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Port congestion and underutilization in the Greater Capital Region: Unpacking the issues

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Introduction

The Port of Manila is the largest seaport in the Philippines.¹ Operating at almost full capacity given the current growth in trade volume, the heavy traffic congestion along the roads within the port area and along the roads in Metro Manila led the City of Manila to impose a truck ban on February 4, 2014. The ban reduced the operating hours of container trucks plying the city streets. It resulted in delays in the delivery of goods, accumulation of containers at the port, slowdown in the logistics chain in and out of the port, and empty containers returning to the port. Coupled with the Land Transportation Franchising and Regulatory Board's (LTFRB) policy that bans trucks without franchise to operate in the port, the truck ban also reduced the number of trucks available for hauling. This resulted in increased trucking and port

costs and shipping line charges. On September 13, 2014, the City of Manila lifted the truck ban indefinitely. Still, the problems of port congestion, high trucking cost, and surcharge imposed by shipping lines to remove large quantities of empty containers continue to loom in the background. These are compounded by the Department of Public Works and

¹ Composed of three major facilities, namely, Manila North Harbor, Manila South Harbor, and Manila International Container Terminal (MICT).

PIDS Policy Notes are observations/analyses written by PIDS researchers on certain policy issues. The treatise is holistic in approach and aims to provide useful inputs for decisionmaking.

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Highways' (DPWH) ongoing road construction and rehabilitation work near the port area.

This *Policy Note* presents the key findings of a study that explored the issues surrounding the congestion in the Port of Manila and the underutilization of Batangas and Subic Ports. Using survey and focus group discussion, the study investigated the factors that affect the decision of shippers, freight forwarders, logistics services providers, and truckers on their choice of port and their satisfaction ratings of their chosen port. The study also used network and freight demand models to determine the optimal freight movement in the Ports of Manila, Batangas, and Subic. This *Policy Note* ends with some short-, medium-, and long-term measures to address the issues.

Findings

Frequently used ports and level of satisfaction

Sixteen of the 17 shippers who were interviewed use the Port of Manila because of its proximity to their warehouses and the availability of carriers. Shippers and locators provided the highest satisfaction rating for this port on attributes such as availability of service providers, shipping companies, and forwarders; reliable shipping schedule; and acceptable cargo acceptance/release. Most of the respondents are open to the use of the rail option to ship their goods to or from the port.

Meanwhile, 15 of the 19 freight forwarders and logistics services providers interviewed

outsource their trucking services while four have their own trucking services. The former were negatively affected by the increase in trucking rates when the truck ban was implemented. Eight revealed that both the consignee and the shipper agree on which port to use for the shipment. The most frequently used port is the Port of Manila because of the availability of shipping lines; accessibility and cheaper rates; proximity to consignees, importers, and warehouses; and ease of transaction and release of goods due to the presence of specialized Bureau of Customs (BOC) staff. Respondents were, on average, satisfied with the "scope/wide area of coverage" of the Port of Manila, but were dissatisfied with the "no red tape" attribute because of their problems with BOC procedures. For the Batangas Port, participants were satisfied with its "convenient road condition" and "less stringent traffic regulation", but were dissatisfied with its supposedly "frequent shipping schedule", "availability of allied services providers", and "sufficient cargo handling facilities". For the Subic Port, respondents were satisfied with its "convenient road condition", but dissatisfied with its supposedly "frequent shipping schedules" and "less travel time".

Truck ban

Seventeen of the 20 interviewed truckers complained about the truck ban, the policies of the LTRFB, the Metro Manila Development Authority and City of Manila traffic enforcers, and the shipping lines' habit of using the port as a container yard for empty containers. The

port congestion, they said, increased the price of trucking services and reduced the number of turnaround. In addition, they complained about the fees and charges imposed on them even without the truck ban such as payment to security guards just to exit the port after unloading the containers, container imbalance charge paid to the shipping lines, and port congestion surcharge paid by the owner of the goods to the shipping lines.

