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Economic Impact of Typhoon *Ondoy* in Pasig and Marikina Cities Using a Multiweek CGE Model Analysis

Philip Arnold P. Tuaño, Marjorie S. Muyrong, and Ramon L. Clarete[1]

ABSTRACT

The adverse effects of extreme flooding caused by Typhoon *Ondoy* in Pasig and Marikina Cities in 2009 are significant. This paper estimates that both cities may have lost PHP 22.54 billion, 90 percent of which represent the loss of Pasig City. Estimates of willingness to pay to avoid the adverse effects of flooding, as measured by the equivalent variation (EV) of income, is positive for Pasig City. Its residents and businesses may want to pay up to PHP 12 billion, the cumulative EV throughout the adjustment period, to be resilient. On the other hand, Marikina City residents appeared to have increased their real consumption because of reduced prices brought about by an appreciation of the real exchange rate. Their EV is PHP 11.19 billion. Their willingness to pay is negative. These results depend on how the city's economy is modeled relative to the rest of the world and the exchange rate policy. The study's estimates are obtained using a multiweek, local economy computable general equilibrium analysis which assumes weekly market clearing. Some suggestions for improving the methodology are provided.

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INTRODUCTION

The economic effects of natural disasters have been acknowledged in literature. However, most of the studies done were on developed countries and involved assessments of such events at the national level. Very little information is available about their impacts in developing countries, and more so at the city level. A typical economic assessment of natural disasters in the Philippines is on the damage to agriculture and infrastructure facilities (WB 2005, 2011). However, more significant than the actual damage is the opportunity cost in terms of reduced productivity and, in turn, forgone income induced by natural calamities. While there have been assessments of the effects of major typhoons in the country,[2] measurements of the damage caused have not been undertaken.

This research developed and used a multiweek computable general equilibrium (CGE) economic model of a city. The framework allows for economic analysis of climate-related disasters affecting subnational economies over a time period that is typically less than a year. It was applied to two coastal cities in the National Capital Region, which had been submerged for several days by Typhoon Ondoy in 2009 and coped with its effects for a total of about 29 weeks. The procedure preserved the general equilibrium theoretic relationships among the different variables of an economy. It developed a weekly social accounting matrix (SAM) of a city-level economy based on an estimated national annual SAM, the city's contribution to the national gross domestic product (GDP), and the assumption that the city's GDP is equally distributed across all the weeks in a year.

The research involved getting information from a group of businessmen in the city to identify disruptions suffered by their businesses from the extreme flooding, including both the extent and duration of adjustments. The suspension of their businesses, in turn, was introduced as shocks to the supply of productive factors in the city CGE economic model in order to simulate the economy-wide effects of extreme flooding. The simulation was sequentially done for a total of 29 weeks, which the experts determined to be the length of the adjustment period.

MEASURING THE COST OF NATURAL DISASTERS

The economic cost of natural disasters globally is estimated to be large and rising. Benson and Clay (2004) reported that the average total loss in the 1990s caused by natural catastrophes in the world reached USD 66 billion per year, which was 15 times higher compared to the 1950s. In the 1994–2013 period, 6,730 disasters have been recorded, killing over 1.35 million people or 68,000 globally each year, and costing the world economy about USD 2.63 trillion (CRED 2015). In the Philippines, natural disasters have been estimated to affect 4–6 million people each year. Using data from the Center for Research in the Epidemiology of Disasters (CRED),[3] the International Federation of Red Cross and Red Crescent Societies (2012) reported that almost 20,000 people have died, while 2.7 million people have been directly affected and 94 million indirectly affected by natural disasters from 1992 to 2011.

The economic impacts of natural hazards are classified according to direct, indirect, and macroeconomic or secondary impacts (Pelling et al. 2002; Benson and Clay 2004; Hallegate and

[2] See for example, the postdisaster study on the economic effects of Typhoon Ondoy in 2009 by the World Bank (2011).

[3] The center was established in 1974 with the mandate to examine the socioeconomic and long-term effect of large-scale disasters. Its headquarters is in Geneva, Switzerland.

Pryzluski 2010). Direct impacts are the immediate consequences of natural disasters. These cover deaths or injuries to the population, damages to physical assets, machinery and capital equipment, crops and livestock, inventories of raw materials and final outputs, as well as to infrastructure facilities such as irrigation systems, roads, and bridges. Damages are estimated at market prices or based on agreed-upon replacement costs.

Pelling et al. (2002) noted that the measurement of the direct losses has typically been the focus of most studies on disaster effects. The estimated damages have been used in disaster mitigation, preparedness, and risk insurance programs. The typical immediate effects of natural disasters are damages to housing, business facilities, industrial production, crops and livestock, and infrastructure. Human deaths and injuries are naturally present due to drowning and other accidents caused by water level rise and subsequent adverse outcomes.

The indirect impacts are costs associated with reduced productivity resulting from the damages to productive capacities of business establishments, forgone household incomes, and lower expenditure over a period of time until productive assets are fully recovered. These effects reflect the extent by which the direct impacts of disasters have spread to the economic system.

The impairment to critical infrastructure such as road networks, bridges, ports, electricity, telecommunications, and water systems reduces productivity of agricultural, industrial, and service industries in the economy. Even if firms had not sustained any asset damage, their productivity is affected. Disruptions to the flow of labor and raw materials as markets fail to function temporarily due to lack of transportation, power, and other critical services take their toll on the economy. On the household aspect, jobs are temporarily lost, and without adequate income, so does protection insurance. In turn, this lowers household incomes and expenditure. Exports decline due to reduced productive capacity.

Economy-wide 'secondary' impacts are losses in overall output and incomes as measured by changes in national, sectoral, or subnational GDP, as well as in other macroeconomic indicators such as capital investments, trade flows, balance of payments, inflation, fiscal deficit, employment, and level of indebtedness. The economic effects of disasters have wider and longer adverse impacts on production, distribution, and consumption of goods and services. Overall output falls and prices of basic commodities increase, pushing inflation. The overall unemployment and underemployment may temporarily increase as businesses stop production. The balance of payments may be adversely affected given the disruptions in export capacity and the need for short-term imports that would cover interruptions in production. Fiscal deficits may rise as tax revenues fall, and public expenditure goes up to pay for short-term relief and rehabilitation of the economy.

