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REVIVING THE PHILIPPINE ECONOMY UNDER A RESPONSIBLE NEW NORMAL

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REVIVING THE PHILIPPINE ECONOMY UNDER A RESPONSIBLE NEW NORMAL

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After the reclassification of areas under enhanced community quarantine (ECQ) to general community quarantine (GCQ), the urgent task for the Philippine government is to provide an exit plan to revive the Philippine economy. Given the significant economic damage resulting from the shutdown of roughly 75 percent of the country's total production in the National Capital Region (NCR) and in the CALABARZON and Central Luzon areas, a gradual reopening of the economy will be necessary to prevent further economic damage that could not only be difficult to repair, but also long to overcome. Indeed, based on recent directives from the government, a substantial number of industries and services have thus been allowed to operate in both the ECQ and GCQ areas.

However, as the Philippine government begins to calibrate the opening of sectors, there remain concerns as to how this process will affect jobs and livelihoods now and beyond. **In this context, an economic recovery plan that talks about short-term, a transition, and full recovery phases— encompassing a revision of the current Philippine Development Plan without losing sight of the long-term goals envisioned in Ambisyon Natin 2040— is still needed.** Indeed, a key component of AmBisyon 2040 has been of building resiliency over the long-term, which includes resiliency in health and economic shocks apart from natural disasters. **At the same time, this recovery plan should also be accompanied by structural reforms to enhance its implementation.**

The Department of Finance has crafted a four-pillar socio-economic strategy aimed at: (a) supporting the more vulnerable sectors of society; (b) increasing medical resources to contain the virus and offer safety to front-liners; (c) keeping the economy afloat through financial emergency initiatives; and (d) creating jobs and sustaining the economy. Yet while enumerating the costs of these plans, the said strategy lacked details on how the country could achieve some of the goals without the availability of widespread testing and adequate health facilities. Loan guarantees, cash transfers, and other forms of subsidies can revive disrupted supply chains but cannot restore productivity in the middle of a persisting health crisis, while the uncertainty of a possible outbreak can keep workers from supplying goods and services.

It is crucial to have these programs and institutions in place since a number of cities, regions and provinces have started to reopen. A modified community quarantine without the necessary health system investments, protection measures, and economic recovery plan risks amounting to an unregulated herd immunity strategy. Opting for herd immunity allows governments to blame the failure of the health and economic system on the virus, rather than on bad governance. Under current GCQ protocols, the burden on containing the virus is mostly transferred to the public. Unless the government provides mass testing, the problem of information is aggravated,

probably raising the transmission risks. Moreover, unregulated herd immunity will be differentially felt by the poor. As healthy workers may recover their earnings from the modified quarantine, the poor, who have limited access to the health services and are thus more susceptible to the virus, are unlikely to benefit from this system. In effect, this will only exacerbate the inequality that prevails in the country.

Moving towards a responsible new normal requires a strategy that addresses both people's wellbeing and the socio-economic weaknesses exposed by COVID-19. Thus, the strategy should have the following elements:

Massive resources into mass testing and containment

Controlling the spread of the virus demands identifying those infected by COVID-19 and then keeping them isolated. Alongside this step are measures to prevent a resurgence in infections. With an untold number of asymptomatic carriers, the optimal strategy is testing¹, which means that millions of Filipinos need to be tested. Achieving this goal requires sufficient allocation of resources, and must be partnered with enhanced capacities for effective tracing and isolating the infected.

Currently, test capacity is now 900 per 1 million population which is below similarly-situated countries in ASEAN such as Malaysia which has more than 2,000 and Thailand at 1,500. Siddarth and Wey (2020) indicates that millions of tests per day will be required to be effective in curbing the pandemic. To control the disease, it requires hundreds of thousands of tests in the Philippines a day. As of April 30, the reported testing capacity in the Philippines was stated by the Department of Health to be 6,300 tests per day— still lower than the 8,000 per day target. Expanding this capacity will require substantial investments, not only in hospitals and testing centers, but also in the continued development of effective tracing, isolation, and quarantining. For the longer-term development of the health system, a concrete step that could be taken could be incentivizing investments for the modernization and expansion of hospitals and healthcare facilities.