Rail connectivity of economic zones and ports

The revival of the Philippine National Railway (PNR) network from Bicol region to La Union can provide a convenient and alternative way to travel and ship cargo in the Luzon area. From 1997 to 2003, the International Container Terminal Services, Inc. (ICTSI) operated a rail-based transport system between the Manila International Container Terminal (MICT) and the Calamba Inland Container Depot (CICD). The system was, however, terminated because the trains could not run at the desired speed and be punctual due to the deteriorating conditions of the rail tracks. Furthermore, there were long turnarounds and waiting times because only one train set was in operation. The current level of freight traffic through Batangas is too small to consider it a major source of potential base traffic for freight railway. In 2014, the average speed in road segments designated as truck routes during peak hours is 5.2 kilometers per hour (kph) compared with the average speed of 16.57 kph for all other roads. Simulation results show that only 4.17

percent of the estimated volume of truck freight would be shifted to rail transport during peak and nonpeak hours. The use of rail freight has a negligible effect on the improvement of travel speed along the roads in the Greater Capital Region.²

Impact of the port congestion

Survey results indicate that the cost of shipping a 20-foot or a 40-foot container by truck doubled after the truck ban. Likewise, port congestion led to time delays in cargo releasing. The economic cost of the port congestion during the seven-month period that the truck ban was in effect is estimated at PHP 43.85 billion due to decrease in BOC revenues, output and productivity losses, and vehicle operating costs.

Planning capacity expansion ahead of demand

JICA (2013a) stated that the Master Plan for Batangas Port consists of four phases. The completed phases (I and II) have a total area of 150 hectares. The remaining phases should be developed taking into account the “building capacity ahead of demand” mindset. Meanwhile, Subic Port has a total area of 41 hectares with 15 operational piers and wharves and the capacity to handle all kinds of sea vessels including Panamax Class container vessels. However, lack of capacity may not be the only cause of port congestion.

² By Greater Capital Region, this refers to the National Capital Region (Metro Manila) and neighboring Central Luzon and Southern Tagalog.

Table 1. New storage rates (PHP per day)

Container Type	Storage Charge
20 footer	5,000
35 footer	8,750
40 footer	10,000
45 footer	11,250

Source: NEDA Aide Memoire, Table 4, November 14, 2014

Manpower and truck availability as well as access to road infrastructure also matter.

The trend toward building capacity ahead of demand is likewise exemplified by the airport building binge in Asia. Jakarta airport is expanding three times its capacity, Kuala Lumpur airport is doubling capacity to 100 million people by 2020, and Beijing, which already has an airport servicing 80 million people, is building a second airport to handle 40 million passengers by 2018. Ho Chi Minh City airport has planned a new international airport as its existing Tan Son Nhat airport will reach its capacity of 25 million passengers in 2016. Meanwhile, under the plan of the Department of Transportation and Communications (DOTC) and the Japan International Cooperation Agency (JICA) for the proposed Sangley International Airport, the target is to serve 55 million passengers by 2025 and complement Ninoy Aquino International Airport's projection of 59 million passengers by the same year. Phase II of the

³ JICA (2013b) pointed out that the utilization rate is less than 5.7 percent in 2012 for both terminals NCT 1 and NCT 2 in Subic Port.

proposed Sangley airport envisions serving 130 million passengers per year by 2050.

Toward a desirable policy direction

(a) On the policy regarding container traffic coming from or going to the south and north of Metro Manila

Starting October 1, 2014, the harbor fee was lowered to USD 0.008 from USD 0.046 per gross register tonnage (GRT), and the berthing fee to USD 0.004 from USD 0.0345 per GRT per day. These rates will expire on March 31, 2015. After that, the rate will be increased to USD 0.0410 for harbor and USD 0.0200 for berthing. Moreover, a 50-percent discount provided by the Philippine Economic Zone Authority on processing fees for full container shipments to be discharged or loaded at Batangas Port has been extended to December 2015. The government has also imposed a higher storage fee for BOC-cleared cargo in the Port of Manila from PHP 500 per 20-foot equivalent units (TEUs) per day after a five-day free storage period to PHP 5,000 after a 10-day free storage period. Table 1 shows the new penalty charges on overstaying inbound foreign containers with gate passes and that have been cleared by the BOC for withdrawal on the eleventh day after clearance. These rates took effect on October 2, 2014.

However, the results of the lowered fees have not been promising. Utilization rates of Batangas and Subic Ports have remained low at 7.8 percent and 8.7 percent, respectively, in 2014, as reported by JICA.³

The government has at least two policy options to consider in structuring its regulatory policy to increase the utilization of Batangas and Subic Ports. One is to adopt a fine and price discount policy. The other is to impose a volume restriction policy. If the desired result is to improve the utilization of Subic and Batangas Ports, the more effective policy is the latter but if the goal is to decongest the Manila ports, then an efficient pricing and penalty mechanism will have to be established.⁴ But if prices and fees are fixed at levels that do not compensate for nonprice service attributes of the most frequently used port, the shippers and other port users would not respond favorably to incentives. However, if too high volume is targeted to be restricted from the frequently used port with relatively large capacity and to be diverted to an underutilized port with limited capacity, the ultimate result will just be to transfer the port congestion problem to the latter. There might still be a window of opportunity toward a policy to divert traffic to Batangas and Subic Ports (most likely up to 2030), and the most appropriate approach favors quantity restriction if port users are seemingly unresponsive to price incentives. Furthermore, planning capacity expansion ahead of demand must likewise be made to avoid simply transferring the congestion problem from the Port of Manila to Batangas and Subic Ports.⁵