The analysis of the economy-wide or secondary impacts is typically carried out using economic input-output (IO) and CGE models. IO studies can assess the reduction of industrial output following the damages to infrastructure, machinery, and other productive assets in key sectors that are directly affected by natural hazards. These effects ripple throughout the whole economy as output losses deprive other productive sectors of intermediate inputs.

A more comprehensive analytical technique involves CGE models which can examine the impacts of natural hazards in both the production and consumption sides of the economy. Relative prices of goods, services, and factors change which, in turn, affect household incomes and expenditure. Unlike in IO models, productive factors are substitutable with each other in CGE models.

Few studies examine the impacts of climate change in geographical areas, specifically that on infrastructure, health, energy use, and water availability (e.g., Hunt and Watkiss 2011). However, most of the studies on climate-related disasters are on the effects on households and vulnerable sectors (e.g., Zoleta-Nantes 2002; Porio 2011; Israel and Briones 2014). None of these studies, however, assessed the economic impacts of climate change at the city level.

While studies on the effects of natural disasters at the city level have been undertaken, these are in developed countries (e.g., Hunt and Watkiss 2011; Gertz and Davies 2015). Gertz and Davies (2015) examined the effects of flooding on the economy of Vancouver in Canada using a dynamic CGE model. A similar analysis is undertaken by this study on the effects of extreme flooding on two cities of the National Capital Region (NCR), namely, Marikina and Pasig Cities.

AN OVERVIEW OF THE ANALYTICAL FRAMEWORK

This part of the paper describes the recursive multiweek CGE model of a city's economy used in this study. The model tracks the different payment flows and exchanges undertaken by institutions within the economy. Figure 1 illustrates the range of transactions in the economy involving services of productive resources, intermediate inputs, and final outputs. Payment flows between institutions cover the transfer of ownership of intermediate inputs, products, and primary factor services in the economy.

Agents, incomes, and spending

There are five institutions or agents in the model: households, firms, government, financial intermediaries, and the foreign sector. Except for households, the institutions are represented by one entity. Agents generate income and spend them on the products produced in the economy or provide exogenous net income transfers to other institutions. Households and businesses pay taxes to the government. Agents save part of their incomes.

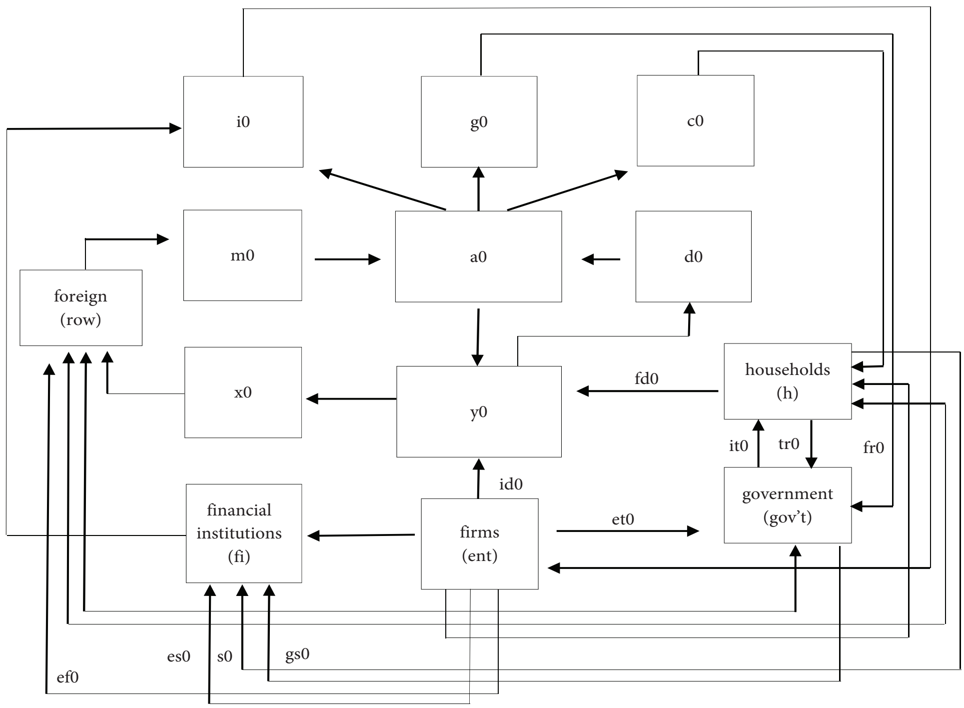
Income levels differentiate the types of households. Households generate their income from selling the services of the primary factors they own (*fr0*) to firms to be used in production. These include wages of high- and low-skilled labor, as well as returns to capital and agricultural lands. Other income components include exogenous transfers from other institutions (*tr0*), particularly from the government. Households pay income taxes (*it0*), purchase goods and services for final consumption (*c0*), including public goods spent by the government (*g0*).

Firms provide intermediate inputs (*id0*) from other firms and factors from households (*fd0*) and firms to produce goods, which are either sold domestically (*d0*) or are exported abroad (*x0*). Locally produced goods to be sold in the home market and imported products and services (*m0*) make up the intermediate inputs as well as products used in the final consumption by households and other agents. A hypothetical composite product of both types of goods, called the 'Armington good' (*a0*) (Armington 1969), conveniently represents the transactions involving local and imported products.

Net income transfers between the economy and the foreign sector are exogenous. These transfers include net remittances of incomes of the labor force working abroad, profits of the capital that is invested overseas, and net purchases of financial assets. The exchange rate is endogenous, its level changing depending on the net flows of merchandise and services trade between the country and the rest of the world.

On the other hand, government receives taxes from households (*it0*) and from enterprises (*et0*), and spend these on transfers to households. The representative financial intermediary receives savings from different institutions including households (*hs0*), business enterprises (*es0*), government (*gs0*), and the foreign sector (*fs0*). It uses the aggregate savings to invest in new capital assets in the economy (*i0*), thereby increasing the stock of capital available for use in the following time period. In the short-run model used in this paper, the time period being a week, there is no savings and investment in new capital.

