenomics" forum, a revised list of 100 flagship projects was approved by the National Economic Development Authority's Investment Coordinating Committee on November 6, 2019 worth PhP 4.2-trillion (Cahiles-Magkilas 2019).

already begun their implementation (e.g., the Chico River Pump Project, the Estrella-Pantaleon Bridge Project) or have been approved for such purposes (e.g., the Subic-Clark Railway Project, the Kaliwa Dam Project), it assesses the governance risks of such projects' resulting in white elephant outcomes. Though economic governance agencies may at times possess the capacity needed to programmatically develop growth-enhancing infrastructure projects, their ability to enforce such standards and criteria remains highly vulnerable to particularistic intervention by well-placed political, economic, and bureaucratic elites (Patalinhug 2017). In the Duterte administration, we argue, these institutional vulnerabilities have been aggravated by an over-ambitious infrastructure program that has further strained the absorptive capacity of economic agencies to properly vet projects and contractors; as well as by an accommodationist 'pivot to China' that, along with peculiarities in the Philippines' procurement framework, has expanded opportunities for malpractice by political brokers and infrastructure contractors in project development processes.

Amidst the COVID-19 pandemic, the turn of the Philippine government to increased debt-driven growth as part of its economic recovery program makes careful selection of infrastructure projects, both China- and non-China-funded, even more crucial. To this end, the paper also offers some recommendations on possible BBB projects for prioritization for the pandemic's 'new normal.' Though assigning projects from foreign-funding for Public-Private Partnerships (PPP) may be worth pursuing in a number of cases, the possibility of dampened travel restrictions and social-distancing measures in transportation could seriously undermine the viability of other types of projects—especially though not only among mega-airports, mega-railway, and mega-bridge projects.

MEGA-PROJECTS, WHITE ELEPHANTS, AND INFRASTRUCTURE GOVERNANCE: THE PHILIPPINE CONTEXT

While they can manifest across different infrastructure types and under a variety of financing modes, 'white elephants' refer to large-scale, unproductive, investment projects that are economically burdensome for governments and/or businesses that are responsible for maintaining them (Robinson and Torvik 2005). Due to their scale, these mega-projects⁴ can drive resources away from lower-risk, if more beneficial, ventures, while giving rise to a continuum of problems, such as legal and political opposition, worsened environmental and social costs, as well as debt burdens that are not paralleled by commensurate economic benefits. At the same time, the implementation of white elephants is usually accompanied by a truncation of open and accountable decision-making, through the adoption of exclusive, if not "exceptionalist", governance regimes that exempt them from the authority of conventional state bodies and regulations, while endowing them with special powers of intervention, decision-making and policy-formulation (Swyngedouw, Moulaert, and Rodriguez 2002; Kennedy et al. 2014). These can include unsolicited public-private partnership arrangements between corporate

⁴ For the purposes of this study, we limit the definition of "mega-projects" to infrastructure ventures falling under the threshold approved by the National Economic and Development Authority (NEDA) Investment Coordination Committee-Cabinet Committee (ICC-CC), which is PhP 2.5 billion (NEDA 2017). Currently approved Infrastructure Flagship Projects (IFPs) currently range from as low as PhP 750 million (for the Motor Vehicle Recognition and Enhancement System) to as high as PhP 149 billion for the PNR North 1 project (NEDA 2020).

firms and state organizations; special parastatal agencies; closed-door networks of bureaucrats, business elites, project consultants, and technical experts; or cosmetic “consultation” exercises in which citizens are denied real capacity to influence major project decisions (Swyngedouw et al. 2002).

In one major literature review of the drivers of megaproject underperformance (Sanderson 2012), three types of factors were identified as usually accounting for white elephant outcomes among large-scale infrastructure projects. Specifically, public officials and contractors can engage in strategic rent-seeking behavior to skew appraisal procedures of projects in their favor; due to their size and complexity, projects can be hounded by misaligned and underdeveloped governance arrangements that leave their proponents unable to cope with turbulence and shocks during implementation; and finally, conflicting cultures and rationalities can underpin everyday ambiguities, frictions, and misunderstandings that ultimately undermine cooperative and collaborative behavior in projects’ development (Ibid.). Yet in countries such as the Philippines, studies of mega-projects have underscored the central role played by political dynamics and factional ties between influential public officials, favored businesses, consultants, and bureaucrats in ensuring the approval and eventual execution of unviable projects (Kennedy et al 2011; Mendoza et al. 2018; Cruz 2019b). Indeed, while the Marcos-era Bataan Nuclear Power Plant could be the most notorious example of a white elephant in the Philippines’ post-colonial history, the period since the return to democracy has continued to witness the emergence of underperforming megaprojects, such as with pet-project special economic zones created by legislators and local politicians (Manasan 2013). Typically driving the development of these unviable ventures has been the working of a “divide-by-N” syndrome, in which elected officials seek to duplicate prestigious infrastructure projects (e.g., airports, ports, higher education complexes, etc.) in local jurisdictions with little regard for viability, redundancy, and cost-effectiveness (Philippine Human Development Network 2013).

From a decision-making standpoint, the occurrence of white elephant projects ultimately stems from the selection and implementation of high-capital ventures whose costs and risks fail to justify their benefits. As governments face limits in the funds that they can lay out for investments, vetting projects for a minimal level of economic return by means of project evaluation and cost-benefit analysis is a basic function of infrastructure governance among both developed and developing countries. But while this can be undertaken in a systematic manner, institutional weaknesses, as well as particularistic political influences can tarnish the integrity by which such assessment procedures are conducted. To provide one example, in a review of 210 projects across 14 countries, Flyvbjerg et al. (2005) found that demand projections for large-scale transport infrastructure are commonly plagued by inaccuracies, with nine out of ten projects suffering from over-optimistic passenger forecasts (with an average forecast error of 106 percent)⁵. A more recent review in 2014 by Oxford researchers (Ansar et al 2014) has revealed similar forecast biases with regards to mega-dam development, with actual costs of hydropower projects being 96 percent greater on average than initial estimated costs. Especially as initiatives expand in size to the scale of “mega-projects”, gaps in institutional capabilities as well as increasing perverse incentives among potential contractors, elected officials, and bureaucrats to secure project rents, combine with an

⁵ Not surprisingly, such erroneous projections translate to a comparable share of projects suffering from substantial cost overruns.

expanded scope for risks and other unplanned factors to interfere with project implementation. According to this “Iron Law of Megaprojects”, mega-projects will tend to be delivered “over budget, over time, over and over again”, driving cost and schedule overruns, as well as benefit shortfalls, regardless of country context and development status (Flyvbjerg 2014). The regularity by which such erroneous projections manifest in large-scale infrastructure is in fact grave enough that leading scholars in project management have found that pre-implementation feasibility studies, planning analyses, and social and environmental impact assessments are “generally not to be trusted” (Ibid.; Flyvbjerg 2017).

In the Philippines, disastrous experiences with debt-driven growth during the Marcos years have underpinned sustained reform in the area of infrastructure governance. While the country has been noteworthy for the extent to which it has enabled the participation of the private sector in infrastructure development⁶, several administrations have also implemented major institutional changes as regards the planning and processing of high-capital projects. To begin with, through Executive Order 230 in 1987, then-president Corazon Aquino reorganized and strengthened the role of the National Economic Development Authority (NEDA) and its secretariat, in socioeconomic policy and planning; investment programming; and project evaluation and monitoring. Though NEDA had existed even during the Marcos period, most decision-making on social and economic policies and programs had previously been concentrated in the Office of the President, with little delegation of responsibilities to national-level agencies. Through Aquino’s EO, inter-agency committees linked to the NEDA Board— in particular the Development Budget Coordinating Committee (which formulates the annual budget for submission to Congress), Investment Coordinating Committee (which evaluates large capital and foreign-funded projects of the government), and the Infrastructure Committee (which determines priority infrastructure ventures and endorses them to the ICC)— assumed a much more significant role in national infrastructure governance (Canlas 2017). During the government of Benigno Aquino III, such institutional shifts were complemented with the upgrading of the former Build-Operate-Transfer Center into a larger, better-resourced, and better staffed Public-Private Partnership (PPP) Center in order to execute the second Aquino administration’s flagship PPP program along the lines of good governance standards (Aquino, 2010; Holmes, 2012). Since then, the development of PPP infrastructure projects has been facilitated by the said center. Box 1 provides a summary of the current procedures under the Duterte administration for ODA projects.