Ensured survival of industries and workers

In view of the significant costs that testing entails, the government can apply a targeted approach in reviving essential industries. This approach refers to assisting specific industries or firms with significant impacts on the economy. As opposed to a policy that simply provides funding to any ad-hoc industry, this approach also promises to reduce corruption in the extension of government support.

¹ In addition, social distancing should be a primary concern. Among the biggest concerns with lifting the ECQ is the potential surge of new cases from travel and work. Reopening the economy exposes our workers. Without government guidelines on how to implement strict social distancing in various types of workplaces as well as guidelines about which jobs outside the health sector would require the use of PPE, a resurgence in infections through workplace transmission will be likely.

In both the modified ECQ and GCQ, the Philippine government has allowed certain industries to open.² As shown in Table 1, these industries need to open in order to maintain a level of production and provide jobs. However, there are certain risk qualifications, like those proposed by colleagues at the UP School of Economics (Solon, et al. 2020). In this proposal, viable industries are identified based on their high forward and backward linkages and as well as the potential number of workers they can employ. Collectively, the industries in Table 1 operate at around 60% of the country's productive capacity and employ more than 60% of their manpower.

Table 1. Prospective Identified Industries

	Shared of Real GDP (2019)	Number of Employed	Backward Multiplier	Forward Multiplier	Infection Risks	Testing Required
<i>Agriculture and Fishery</i>	7.7%	9,998,247	1.5	1.5	Low	None
<i>Food Manufacturing</i>	7.9%	1,068,805	2.2	8.1	Medium	Periodic Random
<i>Basic Health Services</i>	1.6%	517,583	2.3	1.2	High	Regular Testing
<i>Pharmaceutical Products</i>	0.8%*	39,349	2.6	1.4	Medium	Periodic Random

²Among sectors to be allowed are: (a) Agriculture and fisheries and the entire value chain including manufacturing of feeds, fertilizers, and pesticides; (b) Manufacturing and processing plants of basic food products, essential products, medicines, and medical supplies; (c) Retail establishments (groceries, supermarkets, hypermarkets, convenience stores, public markets, pharmacies, and drug stores); (d) Food preparations and water refilling stations; (e) Logistics service providers (cargo handling, warehousing, trucking, freight forwarding, and shipping line), including public transport; (f) Delivery services, whether or not e-commerce platform, in-house or outsourced, transporting only food, water, medicine, pet food, hardware products or other basic necessities; (g) Banks and capital markets; (h) Power, energy, water, IT and telecommunications supplies and facilities, waste disposal services and technical services to above utilities; (i) Electricity, gas, steam, and air conditioning supply; (j) Postal and courier activities; (k) Water collection, treatment, and supply; (l) Waste collection, treatment, and disposal activities (except materials recovery – junk shop); (m) Sewerage (except emptying of septic tanks); (n) Veterinary activities; (o) Repair and installation of machinery and equipment; (p) Repair of computers and personal household goods; (q) Services to buildings and landscape activities (except landscape care); (r) Employment activities (manpower services for essential activities); (s) Security and investigation activities; (t) Programming and broadcasting activities; (u) Rental and leasing activities (except for entertainment and mass gathering purposes); (v) Accommodations used as quarantine facilities for OFW and overseas Filipinos, as well as temporary accommodation for essential industries such as healthcare facilities, banks, BPOs, exporters and other frontline service sectors; (w) Services to buildings and landscape activities; (x) Extraction of crude petroleum and natural gas; (y) Gasoline stations; Laundry shops (including self-service); (z) Export companies (with temporary accommodation and shuttle services); (aa) Business process outsourcing companies (with temporary accommodation and shuttle services, work from home); (ab) and Mining and quarrying.