Figure 1. Illustrative flow of transactions in a general equilibrium model



Note: Institutions include households (h), firms (ent), government (gov't), financial sector (fi), and foreign sector (row). Stocks include production output (y0), Armington supply (a0), exports (x0), imports (m0), domestic supply (d0), investment (i0), government consumption (g0), and consumption (c0). Flows include factor demands (fd0), factor returns (fr0), transfers (tr0), income taxes (it0), intermediate demand (id0), government savings (gs0), household savings (s0), enterprise savings (es0), and enterprise factors (ef0).
Source: Modified from Markusen and Rutherford (2004)

The interdependencies of the agents in the economy depicted in Figure 1 confirm that any disruption in one part of the economy will affect the rest of the economy. For example, a loss of productive factors, due to a disruption in the flow of capital, will reduce output in the economy and therefore will reduce the total amount of goods available for household consumption, firm investment, and government spending. This will lower household incomes and total investment in the economy.

Equilibrium conditions

The CGE model used in this study takes after that of Rutherford (1999) and Rutherford and Paltsev (1999). The firms maximize their profits subject to technology and input constraints. Endowed with primary factors, households maximize their respective satisfaction levels consistent with their budget constraints. Both households and firms are pricetakers and markets are perfectly competitive. The optimization in production and consumption produce the market supplies of products and demands for primary factors, intermediate inputs, and Armington goods.

Three types of equilibrium conditions apply. The first requires that total spending by all agents equals exactly the aggregate income, i.e., the model is Walrasian. The second is that the revenues generated from each production activity defray exactly the production costs. The last type of equilibrium conditions of the model is market clearing, i.e., excess demands are zero. Each of the three types of conditions is associated with a particular endogenous variable, namely, incomes of agents, scale of production, and prices of products, respectively.

The second and third types of conditions are formulated as complementarity problems, i.e., for the second, the profit equation is expressed as less than or equal to zero, with each inequality associated with the scale of production. If in equilibrium the profit of a given activity is zero, then production scale is nonnegative. Otherwise, the activity is shut down.

In the case of the third type, excess demands in equilibrium can be zero in which case the price of the product is nonnegative. However, they can be negative and the associated prices are strictly zero, or the products are free.

Modeling climate-related disasters affecting a city

The application of the CGE model in measuring the secondary effects of natural disasters reflects the observations documented in existing literature on the nature and dynamics of such catastrophic events like extreme flooding (e.g., Aufret 2003; Skoufias 2003).

The extreme flooding in Metro Manila in 2009 had affected not only the household but also the business sectors. According to key resource persons, 90 percent of Pasig City's geographical area was reportedly inundated during the day of the typhoon, while 85 percent was the case for Marikina City.[4]

As explained earlier, this shock in the capital and labor stock arising from citywide flooding reverberates in the economy through constraints in the supply of goods from affected industries (Gertz and Davies 2015). For the case of Metro Manila, the damages to offices, plants, and machinery, as well as the inability of personnel to report for work, were the main constraints. The interruptions in the production of goods and services due to the flooding, therefore, increased trade constraints faced by each city in Metro Manila.

It becomes imperative to equip the model with features that relate the economy with the impacts of natural disasters to analyze the effects of climate-related shocks through time. Reduced factor services availabilities are introduced as shocks to the benchmark equilibrium of the model in week *t*. Equilibrium is computed consistent with reduced labor or capital stocks. In week *t+1*, adjustments to the factor stocks are computed and introduced as the current shocks to the model's equilibrium.

The effects on sectoral outputs, prices, agents' incomes, and economic welfare of households are then assessed in each weekly equilibrium. All these secondary effects are computed by sequentially computing the general equilibrium of the model from the initial period of the disaster to the time the local economy would have resumed its normal operations. In the following section, the data used in calibrating the model is discussed.

DATA AND EMPIRICAL IMPLEMENTATION

The data used in numerically specifying the CGE model is the SAM. In its simple version, the SAM traces the circular flow of income and expenditure in the economy, i.e., from factor payments by producers to households and product purchases of the latter from the former. Additionally, it tracks

[4] Based on interviews by the research team with the Pasig Business Center, May 10, 2016, and with PCCI Marikina Chapter, May 27, 2016. See the next section.

income and spending of institutions including businesses, government, financial intermediaries, and the rest of the world. The SAM is assembled from various data sets of the economy in a way consistent with the specifications and general equilibrium conditions of the CGE model. The assembly is made in a particular year, which is the period the model is calibrated to.

National, regional, and city SAMs

Conventionally, CGE models are calibrated with annual data sets. Thus, adjustments are made to a country's SAM in order to produce its counterpart for a city's economy. A national SAM of the Philippines was constructed for the year 2009.[5] It was adjusted in two ways to come up with the NCR regional SAM and from it to produce the two city SAMs of Pasig and Marikina. First, the national SAM was scaled down to NCR using the proportion of the regional to the national GDP. In 2009, the NCR's GDP was 31.7 percent of the national (PHP 2.53 trillion versus PHP 7.97 trillion, respectively). From the NCR's SAM, the separate city SAMs of Pasig and Marikina were assembled, applying the shares of the respective cities in the NCR's GDP. The other adjustment was extracting a weekly SAM from the city's corresponding annual SAM by dividing the data in the SAM by 52.

Accordingly, the two city SAMs of Marikina and Pasig reflect the specification of the national SAM. Thus, it is useful to describe the latter to know what is in the former. The assembled national SAM comprises 16 production sectors, the selection being guided by the configurations of the city economies of Pasig and Marikina. Accordingly, the SAM has two primary production activities, five industrial sectors, and nine services industries:

Sector Description	Code
Agriculture, which includes crop production and agricultural services	Agri
Natural resources, including fishing and forestry	Natr
Food processing	Food
Textile and garment processing	Text
Nonmetallic processing, i.e., chemicals, plastics, glasses, rubber	Nmet
Machinery and electronics equipment	Mach
Other manufacturing	Otmn
Construction	Cons
Utilities, i.e., electricity, gas	Util
Transportation services	Tran
Retail and wholesale trade	Trad
Financial services, including banking	Finl
Real estate	Real
Public administration and services, including health and education	Ppsr
Hotel, restaurant, and tourism services	Htrt
Other services	Otsr

The data sources for the 2009 national SAM are the national income accounts, the Budget of Expenditures and Sources of Financing, the Department of Finance government financing tables,

[5] The procedure follows that of Cororaton (2003), who assembled a 1994 SAM.

Foreign Trade Statistics, Balance of Payments account, and the Family Income and Expenditure Survey—all from the year 2009.