⁶ See Mendoza and Cruz (2020) for a review of infrastructure policy reforms related to private sector engagement and transparency and anti-corruption.

Box 1. ODA Project Evaluation at the NEDA Investment Coordinating Committee⁷

Since 2017, all investments projects to be undertaken by the Philippine government worth more than PhP2.5-billion, require screening and appraisal by the National Economic Development Authority's Investment Coordination Committee (NEDA-ICC) (DOF and NEDA 2018). In this evaluation process, proposed projects are to be subjected to a comprehensive assessment as to their technical appropriateness, their social and environmental impacts, their financial and overall economic viability, as well as institutional/governance issues involved in their implementation. With respect to economic viability, cost-benefit analysis is typically employed, entailing a systematic effort to (a) identify and anticipate the costs and benefits of investments; (b) to quantify those costs and benefits in monetary terms; (c) to express the future stream of those costs and benefits in terms of their present value; and (d) to apply a viability criteria by which a project can be judged as either passing or failing. Usually, the criteria for the project involves its Economic Internal Rate of Return (EIRR)— which is usually laymanized (albeit somewhat inaccurately) as the *expected future rate of return of an investment for the entire economy*. During the Aquino administration, projects evaluated by the NEDA-ICC needed to demonstrate an EIRR of at least 15%, though the hurdle rate was lowered in 2017 to 10% (DOF and NEDA 2016).

While ODA projects typically must go through NEDA-ICC review, as mandated by the 1996 ODA Act, deviations from these processes can also occur. During the Duterte administration, for instance, a separate set of procedures for vetting China-funded projects has been established, ostensibly to augment the rigor of evaluations amidst “debt trap” fears, even as approval procedures for ODA projects have generally been realigned in order to “fast track” their approval (DOF 2016; DOF 2017). Prior to this, the government of Gloria Macapagal-Arroyo also gained notoriety for regularly “short-cutting” the NEDA-ICC evaluation process by authorizing committees of “Presidential consultants” to undertake project evaluation without the involvement of the ICC’s technical secretariat. It was through such ad-hoc committees that controversy-ridden ODA projects such as the NBN-ZTE as well as the Northrail ventures were green-lighted for implementation, despite a variety of issues associated with them (Desierto 2009). Especially among big-ticket ODA projects, the NEDA ICC can likewise commission technical consultants to undertake evaluation activities on its behalf.

Yet despite the advances that have since been made in infrastructure planning and development, there remains indication that dynamics underpinning the “iron law” of mega-projects remain in place in the country. Cost-overruns have been a typical ailment in Philippine infrastructure development: indeed, a 2015 study of 85 transport infrastructure ventures from the 1980s to the 2010s, which included ventures financed by the Japanese government, the World Bank, and the Asian Development Bank, discovered that such overruns hounded more than half of examined initiatives. Bridges, in particular, were found to have experienced average cost escalations of 11.9 percent from their initial costings, while the figure for road infrastructure were at a more muted 2.7 percent (Roxas et al. 2015). Equally telling, a 2008 review by the Philippine Center for Investigative Journalism of 71 Official Development Assistance (ODA)-financed infrastructure projects during the presidency of Gloria Macapagal-Arroyo, including those supported by Japan, the Asian Development Bank and the World Bank, established that three out of four (73 percent) of such venture proved unable to deliver the economic benefits pledged prior to implementation by their proponents (Landingin 2008). Especially for megaproject-scale initiatives, there has been indication that infrastructure projects have been highly vulnerable to risks unanticipated by their proponents, such as disputes with national and local political elites, local or public opposition, guerrilla attacks, to economic downturns like the 1997 Asian Financial Crisis. In a majority of cases, the disruptive impacts of these shocks were aggravated by technical capacity deficits

⁷ Material for box lifted from Cruz and Camba (forthcoming).

among government agencies with roles in formulating and implementing infrastructure projects, particularly with regards to the effective development of feasibility studies, contract writing, and the assessment of unsolicited project proposals from the private sector (Canlas 2017).

Yet besides such capacity deficits, at the core of such outcomes have been political economy factors, in which the array of rents generally available in infrastructure projects, in a context of lingering institutional gaps, generate incentives among influential parties in political, bureaucratic, and business spaces to sideline sound economic decision-making in the selection of ventures in favor of more arbitrary political criteria. Given procedural requirements for ex-ante evaluations in the Philippine government, these pressures typically result in “optimistic biases” as regards the appraisal of projects, where expected benefits are inflated, and figures on costs and risks are minimized to ensure that favored projects clear viability tests (Landingin 2008a). In this respect, cost-benefit failures are typically a symptom of broader interference in processes of infrastructure project planning and selection, in which internal and external actors can misrepresent projections, and exploit their connections or institutional privileges within the bureaucracy to increase the chance of their preferred ventures in being approved for implementation.

The same role of political factors in Philippine infrastructure development is also demonstrated by the vulnerability of projects to swings in the electoral cycle as well as shifts in the political climate. At the national and local level, it is well-known that long-term, big-ticket projects can struggle to outlast the rise of opposing administrations, with corruption allegations usually justifying the discontinuation of ventures which had been approved and initiated by previous administrations (Landingin 2008b; Ocampo 2010). While this does not mean that all such defunding and nullification efforts should be treated as part of elite intramurals, they nonetheless underscore the fact that infrastructure development in the Philippines—far from being a purely technocratic endeavor—hinges upon securing and preserving a modicum of coalitional support needed for sustaining collective action across agencies, government branches/levels, the public and private sectors, as well as other critical stakeholders (e.g. foreign funders, local residents, civil society, affected communities) in undertaking multi-year mega-projects.

INFRASTRUCTURE GOVERNANCE AND THE “PIVOT TO CHINA” IN THE DUTERTE ADMINISTRATION

With the rise of President Rodrigo Duterte to public office in 2016, the Philippine infrastructure governance landscape has undergone tectonic shifts. Compared to the focus of the administration of Benigno Aquino III on promoting good governance and curbing corruption in infrastructure development, the Duterte government has sought to inculcate an aggressive acceleration in infrastructure spending. In doing so, the administration has broken away from the Aquino presidency’s vaunted PPP program—lauded by the World Bank as one of the best-performing programs of its kind in Asia (World Bank 2018), though also frustrating many in terms of the pace of its rollout—in favor of arguably the most state-heavy approach to infrastructural development since the end of the Marcos period (Mendoza 2017). The Duterte administration reportedly chose to depart from the Aquino administration’s PPP mechanism on grounds of inefficiency

and higher costs, claiming it “was able to sign only 12 PPP contracts and complete the only 3 projects, although 28 projects were approved” (Ito 2019).

Table 1 shows the significant shift of funding proportion from PPPs under the Aquino administration towards ODA under Duterte. As can be observed, the Duterte period has included a turn to increased domestic public funding of infrastructure and public works, as well as an increased reliance on ODA for financing the most capital-intensive flagship infrastructure projects. Additionally, a number of well-publicized measures to expedite the implementation of infrastructure projects have included a rationalized “3-in-1” approval process for ODA-funded projects; the shifting of counterpart budget allocations, right-of-way, and land resettlement efforts to earlier project stages than previously; and the establishment of a dedicated task force and project monitoring offices for streamlining the adoption and execution of BBB projects (Mendoza and Cruz 2018).

Table 1. Comparison of Project Funding Sources under Aquino III and Duterte

Major Funding Sources	Aquino Administration (Cost of Projects - PHP millions)	Aquino Administration (Share of Total Costs)	Duterte Administration (Cost of Flagship Projects - PHP millions)*	Duterte Administration (Share of Flagship Projects)
Total	601,509.19	100.0%	4,130,016.47	100.0%
Local Financing	98,112.07	16.3%	235,211.00	5.7%
PPP	280,355.28	46.6%	1,751,120.00**	42.4%
ODA	297,716.58	49.5%	2,263,490.47	54.8%
Stated Japanese ODA	197,072.93	32.8%	1,472,018.31	35.60%
Stated Chinese ODA	None*	None*	601,433.16	14.6%
Stated Korean ODA	22,704.64	3.8%	44,155.00	1.1%
Stated World Bank ODA	67,096.63	11.2%	21,772.00	0.52%

Source: NEDA

*Figures may not add up to 100% due to hybrid categories (e.g. GAA/PPP, GAA/ODA, etc.)