<i>Chemical products (for cleaning and related chemicals)</i>	0.2%*	14,280	2.4	3.2	Medium	Periodic Random
<i>Wearing Apparels (with expanded PPE sector)</i>	0.4%	610,650	1.7	1.2	Medium	Periodic Random
<i>Financial Services</i>	7.7%	437,123	1.8	2.3	Medium	Periodic Random
<i>Utilities (Electricity, Gas, and Water Supply)</i>	3.2%	16,882	2.0	2.3	Medium	Periodic Random
<i>Communications</i>	4.3%	202,724	1.7	1.6	Medium	Periodic Random
<i>Land Transport</i>	1.5%	2,721,687			High	Regular Testing
<i>Logistics (Storage and Services Incidental to Transport)</i>	1.0%	3,106,182	2.3	2.2	High	Regular Testing
<i>Retail Trade (Supermarkets, Hardwares and Drugstores)</i>	13.5%	5,995,435	1.7	11.8	High	Regular Testing
<i>Restaurants (converted to take out)</i>	1.40%*	1,381,952	1.1	1.3	High	Regular Testing
<i>Public and limited Private Construction</i>	10.6%	3,865,472	1.0	1.2	High	Regular Testing
<i>TOTALS</i>	61.8%	27,354,684				

Source: Authors' calculations from Philippine Statistics Authority data and risk classifications as discussed in Solon, et al. (2020). * - Extrapolated from 2012 Input-Output Tables

Apart from agriculture, the industries that are most important for reviving jobs and growth are also at high risk for COVID-19 infection, where workers will require ongoing testing. Indeed, data compiled by the Emergency Response Integrated Center (www.eric.org.ph) provides a geographical perspective of the extent of COVID19 infections across the provinces and regions:

the concentration of the virus is largely in Metro Manila and CALABARZON provinces, whereas other provinces have either less than 50 or zero cases.³

If the objective is to open as many sectors as possible, then the Philippine government should develop a strategy based on the results coming from the COVID-19 testing centers of the national or the local governments. This strategy should ensure the provision of maximum productivity with a minimum of risks. Dividing the country into regions based on risk factors may be counterproductive and be unable to restore the supply chains lost during the quarantine.

At the same time, the Philippine government will need to provide assistance to industries that affected by travel and physical distancing restrictions, but also too risky to neglect and allow to fail. Otherwise, these industries are likely to collapse as they lose their working capital. These industries include:

- Travel and Hospitality industries (e.g., air and sea transport, hotel, dine-in restaurants, etc.);
- Entertainment and art industries (e.g. theater, dance, music, cinema, museum, literature, etc.)
- Retail stores and the corresponding manufacturing and other service industries (e.g. clothing, appliance, spa, gym, food court, etc.)

The activities of these sectors may be banned or severely restricted until the pandemic ends, thereby enforcing a negative demand shock. The tourism industry itself hires 5 million workers, roughly the same amount of the so-called non-essential workers in the NCR. In addition, assistance should be considered to workers who are displaced by the quarantine. Among these workers are those in the entire informal sector, school personnel, and returning OFWs.