To assemble the NCR GDP, two additional data sets were obtained. One is the 2009 Commodity Flow Account, which was used to get information on the composition and level of trade of the region with the rest of the Philippines. The data set, gathered and published by the Philippine Statistics Authority, provides information on the values of inflow and outflow of goods and services to and from a region of the country to another. The other was on the local government receipts and expenditure. The data was sourced from the Bureau of Local Government Finance. It includes local expenditure on public goods and services and local income sources including real estate taxes, business taxes, and internal revenue allotments from government.

The city economies of Pasig or Marikina are modeled as small open economies with respect to the world and the rest of the Philippines. As a small open economy, its domestic prices are linked to the corresponding prices of the products in the larger markets of the rest of the world and the rest of the Philippines.

In summary, the two city SAMs have 16 production sectors, 2 production factors (labor and capital), and 7 institutions—households, enterprises/firms, financial intermediary, national government, local government, the rest of the Philippines, and the rest of the world.[6]

Business sector consultations

The cities of Pasig and Marikina were selected for the study. Pasig City is mostly industrial, while Marikina City is mostly residential. Both were heavily inundated by Typhoon Ondoy, with an estimated 90 percent of Pasig City and 85 percent of Marikina City flooded at the height of the typhoon.[7]

Years of infrastructure development had made Marikina less flood prone. The volume of water Typhoon Ondoy brought, however, was unexpected even by the Marikina residents. The flood heavily damaged much of the micro, small, and medium enterprises (MSMEs) near the Marikina River.

In Pasig City, areas most badly affected were those near the Manggahan Floodway and in the border of Marikina. A difficult challenge faced by city residents and business locators was the persistence of floodwaters months after the typhoon onslaught. As in Marikina, the MSMEs were the ones more badly hit. Some of the larger firms, on the other hand, have either the mechanisms to mitigate the adverse effects of flooding, or business continuity protocols, or both.

Consultations with business organizations in the two cities were undertaken to develop a more nuanced understanding of the temporal impacts of Typhoon Ondoy on business establishments. They were asked how they had coped with the flooding, particularly how they scaled down their business operations from the first week of flooding to the time when the city in general had fully recovered from the disaster. These consultations produced information on the length of the recovery period, as well as useful data for producing the city SAMs.

Tables 1 to 3 give the results of the consultations showing the level of shock sustained by the availability of labor and capital and the flow of raw materials when the typhoon hit, on a weekly basis, as the industries affected gradually recovered. The numbers in the matrices give the proportion of the three types of production factors that are available in the weeks following Typhoon Ondoy. The

[6] The SAMs for the NCR, Marikina, and Pasig Cities are not reported but may be obtained upon request.

[7] Based on interviews by the research team with the Pasig Business Center, May 10, 2016, and PCCI Marikina Chapter, May 27, 2016.

number 0 in the table indicates there was no capital, labor, or raw materials available for production for the particular industry in the week indicated.

On the other hand, the number 1 indicates that normal supplies of these factors and raw materials were already available. In most cases, when the representative firms report that their operations had stopped for a month, capital stock is pegged at 0 percent over that time period. The first general assumption, therefore, is that for firms which were affected, virtually all capital assets (i.e., machinery and plant) were deemed not serviceable for production.

Capital availability after Typhoon Ondoy

The average time it took business enterprises in Marikina City to resume normal operations was 1.5 months. In contrast, the estimate for Pasig City was just about one month (see highlighted cells in Table 1). In both cities, firms needed time to repair, replace, or clean up their plants and machinery, which took most of their time and resources due to the muddy nature of floodwater. Hence, it is assumed that the time it took to resume operations is closely related to the availability of capital that can be used for operations, as noted above. Another period of 1.5 months was needed for Marikina firms to be able to go back to normalcy, while Pasig firms needed another six months (Table 1). These scenarios were therefore assumed for most types of firms in both cities.

As shown in Table 1, some sectors were able to resume operations faster than others. For instance, it had taken only two weeks for affected financial institutions and real estate firms to resume operations. Notable for their quick response in repairing damages to their capital were the utility firms and communication firms. Transportation, as well as public services, were also assumed to have continued operations despite the massive inundation. In Pasig, one firm reported that their operations have not been affected despite inundation of the actual plant due to support mechanisms already installed. Hence, many nonmetallic processing firms located in Pasig City are assumed to have had little disruption in their operations.

Finally, it is noted, however, that some MSMEs have no longer been able to recover. This is reflected in the model by disallowing some of the sectors, mostly composed by MSMEs, to resume 100-percent capital availability.

Labor and raw materials availability after Typhoon Ondoy

Within the first work week after the typhoon, workers in most industries in both cities were back at work. Interviews with Marikina firms, for instance, revealed that labor supply has not been affected substantially as workers were willing to go back to work within the first work week after the typhoon. According to one manufacturing firm interviewed, as soon as workers were done cleaning up their own homes, they went to their work site to help clean it up as well, fully aware that they needed to help their companies restart operations. In return, the companies continued to keep them employed even while operations have stopped, and paid them for the cleanup. Interviews with representative firms from Pasig also revealed the same scenario with their employees. Absences have only been common during the first two or three days of the first work week after the typhoon.

Hence, it can be assumed that labor supply has not been substantially reduced even in the first work week after the typhoon except during the first few days (Table 2).

In the case of raw materials supply in Marikina, however, most firms experienced difficulty for two weeks after resuming operations due to the difficult entry and access to Marikina as a result of massive debris. This same scenario is assumed for the entire city. In Pasig, only industries that required agricultural products were assumed to have been adversely affected by the disruption in raw materials supply (Table 3).