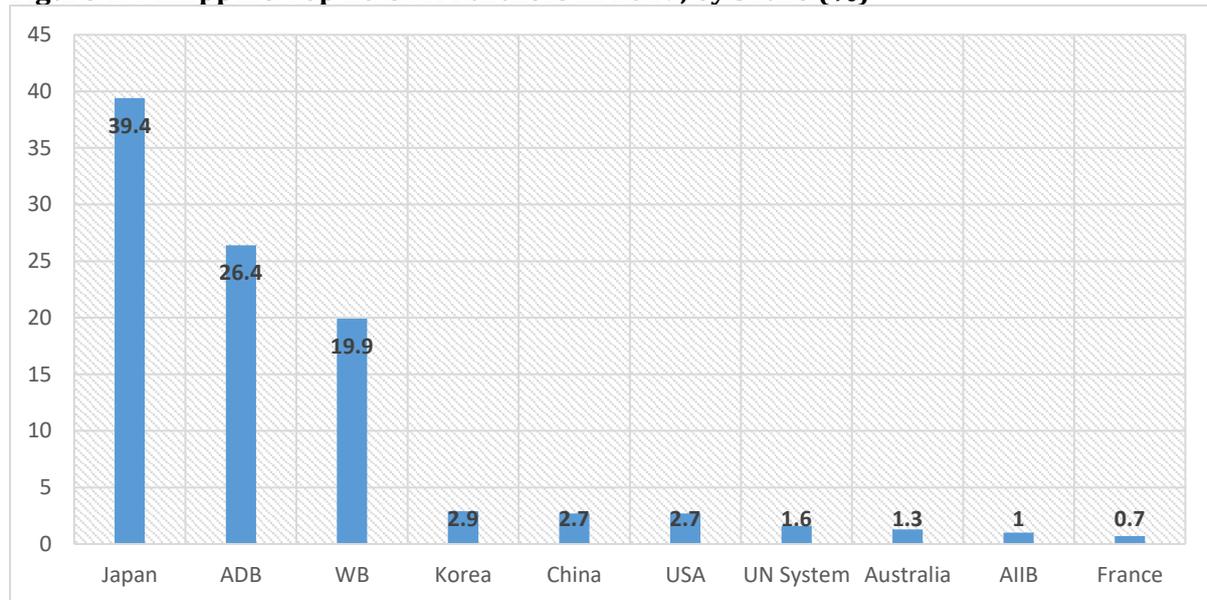
**As of August 2020, unsolicited PPPs accounting for PhP 1.399-trillion or roughly 80 percent of PPP portfolio.

This turn to ODA by the Duterte administration has dovetailed with its much-ballyhooed “pivot to China”— cemented during Duterte’s state visit to the People’s Republic last October 2016. Beginning with the signing of at least 27 memoranda between Philippine cabinet officials and counterparts among Chinese government agencies and potential investment partners (Cardenas 2017), the prevailing perception has been that BBB has privileged Chinese ODA above that of traditional bilateral partners (Camba 2019b), including multilateral agencies (e.g. World Bank, the Asian Development Bank), Western governments, as well as other longstanding donors within the region (e.g. Japan, Australia, South Korea).

In practice, however, the picture has been more mixed: though it is true that the allocation of proposed ODA funding sources has shifted slightly since first being bared to the public in 2017, many of the most expensive foreign-funded projects (e.g. the Metro Manila Subway Project, the North-South Commuter Railway), as well as the largest share of ODA in general, have remained assigned to Japan. Indeed, in NEDA’s 2019 ODA portfolio review, Japanese financing accounted for 39 percent of active ODA loans and grants to

the Philippines (see Figure 1), followed by the Asian Development Bank (26 percent), and the World Bank (20 percent)— all traditional Philippine development partners. By contrast, Chinese ODA accounted for only around 2.7 percent of the total ODA portfolio; this was mainly a reflection of the low number of China-funded ODA projects (2 grants and 2 loans) that had been rendered active as of end-2019. In addition, the country had one active loan during that year with the multilateral, but China-linked, Asian Infrastructure Investment Bank (for the Metro Manila Flood Management project).

Figure 1. Philippine Top 10 ODA Partners in 2019, by Share (%)



Source: NEDA ODA Portfolio Review 2019

Of course, the low share of active Chinese ODA does not yet cover the significant number of projects for China-linked financing that have been proposed under the current administration. As shown by Table 2, in 2019 and 2020, there were at least 17 proposed ventures in the BBB flagship infrastructure pipeline that had either secured or were officially being eyed for Chinese financing, spanning nearly PhP 600 billion in projected costs. Yet as of writing, only four of these infrastructure projects have commenced construction— including the Binondo-Intramuros and Estrella-Pantaleon bridges (funded by grants), as well as the Kaliwa Dam and the Chico River Pump projects (funded by loans), which combined only amounted to around PhP 22 billion. The paucity of projects that have been approved contrasts sharply with the early bombast of the Duterte administration’s turn towards Chinese infrastructure financing. This outcome has been attributed by senior government officials to ‘slow processing’ of proposed loans by Chinese government donors, though chronic delays have also been evident among those projects that have begun implementation (Camba 2019a; de Vera 2020).

Table 2. Duterte China-funded projects

Project Title	Funding	Agency
<i>In NEDA's April 2019 Update in Flagship Projects</i>		
<i>Subic-Clark Railway Project</i>	Loan (PhP 50.031-B)	DOTr / BCDA
<i>Ambal-Simuyay River and Rio Grande de Mindanao Flood Control Projects</i>	Loan (PhP 39.220-B)	DPWH
<i>Palanca-Villegas (2nd Ayala) Bridge</i>	Loan (PhP 1.595-B)	DPWH
<i>Beata-F.Y. Manalo Bridge</i>	Loan (PhP 1.387-B)	DPWH
<i>Blumentritt-Antipolo Bridge</i>	Loan (PhP 1.103-B)	DPWH
<i>East-West Bank Bridge 1</i>	Loan (PhP 1.538-B)	DPWH
<i>North and South Harbor Bridge</i>	Loan (PhP 8.030-B)	DPWH
<i>Binondo-Intramuros Bridge</i>	Grant (PhP 4.607-B)	DPWH
<i>Estrella-Pantaleon Bridge</i>	Grant (PhP 1.367-B)	DPWH
<i>Chico River Pump Project</i>	Loan (PhP 4.373-B)	NIA
<i>PNR South Long-haul (Manila-Bicol)</i>	Loan (PhP 175.318-B)	DOTr
<i>NCWSP – Kaliwa Dam Project</i>	Loan (PhP 12.2-B)	MWSS
<i>Mindanao Railway Project Phase 1*</i>	ODA (PhP 81.686-B)	DOTr
<i>Potential Additional China ODA projects in NEDA's February 2020 Update**</i>		
<i>Sangley Airport</i>	GAA (PhP 1.436-B), but with discussions of China-funded expansion	DOTr
<i>Davao City Expressway</i>	ODA (PhP 24.5-B)	DPWH
<i>Panay-Guimaras Negros Bridge</i>	ODA (PhP 189.5-B)	DPWH
<i>Potential Additional China ODA projects in NEDA's August 2020 Update**</i>		
<i>Marawi Rehabilitation</i>	Grant (PhP 999-million)	DPWH / DHSUD
<i>Samal Island-Davao City Connector Bridge</i>	ODA (PhP 23.0-B)	DPWH
<i>Safe Philippines Project Phase 1</i>	ODA (PhP 20.3-B)	DILG

Source: NEDA

* - still not officially assigned for China ODA, though state-level discussions ongoing