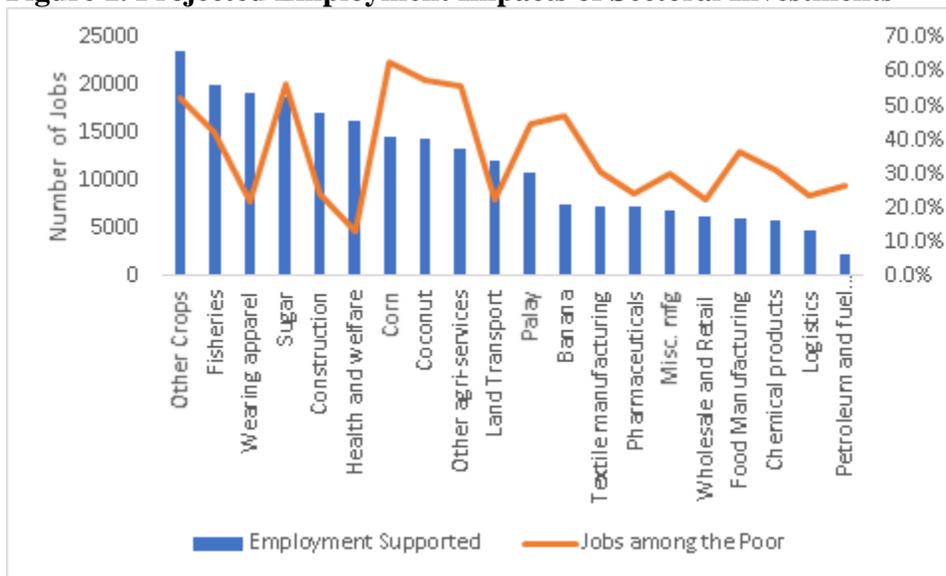
Change in the economic structure

Addressing the limited productivity brought about by the COVID-19 pandemic demands a restructuring of the economy away from business-as-usual. Indeed, COVID-19 exposed the structural weaknesses of the Philippine economy. **Indeed, COVID-19 exposed the structural weaknesses of the Philippines, such as the overdependence of the economy on Metro Manila. This weakness can be addressed by channeling investments outside of Metro Manila, improving infrastructure in rural areas and urban zones apart from Greater Manila, and deliberately shifting our development efforts and towards agricultural areas and growth centers other than Cebu and Davao.** The long-term goal is to strengthen the least productive sector, but the pandemic has made this effort more urgent. Restructuring the economy entails reviving the whole supply chain that utilizes other seaports (i.e. move shipments away from Manila to Subic and Batangas). Putting up the logistical infrastructure and trading facilities to enable agricultural products to move seamlessly to demand centers in the country is imperative.

³ Additionally, an analysis from the University of the Philippines Pandemic Response Team (2020) that used provincial level population density as a proxy measure of “outbreak spread potential” found that the high risk areas are the urban centers of Metro Manila, Cebu, and Davao. Furthermore, this study also showed that industrial areas in the CALABARZON have a 90 percent probability of an outbreak.

To illustrate the potential for targeted investments to restructure the economy while stimulating employment, Figure 1 displays the results of a simulation using Leontief input-output multiplier analysis among the sectors in Table 1⁴. While our estimates allow comparison of different sectors’ potential for supporting jobs, we caution against a literal interpretation of the numbers as a locked-down environment is likely to have dampened multiplier effects across sectors.

Figure 1. Projected Employment Impacts of Sectoral Investments



Source: Authors’ calculations using 2012 Input-Output Tables and 2015 FIES-LFS

Despite these caveats, the simulation highlights the following trends:

- a. Apart from supplying food, investment in agricultural sectors consistently stimulates the greatest spillover effects among all sectors on general employment, as well as on employment among the poor.
- b. Investment in the ‘wearing apparel’ sector, as well as the ‘health and social welfare’ sector, also have some of the most pronounced effects on jobs. This illustrates the employment-supporting potential of investing in or financing pandemic-response sectors.
- c. Investment in ‘construction’ and ‘land transport’ also have high positive impacts on employment, attesting to the potential of a redesigned Build, Build, Build program, and investments in our public transportation system, to drive recovery.
- d. Investment in other industrial sectors like textiles, miscellaneous manufacturing, and chemical products also have noticeable pro-poor effects, illustrating the potential of support to other sectors relevant to the pandemic response to benefit poorer households.

⁴ The projections represent the economy-wide job impacts of a PHP 1-billion infusion of investment in a single sector, all other factors held equal. See Cruz and Muyrong (2020), [“Ushering in the ‘New Normal’: Public Investment in a Pandemic Economy”](#) for more details.