Table 1. Capital availability in the cities of Marikina and Pasig

Panel A: Marikina City

Model Sectors	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	Wk 15	Wk 16
Agriculture	0	0	0	0	0	0	0.14	0.29	0.43	0.57	0.71	0.71	0.99	0.99	0.99	0.99
Natural resource extraction	0	0	0	0	0	0	0.14	0.29	0.43	0.57	0.71	0.71	0.99	0.99	0.99	0.99
Food, beverages, and tobacco	0	0	0	0	0	0	0.14	0.29	0.43	0.57	0.71	0.71	0.99	0.99	0.99	0.99
Textile, garments, and apparel	0	0	0	0	0	0	0.14	0.29	0.43	0.57	0.71	0.71	0.99	0.99	0.99	0.99
Nonmetallic mining and processing	0	0	0	0	0	0	0.14	0.29	0.43	0.57	0.71	0.71	0.99	0.99	0.99	0.99
Machinery and electrical industries	0	0	0	0	0	0	0.14	0.29	0.43	0.57	0.71	0.71	0.99	0.99	0.99	0.99
Other manufacturing	0	0	0	0	0	0	0.14	0.29	0.43	0.57	0.71	0.71	0.99	0.99	0.99	0.99
Construction	0	0	0	0	0	0	0.14	0.29	0.43	0.57	0.71	0.71	0.99	0.99	0.99	0.99
Utilities	0.05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Transport and communications	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Trade	0	0	0	0	0	0	0.14	0.29	0.43	0.57	0.71	0.71	0.99	0.99	0.99	0.99
Financial	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Real estate and commercial	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Public and private services	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hotel and restaurant	0	0	0	0	0	0	0.14	0.29	0.43	0.57	0.71	0.71	0.99	0.99	0.99	0.99
Other services	0	0	0	0	0	0	0.14	0.29	0.43	0.57	0.71	0.71	0.99	0.99	0.99	0.99
Average	0.13	0.19	0.31	0.31	0.31	0.31	0.41	0.51	0.61	0.71	0.8	0.8	0.99	0.99	0.99	0.99

Wk = week

Source: Authors' calculations based on interviews with business sector representatives

Table 1. Capital availability in the cities of Marikina and Pasig (continued)
Panel B: Pasig City

Model Sectors	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	Wk 15	Wk 16
Agriculture	0	0	0	0	0.04	0.08	0.12	0.16	0.2	0.24	0.28	0.32	0.36	0.4	0.44	0.48
Natural resource extraction	0	0	0	0	0.04	0.08	0.12	0.16	0.2	0.24	0.28	0.32	0.36	0.4	0.44	0.48
Food, beverages, and tobacco	0	0	0	0	0.04	0.08	0.12	0.16	0.2	0.24	0.28	0.32	0.36	0.4	0.44	0.48
Textile, garments, and apparel	0	0	0	0	0.04	0.08	0.12	0.16	0.2	0.24	0.28	0.32	0.36	0.4	0.44	0.48
Nonmetallic mining and processing	0.99	0.99	0.99	0.99	1	1	1	1	1	1	1	1	1	1	1	1
Machinery and electrical industries	0	0	0	0	0.04	0.08	0.12	0.16	0.2	0.24	0.28	0.32	0.36	0.4	0.44	0.48
Other manufacturing	0	0	0	0	0.04	0.08	0.12	0.16	0.2	0.24	0.28	0.32	0.36	0.4	0.44	0.48
Construction	0	0	0	0	0.04	0.08	0.12	0.16	0.2	0.24	0.28	0.32	0.36	0.4	0.44	0.48
Utilities	0.05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Transport and communications	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Trade	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
Financial	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Real estate and commercial	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Public and private services	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hotel and restaurant	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
Other services	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
Average	0.19	0.25	0.37	0.37	0.58	0.6	0.62	0.63	0.65	0.67	0.69	0.7	0.72	0.74	0.76	0.77

Wk = week
Source: Authors' calculations based on interviews with business sector representatives

Table 1. Capital availability in the cities of Marikina and Pasig (continued)
Panel B: Pasig City

Code	Wk 17	Wk 18	Wk 19	Wk 20	Wk 21	Wk 22	Wk 23	Wk 24	Wk 25	Wk 26	Wk 27	Wk 28	Wk 29	Wk 30	Wk 31	Wk 32
Agriculture	0.52	0.56	0.60	0.64	0.68	0.72	0.76	0.80	0.84	0.88	0.92	0.96	0.99	0.99	0.99	0.99
Natural resource extraction	0.52	0.56	0.60	0.64	0.68	0.72	0.76	0.80	0.84	0.88	0.92	0.96	0.99	0.99	0.99	0.99
Food, beverages, and tobacco	0.52	0.56	0.60	0.64	0.68	0.72	0.76	0.80	0.84	0.88	0.92	0.96	0.99	0.99	0.99	0.99
Textile, garments, and apparel	0.52	0.56	0.60	0.64	0.68	0.72	0.76	0.80	0.84	0.88	0.92	0.96	0.99	0.99	0.99	0.99
Nonmetallic mining and processing	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Machinery and electrical industries	0.52	0.56	0.60	0.64	0.68	0.72	0.76	0.80	0.84	0.88	0.92	0.96	0.99	0.99	0.99	0.99
Other manufacturing	0.52	0.56	0.60	0.64	0.68	0.72	0.76	0.80	0.84	0.88	0.92	0.96	1.00	1.00	1.00	1.00
Construction	0.52	0.56	0.60	0.64	0.68	0.72	0.76	0.80	0.84	0.88	0.92	0.96	1.00	1.00	1.00	1.00
Utilities	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Transport and communications	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Trade	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Financial	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Real estate and commercial	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Public and private services	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hotel and restaurant	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Other services	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Average	0.79	0.81	0.83	0.84	0.86	0.88	0.90	0.91	0.93	0.95	0.97	0.98	1.00	1.00	1.00	1.00

Wk = week
Source: Authors' calculations based on interviews with business sector representatives

Table 2. Labor availability in the cities of Marikina and Pasig

Model Sectors	Panel A. Marikina City				Panel B. Pasig City			
	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4
Agriculture	0.5	1	1	1	0.9	1	1	1
Natural resource extraction	0.5	1	1	1	0.9	1	1	1
Food, beverages, and tobacco	0.5	1	1	1	0.9	1	1	1
Textile, garments, and apparel	0.5	1	1	1	0.9	1	1	1
Nonmetallic mining and processing	0.5	1	1	1	0.9	1	1	1
Machinery and electrical industries	0.5	1	1	1	0.9	1	1	1
Other manufacturing	0.5	1	1	1	0.9	1	1	1
Construction	0.5	1	1	1	1	1	1	1
Utilities	0.9	1	1	1	0.9	1	1	1
Transport and communications	1	1	1	1	0.9	1	1	1
Trade	0.5	1	1	1	0.9	1	1	1
Financial	0.5	0.5	1	1	0.5	0.5	1	1
Real estate and commercial	0.5	0.5	1	1	0.5	0.5	1	1
Public and private services	1	1	1	1	1	1	1	1
Hotel and restaurant	0.5	1	1	1	0.9	1	1	1
Other services	0.5	1	1	1	0.9	1	1	1
Average	0.59	0.94	1	1	0.86	0.94	1	1

Wk = week

Source: Authors' calculations based on interviews with business stakeholders

The factor supplies in the cities of Marikina and Pasig recovered to their predisaster levels within the same year, and businesses in these cities were able to resume operations as well. In fact, in the case of labor, workers proved to be very resilient. The central business district of Pasig City, the Ortigas Center, had been fortunately spared due to its higher elevation. Labor supply returned to normalcy within the first work week after the typhoon due to (1) the firms' business continuity management and (2) the employees' recognition of the need to rehabilitate their businesses (i.e., their income sources). On the other hand, damage to capital stock has been mainly due to the muddy floodwater. Cleanup of the plants and machinery took considerable time for most companies. Raw materials supply was contingent on the immediate removal of road blockages.