** - with initial bilateral agreements and Memoranda of Cooperation signed during visits to China

Despite the slow approval and development of China-funded projects by the administration, both ongoing and still-to-be-implemented projects have elicited a disproportionate amount of controversy. The Kaliwa Dam and the Chico River Pump projects, for instance, have been opposed, not only by environmentalists and affected communities, but by legal experts and economic observers as having 'onerous' provisions (e.g. the potential collateralization of Philippine natural patrimony in the event of default), and government's bypassing of cheaper, less environmental destructive alternative water supply projects (e.g. a Japanese-funded intake weir, the Laguna Lake

project) (La Vina and Reyes 2019a; La Vina and Reyes 2019b; Punongbayan 2019b). Similarly, both the Binondo-Intramuros and Estrella-Pantaleon bridges have experienced delays on account of local resistance: the Binondo-Intramuros bridge due to opposition by business groups, UNESCO, and the National Historical Commission to its proposed destruction of protected heritage sites in Intramuros (Cahiles-Magkilat 2018); and the Estrella-Pantaleon traversal because of the disruptive impacts of the original bridge's demolition and reconstruction on traffic congestion and on local economic activity (Orellana 2018). As likewise mentioned in the paper's introduction, among approved, but to-be-implemented projects, the Subic-Clark Railway and the Mindanao Railway-Phase 1 have also been identified by observers as possible white elephant projects in the making, on account of freight transport redundancy issues (i.e., the Subic-Clark Railway and SCTEX), and debatable demand forecasts and initial costings (i.e., the Mindanao Railway). More recently, the Sangley airport, for which a PhP 623-billion expansion is currently being planned (Balinbin 2020), has elicited concern from various quarters about viability issues, especially in a context where four mega-airport projects have been proposed for addressing congestion issues at the Ninoy Aquino International Airport.

Broader governance trends in the development and implementation of infrastructure projects also give cause for concern. While the Duterte administration has adopted several landmark transparency and open government measures, such as the creation of a landmark executive order on Freedom of Information (FOI), an electronic FOI portal, and a Philippine infrastructure transparency portal, there has been evidence that the effectiveness of such mechanisms have been quite limited with respect to securing detailed information and vital documents (e.g. feasibility studies) of foreign-funded infrastructure projects (Mendoza and Cruz 2020). More troublingly, there has been indication that levels of rent-seeking may be on the rise. Indeed, 2018 reports by the Philippine Center for Investigative Journalism have alluded to the operation of "syndicated circles of corruption" among public officials and contractors amidst highly-accelerated bidding processes for public works projects. For instance, majority of the top 10 firms securing the most contracts between July 2016 and December 2017 were firms which had been blacklisted for irregularities and falsifying documents, that were directly connected to politicians, and had a record of poor performance evaluations (Mangahas and Ilagan 2018a; 2018b; 2018c). Interviews with private sector infrastructure contractors have also confirmed these trends in the public works procurement in the present administration: compared to reported levels of kickbacks in DPWH road projects of 10-15 percent of projects' budgets amidst the Aquino administration's good governance drive, the level has allegedly increased to 30-45 percent at present. While the dynamics of corruption in non-road, large-scale infrastructure projects can be more complex (e.g., involving the establishment of shell companies, and kickbacks involving absolute amounts rather than budget shares), interviewed contractors were of a common view that the level of rent-seeking has deteriorated since the past presidency (Mendoza and Cruz 2020; Lobjigo 2017).

What have been driving these dynamics within the Duterte administration? To be sure, white elephants have been a long-running phenomenon across presidencies and have emerged even during reformist administrations⁸. With regards to high-capital projects,

⁸ Most notoriously, the case of the Aurora Pacific Economic Zone and Freeport (APECO) was approved under the administration of Benigno Aquino III, due to his alliance with the local ruling family of Aurora (the Angaras), despite

this is ultimately reflective of the working of political incentives with regards to the design, evaluation, approval, and implementation of infrastructure projects, thereby resulting in “policy-based evidence-making” dynamics, where economic analyses serve to justify pre-existing, politically-determined project decisions (Habito 2013). In addition, a compounding factor could also be the fact that decision-making members of interagency bodies screening infrastructure projects are included based on their position within the government bureaucracy (and are often political appointees), rather than on their capability to evaluate projects. On this basis alone, the project approval procedure can readily be exposed to political pressures that may confound objective assessment of large-scale ventures. But even in situations where such decision-makers exercise their functions impartially and programmatically, the current setup encourages reliance on the analysis of secretariat staff, which adds to the bureaucratic burden and inefficiency of the approval process (Patalinhug 2017).

Yet despite these continuing trends across administrations, the Duterte presidency’s infrastructure program in general, and its espousal of China-funded projects in particular, have also broken from past policy and practice in a number of ways that could aggravate the possibility of unviable projects being approved and selected. Arguably the two most important of these shifts include:

Infrastructure acceleration despite limited capacity. BBB has aimed to spur a dramatic acceleration in infrastructure spending, which involves expediting the process by which large-scale infrastructure projects are designed, appraised, and implemented. Whether this public investment expansion will result in the development of projects with high levels of social and economic return, however, will depend on the ability of the economic bureaucracy to absorb additional demands made of it. If the managerial and technical capabilities of agencies are not augmented prior to the infrastructure ramp-up, there will be a substantial risk of bureaucratic overstretch, increasing the likelihood of selecting of unviable projects, and encountering cost and schedule overruns later in the project cycle (Presbitero 2016). Moreover, when past appraisal capacity was already imperfect, infrastructure spending surges are likely to aggravate existing challenges with heightened perverse incentives for the selection of projects that are privately-beneficially but socially-inefficient; for weakened capability to provide thorough checks on unrealistic cost-benefit estimations; and to diminish the transparency and accountability of public government expenditures due to the use of non-regular expenditure modes (e.g. special purpose vehicles; government-owned corporations) (Warner 2014).

Here, the record of BBB and the Duterte administration’s efforts to enhance the institutional capacity of the Philippine infrastructure governance system has been mixed. On one hand, the government’s economic managers have recognized the institutional constraints of the country’s infrastructure bureaucracy, and have, since 2017, solicited technical assistance from the Asian Development Bank through an Infrastructure Preparation and Innovation Facility (IPIF) for improving project preparation, feasibility analysis, approval, and implementation procedures among a number of DPWH and DOTr projects (Marquez 2017). In early 2020, this was supplemented by a PhP 3.8-billion Philippine-Korea Project Preparation Facility, which was established to support preparatory activities and analyses, especially for water, flood control, irrigation, bridge,

significant pushback from his own allies and supporters in civil society. For narratives related to this case, see Cruz and Juliano 2012; Montefrio 2013 and Julien 2018.

and road projects (de Vera 2020). Specifically, for China-funded projects, the government has also established special and reportedly more stringent evaluation procedures and availment guidelines in both pre-project and project implementation stages, which were approved by the NEDA Board in November 2016 (DOF 2016).

On the other hand, substantial gaps remain in the capacity of government agencies vis-à-vis the heightened ambition of the BBB program. As already mentioned, transparency and accountability mechanisms that have been deployed by the administration for checking upon corruption in BBB have proven highly uneven in terms of their effectiveness (Mendoza and Cruz 2020); and compared to its rhetoric of curbing the scourge of ‘underspending’ that afflicted infrastructure development during the Aquino presidency, high levels of underutilization of infrastructure budgets have persisted well into the present administration (Mendoza and Cruz 2018; Habito 2019; Cuenca 2021). But apropos the assessment and selection of projects, the most striking indicator of government’s strained capacity to evaluate proposed infrastructure projects has been the 2019 revision of the BBB list of now-104 flagship projects, where the administration’s economic managers dropped 29 of the original 75 BBB flagship projects on cost and infeasibility grounds, while including a cavalcade of proposed unsolicited PPP projects in their stead (Rivas 2019).