The lack of an aggressive economic response not only misses the opportunity to jumpstart the economy when the other regions are still under lockdown, but more importantly strains poor households. Of particular concern are the farmers who have lost their markets from the barriers imposed in the urban areas. In the industry and services sectors, losses can be recovered once the pandemic ends. In agriculture, however, production cannot be paused and resumed without incurring significant cost as the quality of the inputs, especially labor and soil quality, is compromised.

Since roughly 80 percent of agricultural production comes from small farms, restructuring the economy means a transition from subsistence farming to surplus agriculture production. One short-run rural development strategy could be to increase the scale of household-based intensive farming systems adopted in sustainable agriculture. For example, the so-called Diversified and Intensified Farming System (DIFS), understood simply to be labor-intensive backyard gardening, supplements income from rice or corn farming. Increasing productivity in these farms will require partnerships with various companies, universities and research institutions, enhancement of soil quality particularly in the face of climate change, access to finance, availability of water and linkages to markets. In the long run, however, the Department of Agriculture and Department of Agrarian Reform must promote a shift to cash crops and upscale farming to take advantage of scale economies. Particular attention should be given to micro and small enterprises that have been affected by the crisis. Cooperatives, microlending and microinsurance organizations, and other economic institutions that strengthen the participation of the poor and vulnerable in market activities should especially be supported.

Efficient but Safe Public Transportation

Challenges in public transportation are among the most critical and hardest to solve. Not only did the suspension of public transportation place poorer households at a disadvantage, suggested alternative modes of transportation (e.g. cycling to work or school) also place the burden of these adjustments more heavily on the poor. A coordinated response between DOTr and the private sector is imperative to provide transportation for workers in the essential sectors once the ECQ is lifted. This follows directly from the model employed by the Office of the Vice President (OVP) in providing transportation services to medical front-liners by coordinating with hospitals. At the same time, potential road congestion must be addressed by controlling non-essential travel, including by private car owners. For this same reason, the ‘new normal’ must maximize work-from-home arrangements, and rationalize public transportation services to minimize congestion. Routes undertaken by public utility vehicle operators will need to be streamlined away from past redundancy-prone arrangements, while mis-incentives resulting from their drivers’ wage schemes will have to be addressed.

Improved Communications: ICT and Broadband Access and Coverage

Because physical distancing protocols are likely to remain over a few years, the Build Build Build program of the Philippine government can be partly reoriented to expanding and upgrading the digital infrastructure of the country. This will minimize the need for physical contact and allow firms to take advantage of digital technology to generate economic activity. Government

can partner with the private sector through the following examples:

- Develop new online applications, telephone services, or other similar means to connect the supply chain and to connect buyers with sellers even without the need for physical contact (paired along with new delivery services). New delivery services can be started from the public transport drivers displaced by the lockdown, for example. Although this may not easily replace pre-lockdown private consumption expenditures right away, this will still aid in economic recovery as the largest part of GDP usually results from consumption.
- Integrate digital technologies in the agriculture supply chain to increase farm productivity and to guide farmers to access the consumer markets. With digitization, readily available information can raise worker productivity. Poor communities should also be given access to this technology.
- Better broadband access and coverage is also needed so more students can access and benefit from online education, which is seen as the next best alternative given the possible need for prolonged class suspensions and social distancing even after the lockdown.

Upgraded social protection program linked

During the ECQ, the provision of cash transfers appeared to be sufficient (when received by households). However, under the modified ECQ/GCQ, social protection programs have to be extended beyond income transfers to minimize the exposure of workers to COVID-19 health risks. Apart from cash transfers, there are social assistance programs (including food, water and housing), social insurance programs (such as unemployment insurance), wage subsidies, paid sick leaves and other labor market interventions (including assistance given to small and medium-scale enterprises), among others.

For poor communities, current social protection efforts can be improved by increasing flexibility with identification and qualification requirements, and harmonizing the fragmented delivery process of different social protection programs. Because of these issues, only fifty percent of the allocated funds have been distributed, indicating that a substantial number of households are not being served.