RESULTS OF MODEL SIMULATIONS

This section takes up the results of simulations using the CGE model of the city economies of Pasig and Marikina. The study considered not only the shock but how it had tapered off through time. Thus, the CGE model was set up to attain the weekly equilibria of the respective city economies. This temporal analysis makes use of the information obtained from local businessmen and government officials about the time it took for their city to adjust and recover.

Table 3. Raw materials availability in the cities of Marikina and Pasig

	Panel A. Marikina City									Panel B. Pasig City					
Model Sectors	**Wk 1**	**Wk 2**	**Wk 3**	**Wk 4**	**Wk 5**	**Wk 6**	**Wk 7**	**Wk 8**	**Wk 9**	**Wk 1**	**Wk 2**	**Wk 3**	**Wk 4**	**Wk 5**	**Wk 6**
Agriculture	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Natural resource extraction	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Food, beverages, and tobacco	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Textile, garments, and apparel	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Nonmetallic mining and processing	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
Machinery and electrical industries	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
Other manufacturing	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
Construction	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
Utilities	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
Transport & communications	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
Trade	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
Financial	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
Real estate and commercial	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
Public and private services	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
Hotel and restaurant	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
Other services	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
Average	0	0	0	0	0	0	0	0	1	0.75	0.75	0.75	0.75	1	1

Wk = week

Source: Authors' calculations based on interviews with business stakeholders

Economic effects of flooding in Pasig City

The CGE model was used to simulate the economic effects of primary factor and raw materials availability in Pasig City. The model was solved repeatedly week after week, changing the available supplies of primary factor services as described in Tables 1 and 2, Panel B for Pasig City. The temporary nonavailability of raw materials is modeled by raising the trade cost of moving them into the city week after week as described in Table 3 (Panel B). The number of simulations corresponds to the number of adjustment weeks in Tables 1 to 3.

Production effects

The weekly changes of outputs by industries are shown in Figure 2, which plots the output multiples, with 1 representing the base output of a given industry in the base week (Week 0). The next four weeks pull down the respective production levels of most of the industries, except for two—nonmetallic industries (Nmet) and hotels and restaurant services (Htrt)—that expanded their outputs instead. The expansion of hotels and restaurant services reached 11, which is not shown in Figure 2 to get a better plot of the output changes of the other industries. This result may be explained by the full employment of factors equilibrium condition of the model. If the other industries had contracted, the resources that these industries did not use may have gone to other industries, in this case nonmetallic industries and hotels and restaurant services.

But in most industries, the first four weeks comprise a period of contraction. The recovery starts at the fifth week. However, once again production levels fall in the sixth week. It is only in the seventh week and thereafter that the gradual recovery to their normal levels becomes consistent.

Four industries overshot their recovery. In the fifth and sixth weeks, their respective outputs increased beyond their levels before the shock. Beginning the sixth or seventh week, however, the expansion reverses and converges to the normal level, which is 1, in the 29th week.

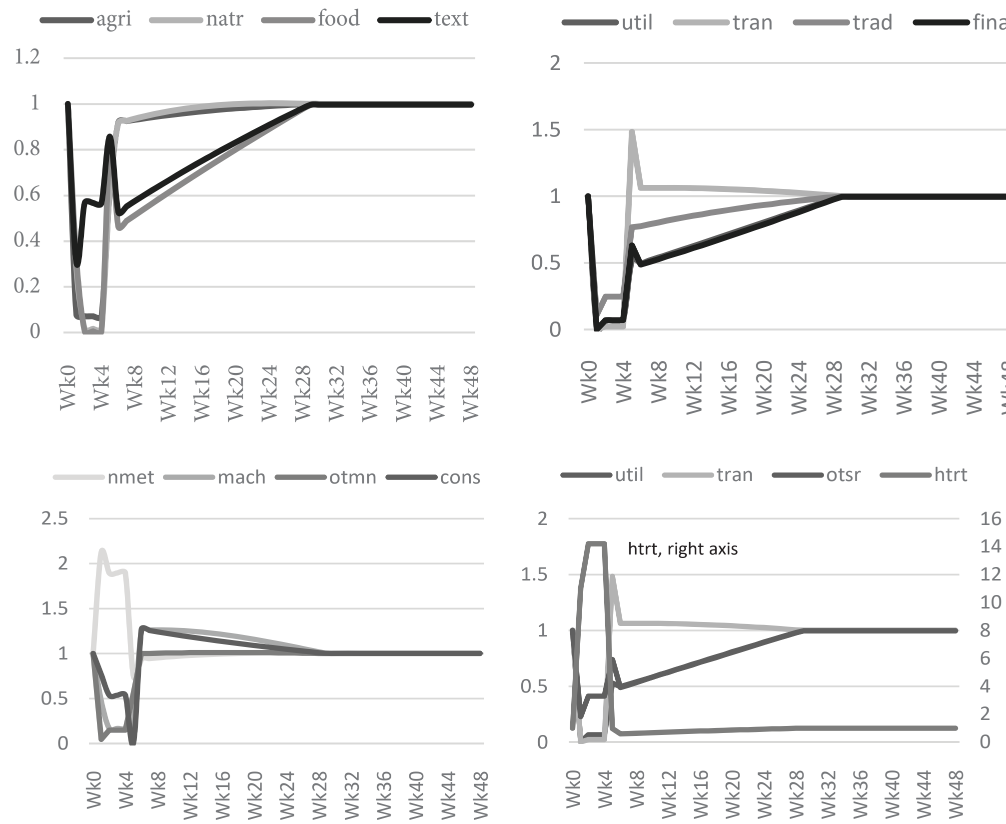
The expansion in output of some of the industries may be explained by the Rybcznski theorem (1955), which notes that as the endowment of a factor is reduced, the output of the industry that intensively uses it falls, while that of other industries that use it less intensively expands. The model used has more than two sectors. Nonetheless, the Rybcznski effect is still reflected in some industries expanding their respective outputs. Note that in the weeks following the disaster, factor endowments are reduced temporarily on a weekly basis and progressively restored to normal levels as described by the business stakeholders (Tables 1 and 2). The deeper adjustments were in capital, while labor endowments recovered in the third week.