During that same year, critical specifications of several BBB projects were revised upwards: for instance, the estimated cost for the 1st Phase of the Mindanao Railway from Tagum to Digos was raised from PhP 35.9 billion to PhP 82.9 billion, due to a failure of its original feasibility study to account for slopes and embankments⁹. Similarly, ongoing projects that have been identified in a May 2020 review of the BBB program to likely encounter schedule overruns, even prior to COVID-19, have included the LRT-1 Cavite Extension Project, the LRT-2 East Extension Project, the Unified Grand Central Station, the Metro Manila Subway, the MRT-7, the Bicol International Airport, and the Metro Manila Skyway Stage 3. According to one comprehensive review, the fact that the list of flagship projects had to be revised and that practically all projects except for the Clark International Airport Terminal project have experienced substantial delays are indications that “project selection and evaluation were haphazardly done” (Patalinhug 2020).

Procurement of Chinese ODA projects: though the lion’s share of public attention on prospective China loans has gone to discussion of their ‘debt trap’ risks and the alleged ‘onerous’ provisions in loan agreements linked to them, independent analyses examining the macroeconomic situation of the Philippine economy relative to other developing countries have typically found the country to be at low risk of suffering “debt distress” from Belt and Road Initiative-related infrastructure financing (Camba 2019a; Hurley et al 2018). Indeed, compared to countries such as Sri Lanka and Pakistan, the ODA donors available to the Philippines are fairly diverse, with traditional partners still dominating the international loan portfolio as earlier demonstrated; and, at least prior to the onset of the COVID-19 pandemic, the country’s debt-to-GDP ratio had declined to its lowest levels in decades, even as economic growth has dramatically accelerated. While there is some indication that government negotiators could have benefitted from strong political directives to secure better terms (like in the case of Indonesia, where China funding for

⁹ Interview with Engr. Neil Bonto of the Mindanao Railway Project Management Office on October 23, 2019.

the Jakarta-Bandung High Speed Rail does not require government guarantees), the loan agreements that have been inked thus far are still arguably less expensive than those during the Arroyo era and are similar in terms to many China-funded and non-Chinese ODA projects in other developing countries (Tritto and Camba 2019; Camba 2020).

More troubling, though less emphasized than the ‘debt trap’ issue, have been concerns of the integrity of procurement processes associated with China-linked undertakings, and their implications on the viability of infrastructure projects. While often celebrated as a landmark piece of legislation, the 2003 Government Procurement Reform Act or R.A. 9184 exempted foreign-assisted government projects from standard procurement protocols for Philippine government activities, by elevating clauses in international agreement above the said law (SEPO 2008). In the absence of more standardized guidelines for how contractors for foreign-assisted projects are to be chosen, this effectively ties procurement processes to conditions provided by foreign countries— a problem which has been less pronounced with the practices adopted by the Philippines’ traditional donors, given their alignment with development finance and ODA standards once adopted by the OECD (the particulars of which are detailed in Table 3). The aid literature suggests that due to sustained advocacy and reforms, OECD-aligned donors are much more likely to provide effective, efficient, legitimate, transparent and adaptive policies related to project implementation (Maxwell, et. al. 2010). By comparison, Chinese ODA has not been aligned to such multilateral standards, and is well known to not impose the same kinds of political and good governance conditionalities as is common practice among OECD Development Assistance Committee donors (Brautigam 2010)

Table 3. Existing overseas development aid (ODA) standards

2005 Paris Declaration Principles	OECD Definition and Priorities	Japanese ODA standards and policies
<ol style="list-style-type: none"> 1. Ownership: Developing countries set their own strategies for poverty reduction, improve their institutions and tackle corruption. 2. Alignment: Donor countries align behind these objectives and use local systems. 3. Harmonisation: Donor countries coordinate, simplify procedures and share information to avoid duplication. 4. Results: Developing countries and donors shift focus to development results and results get measured. 5. Mutual accountability: Donors and partners are accountable for development results. 	<p>ODA is primarily given to countries and territories on the Development Assistance Committee (DAC) List of ODA Recipients, as well as multilateral development institutions which are:</p> <ol style="list-style-type: none"> i. “provided by official agencies, including state and local governments, or by their executive agencies”; and ii. “each transaction of which: <ul style="list-style-type: none"> ○ “is administered with the promotion of the economic development and welfare of developing countries as its main objective; and ○ “is concessional in character. In DAC statistics, this implies a grant element of at least” <ul style="list-style-type: none"> ▪ 45% to <i>least developed countries</i> [LDCs] and other <i>low income countries</i> [LICs]; ▪ 15% to <i>low middle income countries</i> [LMICs]; ▪ 10% to <i>upper-middle income countries</i> [UMICs]; and ▪ 10% in the case of loans to multilateral institutions 	<p>Basic policies of development cooperation</p> <ol style="list-style-type: none"> 1. Contributing to peace and prosperity through cooperation for non-military purposes 2. Promoting human security 3. Cooperation aimed at self-reliant development through assistance for self-help efforts as well as dialogue and collaboration based on Japan’s experience and expertise <p>Priority Issues</p> <ol style="list-style-type: none"> 1. “Quality growth” and poverty eradication through such growth 2. Sharing universal values and realizing a peaceful and secure society 3. Building a sustainable and resilient international community through efforts to address global challenges

Source: OECD 2005; OECD 2020; MOFA 2018

Literature and reportage corroborate the challenges of Chinese aid at local, regional and national levels among Southeast Asian countries¹⁰. For instance, Chinese funding facilitated the suspended Myitsone Dam project on the Irrawaddy River in Myanmar and the Kamchay dam in Kampot Province, Cambodia—both criticized due to transparency issues, projected negative cultural and ecological effects, as well as domestic opposition (Tan-Mullins 2018). Similarly, the Mekong River (which straddles six countries—Cambodia, Laos, Vietnam, Thailand, China and Myanmar) has been subjected to Chinese-funded upstream damming since the 1990s. In 2014, China initiated the Lancang-Mekong River Cooperation Framework which offered aid programs to the other 5 countries in pursuing downstream dam projects. The initiative has persisted despite agricultural and fishing communities’ opposition due to negative impacts in their livelihoods, and even with the Asian Development Bank discontinuing funding projects precisely because of these criticisms (Ono 2018; Oxfam 2011).

These precedents continue to hound the development dynamics of the Duterte administration’s infrastructure projects, particularly through some procurement peculiarities for China-funded ventures¹¹. With regards to BBB, this has drawn attention to the Chinese government’s prerogative to shortlist three potential Chinese contractors, even before the actual signing of loan agreements, who will then bid for the construction of different infrastructure projects in processes organized at the implementing agency (IA) level¹². While the shortlist of contractors for China-funded projects need not be final, the vetting process of these submitted contractors— including those who may have spotty records in undertaking projects in other countries— their technical capacity, as well as the integrity of the procedures by which they do so, can vary substantially. Especially worrisome are whether agencies where such capacity gaps are especially severe, or which possess a reputation for corruption, will be able to ensure that the most qualified foreign contractors will be selected, or more modest, that unqualified firms will be prevented from bidding.

Though the design of projects fundamentally shapes its ex-ante economic feasibility, there is no question that the selection of poor and unqualified contractors can alter the ex-post viability of infrastructure undertakings for the worst. Ineffective construction threatens to dampen the extent and the quality of benefits generated, to balloon the costs of project implementation, and to increase the possibility of remote risks materializing, if not creating new ones. While these possibilities exist for all foreign-funded projects, the challenge has clearly been more pronounced in the case of Chinese ODA— as exemplified in various mishaps that have occurred since the very onset of the Duterte administrations Pivot to China (e.g., the inclusion of blacklisted firms among those matched to proposed China-funded projects following Duterte’s October 2016 state visit to Beijing). If similar firms were to be actually contracted for the development of projects, this would

¹⁰ In another regional context, research by Isaakson and Kotsadam (2018) studied geospatial data of Chinese official financial flows in 29 African countries from 2002-2012 and concluded that the data “consistently indicate(s) that Chinese aid projects fuel local corruption”. Similarly, the state-centric governance of Chinese aid, its support of authoritarian governments, as well as its visible prioritization of Chinese businesses—sometimes at the expense of aid recipients’ economies—has attracted a significant number of criticisms (Defraigne 2016).

¹¹ China-backed BBB projects are not unique in this fashion: airport expansion projects and the Metro Manila Subway Project (which involves the World Bank, JICA and PPPs) have also been reported as potential white elephants (Mendoza and Cruz 2018; Venzon 2019; Gonzalez 2019, Lalu 2020).