Empowered and accountable local governments units

As we shift to more targeted programs, the national government should begin to shift the implementation of its targeted programs to the local governments. While the national government can set the directions of the whole country, the local government units (LGUs) should carry much of the burden in implementing these programs. The national government should aim to facilitate these efforts, instead of constraining them. To improve local performance, the national government can calibrate the criteria of its Seal of Good Local Governance awards to incentivize LGUs to strengthen the effectiveness and accountability of their COVID-19 responses (e.g. in their delivery of local health and social protection services).

LGUs should be able to formulate programs that more effectively benefit their own communities. The knowledge of local governments about their constituents and communities can potentially make them more effective in implementing the following measures:

- ***Testing, Contact Tracing and Isolation.*** Local governments can take the lead in targeting which communities have a greater population density and therefore be given priority. Also, since poverty seems to be a major indicator in determining where infections are found, LGUs can lead identifying these poorest communities.
- ***Type of Social Amelioration Program.*** The local government can decide what type of social amelioration can be offered to its residents as well as in the identification of beneficiaries. The limitations of the national social protection system can be solved if local governments can complement this overall national program with its own social protection system. Moreover, they should be consulted whenever certain sectors that are deemed to be essential in their communities are to be opened to the market.
- ***Distributing Goods to Markets.*** Given the reduction of the middlemen who distribute food from the rural areas, the LGU can offer and facilitate delivery stations for its constituents. This should reduce transaction costs involved in connecting farmers directly with the consumers.

However, the shift towards local implementation must also be complemented by strengthened infrastructure for participation, as well as enhanced mechanisms for accountability. Because communities will assume certain risks under a modified quarantine, they should be able to voice out their concerns and needs through various communication channels, participatory mechanisms, and public hearings to make LGUs more accountable. Poor communities, in particular, have their own social movements (known as *damayan*) which should be encouraged to develop areas of support and communication within the limits imposed by social distancing. In the implementation of the different public programs, government should engage and respect existing local associations and peoples' organizations, which allow the marginalized groups to voice out their views on issues and strengthen local solidarity.

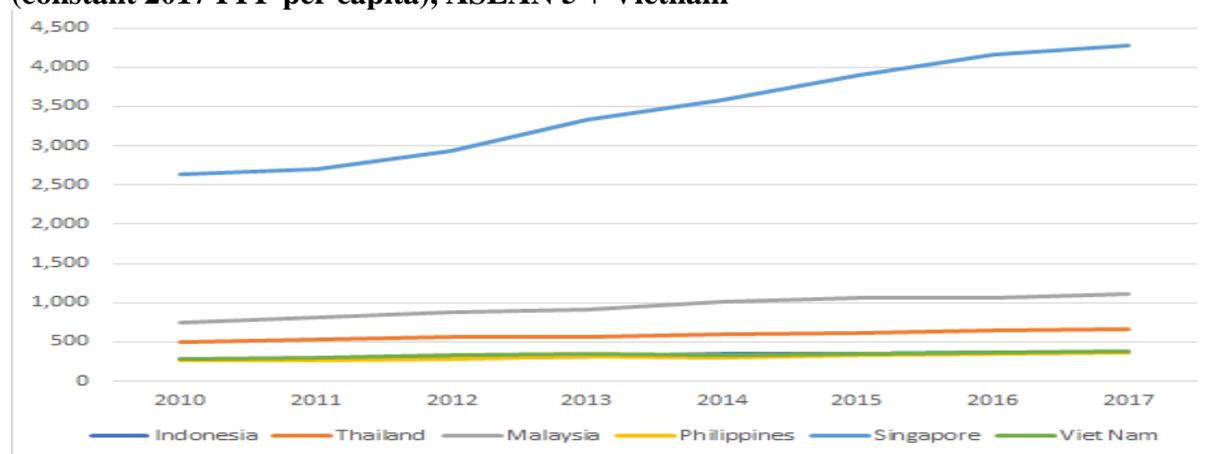
In this case, there is a need to balance disciplining with respect to human rights. In particular, the government can institutionalize good and fair complaint procedures with prompt responsiveness. The participation of civil society organizations in monitoring human rights should be encouraged and be seen as complementary to government initiatives.