Product prices and exchange rate

The effects on producer and consumer prices differ negligibly (Figure 3). All products in the model are tradable. All industries with tradable products export the products they make and produce differentiated products destined for the local market. While different from those that are exported, home products are valued not far from the prices of exported products when the economy is in a state of equilibrium. The country imports products that substitute the local ones. All prices of imported products change uniformly through the adjustment period of 48 weeks. Instead of plotting the price of every product, two price indices, one of consumer and another of producer prices, are computed using the industry's share in GDP as weights.

The two price indices are shown in Figure 3. Both rose in a similar manner, from week 0 in the base case and stabilized at 30 in five to six months. The exchange rate drove the results. Local prices of locally produced tradable products would have to be at par with the imported substitute in equilibrium. The model's equilibrium is computed each week, and the weekly equilibrium domestic

Figure 2. Effects on weekly outputs of the industries in Pasig City

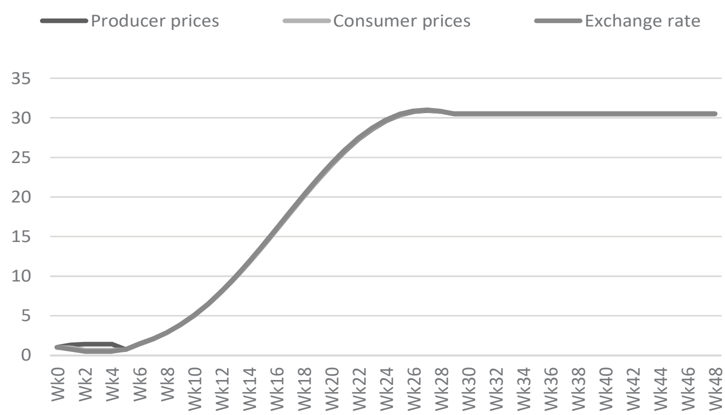


Wk = week
Agri = Agriculture, which includes crop production and agricultural services
Natr = Natural resources, including fishing and forestry
Food = Food processing
Text = Textile and garment processing
Nmet = Nonmetallic processing, i.e., chemicals, plastics, glasses, rubber
Mach = Machinery and electronics equipment
Otmn = Other manufacturing
Cons = Construction
Util = Utilities, i.e., electricity, gas
Tran = Transportation services
Trad = Retail and wholesale trade
Fina = Financial services, including banking
Htrt = Hotel, restaurant, and tourism services
Otsr = Other services

Source: Authors, based on interviews conducted with representatives from the business sector prices closely mirror the movement of the exchange rate (also plotted in Figure 3). Again, as a small open city economy, the economy of Pasig City should have a closure in the sense that its exports are equal to its imports in value terms vis-à-vis the rest of the world. The exchange rate is flexible to ensure that this is so. Figure 3 provides information on how the exchange rate had moved through the adjustment process following the disaster.

Domestic factors influence product prices as well. The disruption of raw materials supply chain in the first few weeks increased producer prices of import substitutes. This is reflected in Figure 3. However, after raw materials supply stabilized in Pasig City in the fifth week, producer prices moved as both consumer prices and the exchange rate.

Figure 3. Producer and consumer weekly price indices and exchange rate, Pasig City



Wk = week
Source: Authors' computation

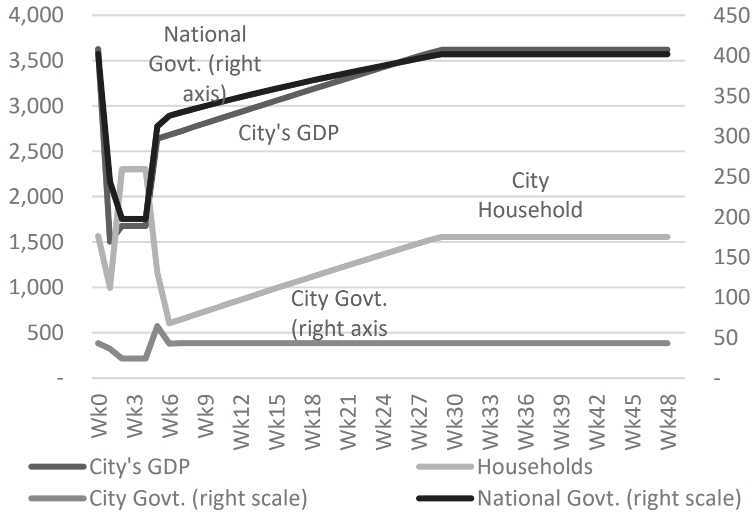
GDP, consumption, and public spending

Figure 4 portrays the weekly GDP of the city, real consumption of the representative households, and the public spending of the national and city governments. On average, the city's industries produce about PHP 3.2 billion of GDP each week. About 31 percent of this amount goes to the private households for final consumption.

The city's GDP contracted in the first week, but started to recover gradually in the third week. By the fifth week, the GDP level had jumped to about 70 percent of its predisaster level and expanded gradually, nearly completing the recovery in the 29th week. By the 48th week, the city's GDP was back to where it used to be. The big recovery process appeared to have occurred in the first five weeks of the adjustment period. Overall, the city lost a total of PHP 20,352.98 billion in GDP.