¹² Interview with Director from the Department of Finance International Finance Group, February 21, 2020.

undoubtedly be likely to worsen the possibility of the “iron law” of mega-projects being realized.

THE KALIWA DAM: TROUBLE IN THE SIERRA MADRE

The case of the Kaliwa Dam, the largest China-funded project currently under implementation in the BBB program, exemplifies the dynamics and risks discussed in the previous sections¹³. Approved in 2013 as part of the “New Centennial Water Source Project (NCWSP)— a public-private partnership venture, by the NEDA ICC during the term of then-president Benigno Aquino III— the PhP 12.2-billion dam has garnered notoriety for its foreseen social and environmental impacts on protected rainforests and indigenous Agta-Remontado communities (Philippine Star 2019), as well as its subsequent reassignment for majority financing via a loan from the Export-Import Bank of China that have been touted to harbor onerous provisions— such as the touted collateralization of gas and oil found in Reed Bank, as well as the adoption of Chinese arbitration rules (La Vina and Reyes 2019; Carpio 2020). At first glance, the dam has been promoted by the Duterte administration as a necessary measure towards building an integrated series of dams in the Sierra Madre Rainforest to alleviate worsening water scarcity in Metro Manila— an issue made manifest by the 2019 water crisis that afflicted the National Capital Region (Manila Bulletin 2019). Yet, a more careful examination of the project’s evaluation documents and procurement procedures also reveals that, far from being a venture with incontrovertible gains for Metro Manila and the Philippine economy, the proposed dam’s balance of costs and benefits render it unviable, while its poor financial prospects could saddle consumers in Metro Manila with higher, long-term water tariffs.

Indeed, though the project was originally approved by NEDA in October 2013, NEDA staff themselves expressed “reservations” on “attendant risks and issues” affiliated with the dam. Surprisingly, a variety of relevant factors— like sedimentation risks, environmental and social costs, impacts on downstream communities— were not considered in the calculation of the dam’s economic rates of return¹⁴. Yet even with all these assessment gaps, the Kaliwa Dam barely met NEDA’s viability criteria at the time (Table 4).

¹³ This section is adapted from Cruz (2019)

¹⁴ Among others, the NEDA evaluation stressed the following:

- **Sedimentation risks** (*Pars. 26, 62*): Based on prior studies, NEDA acknowledged that the Kaliwa Dam could face “a possible short dam lifespan” due to the high rate of sedimentation.
- **Weak accounting of spillover costs** (*Pars. 64, 66*): NEDA emphasized that its economic evaluation did not account for “environment and ecological costs” as well as “social and heritage costs” resulting from the dam’s construction.
- **No downstream impacts** (*Par. 78*): NEDA underscored that its analysis was not able to assess the adverse downstream impacts of the project in the Agos river basin in Quezon province.
- **Costs possibly higher** (*Par. 85*): NEDA recognized that the dam’s cost could escalate significantly due to the project’s location in an area prone to “severe erosion and earthquake hazards.”

Table 4. NEDA’s Economic Viability Indicators for the Kaliwa dam (standalone) and Integrated Dam System

Indicators	Scenario 1 <i>(without water treatment plants)</i>	Scenario 2 <i>(with water treatment plants)</i>
Kaliwa Dam (standalone)		
Estimated Economic Internal Rate of Return (EIRR)*	20.21%	18.13%
Viability	Viable	Viable
Integrated Dam System (Laiban + Kaliwa)		
Estimated Economic Internal Rate of Return	13.40%	15.22%
Viability	Non-Viable	Viable

Source: NEDA (2013)

* - EIRR is a measure of the economic efficiency of projects after their overall costs and benefits to the economy have been considered. Projects are approved as economically viable if their estimated rates of return exceed a pre-set social discount rate.

While NEDA found the Kaliwa Dam project to be economically viable (see Table 1), the project’s estimated economic internal rates of return (i.e., 18%-20%) were hardly above the government’s passing rate of 15% at the time. Equally crucial, the NEDA evaluation found that the NCWSP and Kaliwa dam demonstrated poor financial prospects: the project was estimated to cost its proponents far more than what they could expect to receive from the venture’s operations. In paragraph 84 of the evaluation, NEDA noted that this could risk increasing water tariffs, if MWSS passed on some of the financial burden of the project to downstream concessionaires.

Evidence suggests that a more comprehensive assessment of the Kaliwa dam/NCWSP project would have pronounced the venture an unviable one. Indeed, in a 2012 Water Security Study for Metro Manila, the World Bank also examined the dam’s viability (see Table 5) and established it to be the only unviable venture among ten potential Metro Manila water-source projects (World Bank 2012). The reason for this difference in judgement was that the World Bank study, compared to the NEDA evaluation, also considered probable leakages in the extraction and conveyance of water, as well as environmental assessment and watershed maintenance costs that would be incurred by the dam’s construction and operation. Just as strikingly, and similar to the caveat provided the NEDA evaluation, the Bank furnished evidence that the Kaliwa dam could prove disadvantageous for consumers. Among the ten proposed water supply projects assessed, the long-run average cost of the Kaliwa was calculated at PHP 9.28 per cubic meter— nearly three times the per liter cost of the most cost-efficient project in the list.

Table 5. Summary of World Bank EIRR Estimates, with Sensitivity Analysis scenario*, for ten Metro Manila water source projects

Proposed Project	Estimated EIRR for base case	Est. EIRR with 10% Increase (Decrease) in Costs (Benefits)
Sumag River Diversion Project	37.03%	31.42%
Bayabas Dam	18.14%	15.18%
Maasim Dam	18.44%	14.71%
50 MLD Wawa Dam	19.34%	15.49%
Laiban Dam	15.68%	10.75%
Kanan No. 2 Dam	15.22%	13.00%
Kaliwa Low Dam	14.48%	11.91%
Agos Dam	15.53%	13.55%
Tayabasan River Water Supply Project	23.23%	19.72%

Source: World Bank/MWSS Metro Manila Water Security Study (2012)

* - In project evaluation, sensitivity analysis investigates the impact of adverse changes in the projected costs and benefits of projects, usually involving a 5%-20% variation change in selected variables.

As the approval of the NCSWP during the Aquino administration indicates, questionable cost-benefit evaluations and projects have been a persisting challenge across presidencies, including those which have been recognized as reformist in orientation. Yet as already mentioned, the shift towards government-linked financing and development of infrastructure projects in the Duterte administration has been marked with an escalation of procedural anomalies, which has also been reflected in the Kaliwa dam project. Since the inking of the dam’s loan agreement between Rodrigo Duterte and Chinese President Xi Jin Ping in November 2018, a series of irregularities have been reported of the project’s proponent—the Metropolitan Waterworks and Sewerage System (MWSS). Among others, MWSS has been accused by both local residents, observers, and technical experts of generating ‘deficient’ environmental impact studies in securing its environmental clearances (Enano 2019); in railroading and manipulating procedures for securing the “Free, Prior, and Informed Consent” (FPIC) of affected indigenous communities, despite the well-documented opposition of such communities to the dam project (Conde 2019). Apart from these, the project has drawn opprobrium from a number of legislators, who have highlighted the illegal construction of access roads to the dam site by MWSS, even prior to securing an Environmental Compliance Certificate as well as the FPIC of affected communities, and before the project’s loan agreement had come into effectivity (La Vina & Reyes 2019; Camba 2020b).

Yet arguably the most notorious anomaly that has surfaced in the course of the Kaliwa dam’s presentation within the Duterte administration has involved its contracting and procurement procedures. Indeed, in a June 2019 observation memorandum, the Philippines’ Commission on Audit disclosed several irregularities concerning the awarding of the dam’s commercial contract to the China Energy Engineering Corporation (CEEC), and expressly described the project’s bidding procedure as having only a “guise of being a competitive procurement process”. According to the memorandum, MWSS confirmed the qualifications of three nominated Chinese contractors despite glaring information gaps in their submitted bids; lapses on the side of losing bidders that

disqualified them were on matters that they should have already known in advance (e.g. the lack of a Mayor's Permit, bidding above the approved budget for the contract); and the implementing agency also vetted the very bidding documents even before those documents had been finalized (COA 2019). As a result of these processes, CEEC was awarded the contract of the project, even though investigation of its projects in other countries reveals that some of its subsidiaries had been blacklisted by the World Bank in 2015, while other affiliates (e.g. the China Gezhouba Group Corporation) have been accused of engaging in serial corruption, fraud, human rights, and environmental violations in mega-dam projects in countries such as Nepal, Pakistan, Myanmar, Argentina, Laos PDR, and Ethiopia (Cruz 2019c). In this, the Kaliwa dam bidding process echoes the \$150-million National Roads Improvement and Management Program-1/NRIMP-1 during the Arroyo administration, where Filipino firms as well as Chinese firms were blacklisted by the World Bank for colluding to rig bidding (Lee-Brago 2009; Llanto 2009).