Increased health expenditures and providing priority to human development needs

Countries that have strong health systems were also countries that have managed the impact of COVID-19. Records show that the Philippines— with its shortage of medical workers and stretched health care system— has the highest mortality as a proportion of its population in Southeast Asia. It has a death rate of 4.57 per million, based on official reported data (Varley, 2020).

Figure 2 below shows the health expenditure of the selected ASEAN nations. The Philippines has the lowest expenditure per capita, with its expenditures almost equal to Vietnam, and lower than the other ASEAN-5 countries. The resulting capacity gaps in the Philippine health system have been especially apparent throughout the COVID-19 pandemic: as of April 30, 2020, DOH data reported there being only 1,323 available ward beds and less than 678 intensive care beds in hospital facilities around the country. These figures remain an order of magnitude below the number of critical and severe COVID-19 cases projected to result from ECQ easing by epidemiological modelling efforts from the public, private, and academic sectors.

Figure 2. Current health expenditures by revenues of health care financing schemes (constant 2017 PPP per capita), ASEAN 5 + Vietnam



Source: WHO

Like Indonesia, the Philippines is among the most medically under-served nations in the region. Indonesia has just 4.27 doctors for every 10,000 people while the Philippines has six, according to the World Health Organization. In contrast, while Singapore leads the region in infections with 14,423 confirmed cases, it has conducted more tests, and has reported 12 deaths recently, giving it a fatality rate of 2.05 per million. On a per positive case basis, the mortality rate is less than 0.1% since Singapore has 22.9 doctors per 10,000 people. Thus, the Philippines is meeting the COVID-19 pandemic at a position of weakness due to these existing gaps in the health sector.

At the same time, government should at the same time ensure that the funding for other basic social services remain intact during the transition. Education, nutrition and other social service programs should continue to be provided with utmost urgency to ensure that that human development needs, especially of the poor and vulnerable will continue to be met. Asset reform programs that ensure that marginalized sectors should continue to be implemented in order to address the lack of upward mobility that could be constrained in the new normal.

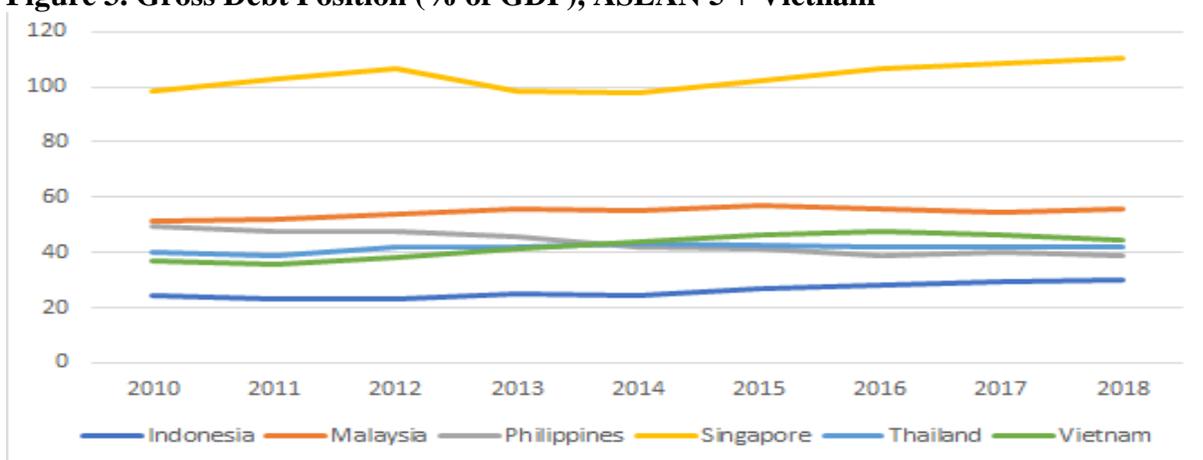
A long-term stimulus programs

To finance these requirements, the government will have to forego any growth targets, and will need to borrow funds to augment its financial capacity. Similarly, it will need to relax its deficit target to allow for greater deficit spending. However, the impact of the pandemic is expected to

persist in the long-term, with a long period of recession. To this end, the Philippine government will need to implement a debt-financed economic growth strategy over the next 2 or 3 years. Within that period, the productivity that is expected from the proposed structural transition will be forthcoming.