Still, these two policy options are not necessarily mutually exclusive. The first option has been barely effective as seen during the aftermath of the Manila truck ban when

numerous spontaneous and uncoordinated pricing discount and fine policies were implemented by various government agencies. It must be stressed that JICA (2013a) recommended the use of incentive packages to increase port utilization. Moreover, JICA (2013b) recommended the improvement of the incentive scheme for maritime stakeholders.

As the results of this study show, proximity of shippers to Batangas Port and affordability of port-related services are not enough to offset the other benefits of using the Port of Manila. Also, the choice of port to use depends on both the shipper and the consignee, hence, a policy toward using the price and penalty mechanism has to be appealing to both decisionmakers. Volume restriction is relatively more effective than price incentives in diverting traffic to Batangas and Subic Ports. However, if pursued, it must be complemented by simultaneously staffing these ports with sufficient BOC and Philippine Ports Authority (PPA) personnel and providing cargo handling equipment, berth capacity, and container yard capacity that are commensurate to the volume of cargo and transaction that are targeted to be diverted from the Port of Manila.

⁴ The items to be covered in the discount policy include berthing fee; harbor fee for import, export, and transshipment; stevedoring and arrastre fee; pilotage services fee; wharfage fee; storage fee; and terminal handling fee.

⁵ "But in reality, the situation is more complex. Diverting traffic to Subic and Batangas is only a short-term solution; high utilization rates for both may mean that we run the risk of transferring the problem we encountered in the Port of Manila to those very ports," said President Benigno S. Aquino in his speech at the 40th Philippine Business Conference, Manila Hotel, October 24, 2014.

Table 2. Greater Capital Region ports' annual capacity, 2013 (in TEUs)

Port	Capacity	Actual Volume	Utilization Rate
Manila	3,700,000	2,884,029	77.9%
• MICT	2,500,000	1,901,476	76.1%
• South Harbor	1,250,000	982,553	78.6%
Batangas	300,000	23,251	7.8%
Subic	600,000	37,470	6.3%

Source: NEDA Aide Memoire, Table 3, November 14, 2014

(b) On the proposed policy to put a cap on the Manila Port capacity

Table 2 shows the annual capacity, traffic volume, and utilization rate for the MICT and South Harbor facilities in the Port of Manila. Although the Manila truck ban was lifted on September 13, 2014, MICT's and South Harbor's utilization rate reached 94 percent and 97 percent, respectively, on October 7, 2014 (Isip and Lopez 2014), way above what is considered the ideal utilization rate of 80 percent.

The Port of Manila is continuously expanding with the completion of Berth 6 in 2012. MICT will also expand its total capacity of 2.5 million TEUs by 20 percent. It is fast-tracking the construction of new yard facilities at its 21-hectare CICD as well as the 9-hectare yard expansion at its Berth 7 site to provide additional capacity for empty containers and facilitate the monthly movement out of the country of about 20,000 empty containers. In 2012, both contracts of International Container Terminal Services, Inc. (MICT) and Asian Terminals Inc. (South Harbor) were

extended for another 25 years, subject to lump sum, annual, and variable fees. Under ICTSI's contract, Berth 7 construction shall commence when volume at MICT reaches 2 million TEUs. Under Asian Terminals Inc. (ATI) contract, the construction of South Harbor Pier 9 into an international container terminal will start when traffic at South Harbor reaches 1.4 million TEUs. However, the continued dominance of Manila ports puts pressure not only on the roads within the port area, but also along major roads in Metro Manila due to the congestion created by port-related traffic. A port stakeholders report pointed out that "the root cause of congestion is the lack of a dedicated port access road to the Manila ports" and urged for the fast-tracking of the North Harbor Link Road and the Port Connector Road, as well as for a master plan for staged expansion of Batangas and Subic Ports (ATI et al. 2014).