At present, MWSS purportedly aims to complete the Kaliwa Dam by 2024, even though construction on the dam proper has yet to commence as of June 2020 (CNN Philippines 2020). Yet if past trends are to serve as a guide as to what can be expected in the future, the dam is likely to continue to encounter setbacks and controversy. The numerous lacunae in its original evaluation, coupled with its anomaly-ridden efforts to secure clearances and undergo procurement, indicates that substantial breaches in procedures have taken place, which will likely rebound on the project in terms of delays, inflated costs, and magnified implementation, social, and environmental risks.

RETHINKING THE “GOLDEN AGE OF INFRASTRUCTURE” FOR THE COVID-19 “NEW NORMAL”¹⁵

While addressing the governance issues raised thus far would have been important prior to the arrival of COVID-19, the ongoing pandemic has made a redesign of the BBB program a national imperative. Though a sustained and even enhanced BBB program has been highlighted by policymakers as a critical area of stimulus spending for the Philippines' COVID recovery program (Chua 2020; Dominguez 2020), the pandemic compels a rethink of BBB in at least three ways. First, in light of the urgent spending needs required by the pandemic, the infrastructure program will have to be modified to expand budgetary space for the government's health and social amelioration efforts, which will be essential spending areas to bolster the country's response to the COVID outbreak. Second, though the implementation of BBB projects can provide a major boost to an economy in freefall, the enforcement of social distancing protocols in construction efforts will slow down these projects' development and, for most of them, further diminish their likelihood of being completed within the current administration. Third, especially if COVID-19 persists, the adoption of travel restrictions and social distancing measures could severely impair the long-term viability of particular types of BBB projects, including that of China-funded transport mega-projects¹⁶. Indeed, while several COVID-19 vaccines have been developed as of 2021, even the World Health Organization has underscored the reality that immunization efforts will not provide a “silver bullet” against the

¹⁵ This section has been modified from the Jerik Cruz's contribution to Ugay et al (2020).

¹⁶ We operate on this particular timetable: that *short-term* projects tend to take around 1-2 years, *medium-term* projects take around a maximum of 5 years, and *long-term* projects tend to take beyond 5 years.

pandemic, given severe logistical challenges that confront the delivery of such vaccines in developing countries, the lingering (if highly diminished) possibility transmission towards already-vaccinated individuals, as well as the continuing mutation of new COVID-19 strains (Su et al 2021).

Specific infrastructure sectors that are particularly vulnerable to a protracted pandemic trajectory include proposed railway, airport, and tourism-related projects. Just as with sectoral upheavals experienced by the air travel, hospitality, and tourism industries since the inception of the COVID-19 pandemic, a failure to stamp out the disease will mean that air travel— including for tourism purposes— will be dampened for the foreseeable future, which will undermine the returns of projects aimed at supporting the operations of these sectors. Equally troubling will be the economic prospects of mass commuter railways, which comprise several of the most expensive projects in the BBB portfolio¹⁷. Should COVID-19 social distancing measures be required for the foreseeable future, immense subsidies may be required to keep such railways and their operators commercially afloat. Along with debt payments for foreign-funded projects, these subsidies could thus ‘crowd out’ domestic public resources which could otherwise be allocated for pandemic-related investments.

Redesign the BBB portfolio of projects to adapt to the ‘New Normal’ and its long-term outlook. Given the need to review and redesign BBB in the wake of COVID-19, the Duterte’s administration’s infrastructure program needs to minimize public expenditures on projects that can (a) otherwise be undertaken as public-private partnerships, and (b) should be put on hold, especially should there be indication that the coronavirus pandemic will persist into the longer-term. Public resources that are and will be allocated to such projects can instead be used to fund critical investments needed for adapting the Philippine economy to the ‘new normal’, such as in social, digital, rural, and inclusive, cost-effective transport investments.

¹⁷ Even during normal periods, the operations of passenger railways in both the Philippines and other countries are heavily subsidized due to the inherent unprofitability of railway services from a commercial standpoint— by one 2018 estimate, for instance, the Metro Manila Subway, if developed, could require PhP 49.8-billion in annual subsidies to make its fees affordable for daily riders (Mendoza and Cruz 2018).

Table 6. BBB Infrastructure Sectors with High COVID and Viability Risks

Infrastructure Sector	Cost (PhP Billions)	Comments
Railways	1,961.3	
Unified Grand Central Station	2.78	Now under GAA implementation, but previously under PPP
LRT 2 West Extension	10.12	Now under GAA implementation, but previously under PPP
Metro Manila Subway Phase 1	356.96	Not yet under implementation, but concerns raised over subsidy costs and viability risks before COVID-19
MRT 3 Rehabilitation	22.00	Now under ODA implementation, but originally for PPP
MRT 4	57.07	Currently for ODA financing, but originally for PPP
LRT 2 East Extension	9.5	Now under ODA implementation, but originally for PPP
Mindanao Railway Project Ph. 1	81.69	Concerns over viability risks already raised before COVID-19
Subic-Clark Railway	50.03	Concerns over viability risks already raised before COVID-19
Airports	1,009.6	
Sangley Airport	1.44	Subjected to GAA implementation with proposed PhP 500-billion expansion, even as concerns raised on feasibility issues before COVID-19. Potential redundancies with other Ninoy Aquino International Airport decongestion projects. Current project cancelled by the Cavite provincial government.
Clark International Airport Expansion Project Phase 1	14.97	Now under PPP implementation. Potential redundancies with Ninoy Aquino International Airport decongestion projects.
New Manila International Airport	735.63	Unsolicited PPP proposal, with concerns over viability risks raised before COVID-19. Potential redundancies with Ninoy Aquino International Airport decongestion projects.
Ninoy Aquino International Airport	102.12	Unsolicited PPP proposal, but with concerns over transfer of substantial government revenue sources (e.g. passenger service charges) to private consortium. Potential redundancies with other NAIA decongestion projects.
Tourism-Driven Projects	42.4	
Mega-Bridge Projects	365.2	Prior to COVID-19, five mega-bridge projects already removed due to infeasibility concerns. Concerns raised of viability risks among many of the remaining inter-island bridge projects.

Source: National Economic Development Authority

Table 6 provides some indication of the scope for reassigning projects for PPP development or for deferral. Though decisions on which ventures would be viable for private sector participation need to be undertaken on a project-by-project basis, one can note that at least five rail-related projects together worth PhP 101.4-billion, and currently assigned for foreign-funded implementation, have previously been allotted for PPP development. Likewise, at least three major railway projects— including the Metro Manila Subway project— amounting to PhP 487.7 billion in costs had already been flagged by observers, and at times other public officials, as harboring “white elephant” risks prior to COVID-19 (Chanco 2018; Bondoc 2019). If the disease persists into the long-term, there can be every expectation that the unviability problems previously raised of these megaprojects will materialize. This will also be the case for tourism-related infrastructure projects (PhP 42.4 billion) as well as mega-bridge projects (PhP 365.2-billion) that remain included in the BBB portfolio of flagship projects. Indeed, five such “inter-island” bridge projects have already been discontinued by NEDA on infeasibility

grounds (Philippine Daily Inquirer 2019); decreased tourism, commercial, and commuter flows as a result of the pandemic are likely to mark other such projects remaining in the BBB list as also unviable.