Figure 3 below shows the gross debt of the Philippines and its ASEAN peers. The following points are noteworthy. First, in the current and the previous administrations, the goal of the Philippines has been to manage the debt in order to strengthen its so-called macroeconomic fundamentals and obtain higher credit ratings. The country then decreased its gross debt to GDP ratio to one of the lowest in the region. Second, other countries have generally allowed their debt position to reach significantly high levels. Singapore in particular has a gross debt position that is more than 100 percent of GDP. Third, this suggests that the Philippines has a lot of leeway in securing funds for productivity. The government must view these debts as long-term investments rather than as deficits. The obsession with controlling the deficit in the short and medium term has resulted in lower investments in health and other basic sectors affecting future productivity.

Figure 3. Gross Debt Position (% of GDP), ASEAN 5 + Vietnam



Source: IMF Outlook

Should tax reforms be pursued by government, their objective should be as an institutional reform for correcting incentives to help firms recover faster and facilitate improvement of revenue generation. Given its financial position, there remains room for a monetization of fiscal deficits, and for the provision of rescue loans through the Bangko Sentral ng Pilipinas (BSP). Even in the long run, expenditures for big ticket projects in the Build, Build, Build portfolio can also be deferred or redirected for development under Public-Private Partnerships (PPPs) to expand the availability of funds for pandemic-related spending.

At present, the Bayanihan to Heal As One Act has so far resulted in the release of close to P300-billion to the economy. The BSP has authorized the acquisition of government securities from the Bureau of the Treasury under a repurchase agreement worth P300 billion. Another P300 billion of loans from multilateral banks are already negotiated and will be used for reviving the economy. Our initial estimate is that the government would need to spend P1-trillion this year. However, as the threat of COVID-19 will most extend beyond this year, the Philippine

government should not be constrained to spend whatever is necessary to protect Filipinos, and to take the opportunity to undertake structural reforms to shield the country from various shocks now and in the long-term. If we fail to scale up our financial efforts now, the damage will require a much larger and costlier response later.

BIBLIOGRAPHY

Siddarth, Divya, and E. Glen Wey. 2020. *Why We Must Test Millions a Day*. COVID-19 Rapid Response Impact Initiative White Paper 6, Cambridge, Mass.: Edmond J. Safra Center of Ethics, Harvard University.

University of the Philippines COVID-19 Pandemic Response Team. 2020. *Modified Community Quarantine beyond April 30: Analysis and Recommendations*. Research and Breakthroughs, Diliman, Quezon City: University of the Philippines Media and Public Relations Office.

Solon, Orville Jose C., Toby C. Monsod, Maria Socorro Gochoco-Bautista, Emmanuel S. de Dios, Joseph J. Capuno, Renato E. Reside Jr., Ma. Joy V. Abrenica, Agustin L. Arcenas, Ma. Christina Epetia, Laarni C. Escresa, Karl Jandoc, Cielo Magno, Carlo Irwin A. Panelo. 2020. A Sectoral View of Lifting the Lockdown and the Use of Sample-based Random Testing. *UPSE Discussion Paper No. 2020-06*. Diliman, Quezon City: University of the Philippines School of Economics.

Varley, Kevin. 2020. "Virus Deaths Show Philippines, Indonesia Worst Hit in Region." *Bloomberg*. April 27. Accessed April 29, 2020. <https://www.bloomberg.com/news/articles/2020-04-27/deaths-show-philippines-indonesia-worst-hit-by-virus-in-region>.