To note, Batangas Port only has an annual capacity of 300,000 containers, while Subic Port has an annual capacity of 600,000 containers. The current available annual container capacity in the Port of Manila is 3.7 million TEUs, a million lower than its capacity in 2013. Without the go-signal to construct Berth 7, ICTSI's capacity is expected to reach 3 million TEUs after the completion of its CICD yard facilities and 9-hectare yard expansion at MICT, raising the Port of Manila's overall capacity to 4.2 million TEUs. This figure excludes the additional capacity to be added (estimated at 2.8 million TEUs) once the Manila North

Harbor Port Modernization Program is completed. MICT's proposed Berth 7 has an estimated capacity of 500,000 TEUs, which far exceeds Batangas Port's current capacity.

JICA (2013a) analyzed four port traffic development options for the Greater Capital Region (Table 3). JICA recommends Option 4, an alternative that does not require contract termination or renegotiation with private port operators, and, at the same time, ensures the full utilization of Batangas and Subic Ports by 2019. In contrast, the authors of this study favor Option 3 because it addresses the Port of Manila's congestion problem, considering as well the study's finding that the use of rail for freight transport may not provide a significant impact on the improvement of road congestion. Option 3 also generates (based on JICA's forecast) the highest utilization rates for both the Batangas and Subic Ports among the four options. In addition, the authors recommend that DOTC and PPA renegotiate the contract with private port operators to explore mutual agreement on a freeze on berth expansion, but possibly allowing for the expansion of yard capacity for storage and efficient handling of laden and empty containers. Lastly, there is a need for action plans to expand the capacity of Batangas and Subic Ports ahead of demand.

Table 3. Four port traffic development options for the Greater Capital Region

Option 1: Status quo scenario. The container traffic shares of South Harbor, MICT, Batangas, and Subic Ports in 2010 will remain constant in the long term. There will be no government intervention to divert container traffic from Manila Ports.

Option 2: Limit Manila Port to Berth 7 capacity of MICT and no port expansion for South Harbor. This scenario involves putting off further expansion of MICT beyond the capacity added by Berth 7 and the conversion of Pier 9 to a foreign container berth.

Option 3: Limit Manila Port to Berth 6 capacity of MICT and no port expansion for South Harbor. This scenario involves suspending further expansion of MICT beyond its present capacity and the conversion of Pier 9 to a foreign container berth.

Option 4: Rescheduling of Manila Port capacity expansion, or delay MICT Berth 7 and South Harbor Pier 9 conversion until 2019. This scenario does not cap MICT's and South Harbor's capacities but delays them until Batangas and Subic Ports have attained full utilization.

Source: JICA (2013a)

Conclusions and recommendations

Evidently, the Manila truck ban triggered further congestion in the Port of Manila and adversely affected exporters, importers, and manufacturers whose operations have been disrupted and who have faced increased transport cost. Freight forwarders, logistics services providers, shipping lines, truckers, and terminal operators were likewise negatively affected because the congestion led to difficulties to off-load cargo and to delays and longer waiting time. However, it has to be noted that the truck ban was instigated by the congestion of Manila's streets caused by huge cargo traffic coming in and out of the Port of Manila, the lack of depot by shipping lines for their containers, and the lack of depot for cargo trucks that are using Manila's streets as their parking garages.

To address these issues, the authors recommend the following measures:

Short term

- Issue a policy statement putting a cap on capacity of Manila's ports and give instruction that cargoes bound for or coming from the south of Manila should call on the Batangas Port while those bound for or coming from the north of Manila should call on the Subic Port.
- Urge ICTSI to revive the PNR rail freight operation to its inland container depot in Calamba, Laguna, during off-peak hours.
- Roll out the 24-hour web-based integrated truck dispatching, appointment, and booking system to improve the logistics chain.

Medium term

- To facilitate the diversion of the Port of Manila traffic to Subic and Batangas Ports, there is a need to increase the number of BOC and PPA personnel and expand the cargo handling equipment, and berth and container yard capacity of the Batangas Port.
- Adopt a rationalization plan for future port development and investment programs for ports in the Greater Capital Region.
- Create an interagency Land Identification and Acquisition Committee to conduct identification and inventory of potential port relocation or expansion sites.

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- There is a need for a gradual rehabilitation and improvement of the PNR line so that it can be used to move empty, unclaimed, and abandoned containers to an inland container yard.

Long term

- Draft a national multimodal transport and logistics development plan with special emphasis on connecting the Subic-Clark-Manila-Batangas corridor to the rest of the country.
- Design and construct a new and large deep-sea port at the location site identified by the multimodal transport and logistics development plan.
- Implement the investments plan for new rail, maritime, port, airport, and road infrastructure to link Philippine ports to the global supply chains. 📄

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