While questionable public- or foreign-funded airport projects are less prominent compared to railway and mega-bridge projects¹⁸, various issues continue to hound the proposed development of mega-airport complexes to decongest the Ninoy Aquino International Airport (NAIA). In fact, four megaprojects in the BBB pipeline are slated for this purpose, which even before the pandemic had been highlighted as indicative of a “lack of transport planning” within the government bureaucracy. While the largest of these ventures (i.e., the New Manila International Airport and the NAIA rehabilitation project) are presently to be undertaken as PPPs, the proposed Sangley Airport has also been eyed to be expanded as a PhP 623-billion project that will be funded by a mix of public and Chinese ODA sources (Patalinhug 2020). Even should the persistence of COVID-19 prove not to be long-term in nature, the economic impact of the pandemic is poised to render several of these proposed large-scale airport facilities redundant. With its prospective public- and foreign-funding components, it remains advisable to defer the envisioned expansion of, at least, the Sangley airport project. While the Cavite provincial government cancelled the current project as of January 26, 2021, it still reportedly plans on restarting it with other partners (Mallari 2021).

Invest in inclusive and efficient road transport infrastructure. Should the mega-projects identified above prove to suffer from worsened feasibility outlooks amidst the pandemic, what types of cost-effective, COVID-resilient infrastructure could be developed in their place? At least with regards to transport, in contrast to the past focus, there remains substantial scope for the Duterte administration to increase investment in inclusive road mobility infrastructure, including non-motorized transport modes such as bicycles, which have gained in prominence amidst the “transportation crisis” created by COVID-19 (Rey 2020). For instance, in its revised list of 100 BBB flagship projects last February 2020, there were *only* four bus transport projects, as well as one flagship project dedicated to non-motorized road transport. Moreover, in this revision process, two Bus Rapid Transit projects in Metro Manila were also dropped from the flagship projects list by the DOTr, on grounds of to their alleged risk of worsening traffic congestion in major thoroughfares (Romero 2019).

Given the various risks that have been mentioned as regards the development of other transportation projects, coupled with the necessity of transforming the road transport sector presented by COVID-19, the Duterte administration would be well-advised to focus more on providing sustainable road and active transport to the public through more inclusive, low-cost, and economically-viable systems. In the short-term, the lower volume of traffic and the need for bus augmentation of the MRT/LRT amidst social distancing, furnishes a window for implementing the BRT projects earlier removed from the roster of BBB flagship projects, as well as developing high-priority bus lanes in other key arteries in the country’s urban areas. Yet this expansion in public transport capacity must also be coupled with investments to enhance conditions for walking and non-motorized transport. This includes dedicated bicycle lane development, sidewalk improvement, and wider public spaces (e.g., public parks), among others. In the same way that

¹⁸ There are major concerns, however, concerning how many of the mega-airport projects are in the form of unsolicited PPP projects, which are less transparent than solicited ones and suffer from level-playing field issues.

telecommuting should be maximized, the use of non-motorized transport (i.e., active transport), especially cycling, should be encouraged to reduce transport congestion while retaining social distancing among commuters.

Table 8. “BIYAHEnihan” Proposals for Urban Mobility Infrastructure

Project	Cost (PhP Billions)	Comments
Sidewalk improvements and bicycle lane development	8.0 (PhP 5-M per km)	1,600 km of sidewalk and bicycle lane improvements (including signage, barriers, lane markings, accessibility improvements)
Bus/PUV priority lanes	30.0 (PhP 300-M per km)	100 km of dedicated lanes for public transportation (inc. roadway, signage, lane markings, traffic/crossing, signals accessibility improvements)
Bus/PUV depots	20 (PhP 1-B per depot)	20 Bus/PUV depots
Intermodal Terminals	16 (PhP 1-B per terminal)	16 Intermodal Bus/PUV terminals
Bus Stop Development	4 (PhP 2.5-M per stop)	1,600 bus stops

Source: MoveAsOne Coalition

Estimates on how much these other investments have been recently generated by the MoveAsOne Coalition (see Table 5), which has been pushing for a safe and sustainable public transportation response within the COVID-19 context. By their figures, development of 1,600 km of sidewalk improvements and bike lanes, 100 km of bus and PUV priority lanes, 20 bus/PUV depots, 16 intermodal terminals, and 1,600 bus stops, is projected to cost PhP 78 billion, though it may also be possible to invest further in such infrastructure if allowed by public resources. This initial amount can be readily covered by reassigning BBB projects highlighted earlier for PPP development or putting them on hold should more adverse COVID-19 scenarios materialize. Proposed China-funded projects that especially should be reviewed for this purpose include the Mindanao Railway Project - Phase 1, the Subic-Clark Railway, the Sangley Airport, and the Panay-Guimaras-Negros Bridge. Apart from its past viability challenges, the Kaliwa dam project also needs to be carefully reviewed, designed, and/or put on hold due to its prospective downstream impacts on agricultural and fisheries production— another area of essential spending during the COVID-19 pandemic¹⁹.

¹⁹ Fund reallocations and project reassignments do not automatically mean earning the ire or unwarranted pressure of Chinese ODA authorities. Across countries, renegotiations of Chinese ODA have occurred—especially when a) a project has already caused significant backlash in the recipient country and b) Chinese authorities have already found merit in adopting existing international standards of project implementation, oversight and re-evaluation (Glosserman 2020). In particular, the government of President Maithripala Sirisena in Sri Lanka was confident in doing this by leveraging public antipathy towards Chinese support of his predecessors. (Parks 2019). Finally, the Arroyo and Aquino governments have renegotiated Chinese projects before (Llanto 2009; Landingin 2011).

CONCLUSION

Over the past four years, the Duterte administration has engineered a series of shifts in the Philippine infrastructure landscape, in the process creating more opportunities for economic engagement with China. As this paper has shown, while the yield from the government's rapprochement with China has yet to place the share of China-assisted projects on par with the Philippines' traditional donors, and while fears of "debt trap risks" may be overstated, the possibility of generating white elephant projects remains significant. Though the institutional weaknesses and political incentives underlying the selection, approval, and implementation of such unviable projects have been a cross-cutting theme in past administrations, these dynamics have been compounded in the Duterte administration by problems of strained absorptive capacity and bureaucratic overstretch due to the demands posed by the BBB program. In addition to these general challenges, the implementation of China-funded projects has been compounded with exemptions in Philippine procurement protocols and weaker governance conditionalities in Chinese ODA that can result in bloated financial, economic, and social costs as well as inflated risks in the course of project development. Controversies and challenges hounding the implementation of the Kaliwa Dam project are strongly illustrative of these processes in the design and implementation of China-funded projects.

Far from thrusting these issues concerning BBB and its China-funded projects to the side, the COVID-19 pandemic has accentuated them. Should the pandemic prove to be protracted in nature (e.g., COVID-19 joining the ranks of "endemic viruses"), the viability of rail, airport, and tourism mega-projects will be undermined, especially for those projects that had already been identified as potential white elephants. In this context, it would be prudent for the Duterte administration to recalibrate the BBB program to reallocate funds away from such mega-projects to infrastructure that will be more COVID-resilient yet also cost-effective. With regards to transportation, a promising area for investment lies in prioritizing the development of bus-priority and non-motorized transport, for which budgetary space can be opened by reassigning several projects for PPP development, or deferring them until more favorable public health and economic conditions are achieved in the medium- or long-term. These include China-funded projects such as the Mindanao Railway, the Subic-Clark Railway, the Sangley Airport, and the Kaliwa Dam project. Beyond investment in inclusive and active transport infrastructure, other critical expenditure areas for a COVID-adjusted BBB program are for social (including health and education facilities), digital, and rural infrastructure.

There is likewise significant scope for institutional reforms. However, these would require acknowledging and addressing existing governance and accountability gaps in the country's infrastructure governance regime. To plug such gaps, increasing the role of non-government actors (be they NGOs, academic and technical experts, as well as media coverage) that can monitor and shape, not only procurement processes, but also the approval and implementation of projects can be championed. For instance, at project evaluation stages, requiring the concurrence and/or audit of independent qualified experts in the approval of projects can help check on the risk of "optimistic biases" eventually resulting in the generation of white elephants. Whether the Duterte administration will muster the appetite for such reforms in its final two years in office remains to be seen.

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