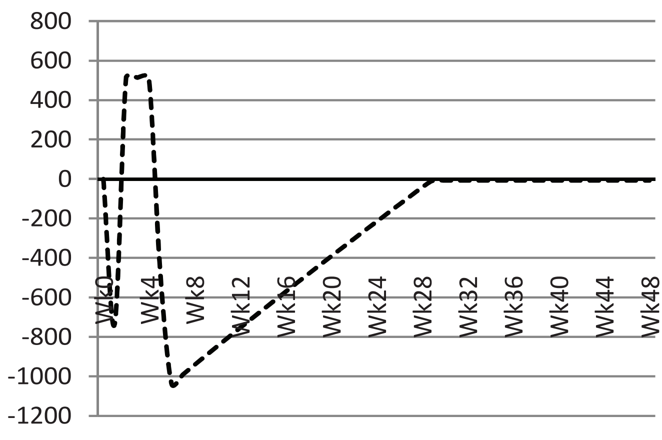
Households' final consumption likewise dropped in the first week and expanded in the second and third weeks. It overrecovered with private consumption levels higher by 48 percent compared with its preshock level. The change may be traced to falling consumer prices as real exchange rate appreciated in the first three weeks. Imported products, already in demand as local outputs fell, became more competitive and kept local consumer prices down. After these first few weeks, final consumption by households fell as consumer prices rose with a depreciating real exchange rate. Like the GDP, final consumption stabilized in the 29th week.

Figure 4. Effects on the city's GDP, household final consumption, and national and local public spending, Pasig City (in PHP million)



GDP = gross domestic product; Govt = government; Wk = week
Note: National and local public spending are read from the right axis.
Source: Authors' calculation

Figure 5. Overall well-being of city residents, Pasig City (in PHP million)



Wk = week
Source: Authors' calculation

Public spending, read from the right axis, follows a similar trajectory as the city's GDP. Local public spending dropped at first then recovered fully in the sixth week.

Overall well-being, measured by the equivalent variation (EV) of income, fell in the first week. It recovered to positive levels in the second and third weeks (Figure 5). The change was consistent with the improvements in real consumption of the representative household. In the fifth week, EV went back to negative terrain, indicating that residents were worse off. But in the sixth week, well-being started its recovery until the 29th week, when it stabilized back into its former condition before the shock.

The EV may indicate the affected residents' willingness to pay for programs that make their communities more resilient to climate change-related shocks. It reached a total of PHP 12,048.18 million throughout the adjustment period. Residents may be willing to pay up to about PHP 13 billion for programs that could make them immune to shocks. Resources for this purpose may be allocated from the budget for programs aimed at strengthening resilient communities. A good option would be for the national and local governments to invest in resiliency-promoting interventions using their tax incomes.

Economic effects of flooding in Marikina

Likewise, the CGE model of Marikina's economy was used to simulate the economic effects of flooding in that city. The dimensions of the shock are described by the adjustment durations described in Tables 1 to 3. The industries in Marikina reached their predisaster output at week 12 (Figure 6). Some industries reached their respective predisaster outputs earlier, recovered significantly, but then declined once again. For example, the output of the other manufacturing sector (otmn) improved by the second week and continued its recovery for the next 10 weeks, before falling to its preflooding level. This is also true for the construction and public and private services sector.

Similar to Pasig, the Marikina economy should have a closure in the sense that its exports are equal to its imports in value terms vis-à-vis the rest of the world. The exchange rate is flexible to ensure the closure.

Producer and consumer prices fell significantly, and by the 12th week settled at about a quarter of 1, their preflooding levels. The pattern is driven by changes in the real exchange rate or the price of domestic goods relative to the price of foreign goods. Weak demand for local products in the city deflated their prices.

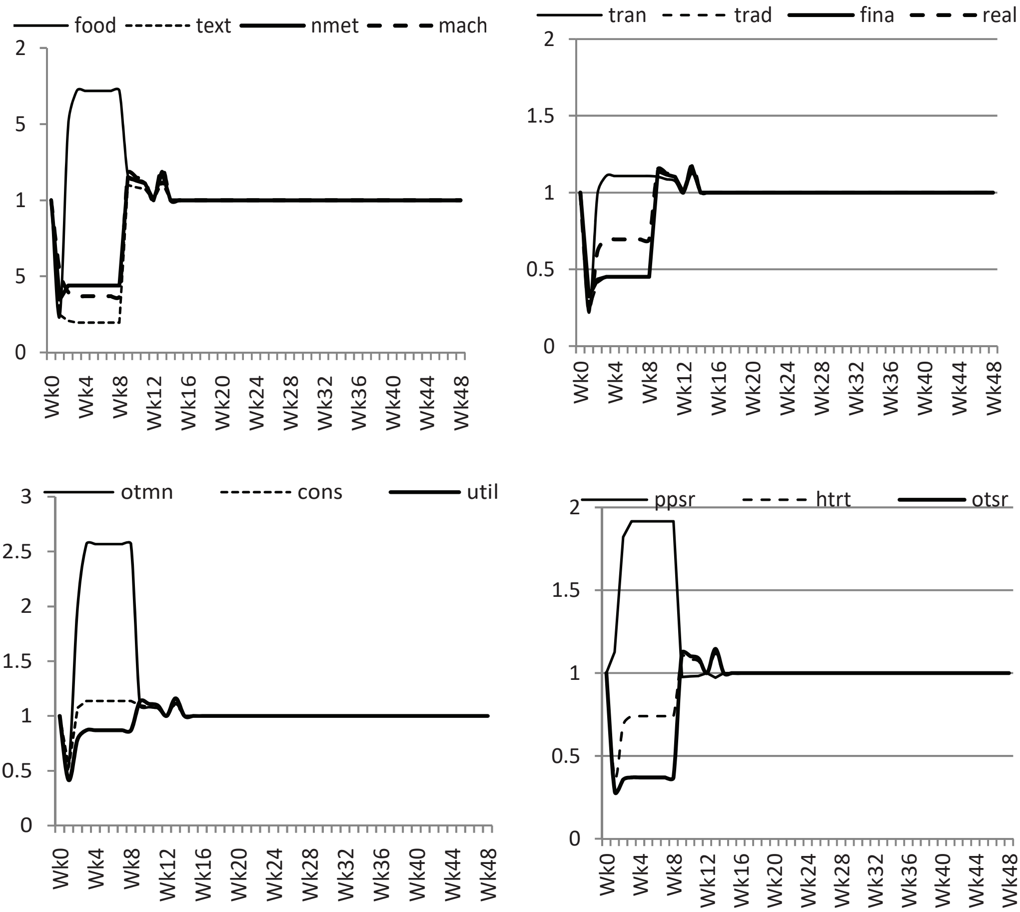
Figure 8 portrays the weekly city GDP, the income of the representative household, and the national and local government spending. On average, the city's industries produced about PHP 1.2 billion of GDP each week. The city's GDP contracted in the first week, and recovered gradually up to the seventh week. It went back to its preflooding level by the eighth week, with a total loss of PHP 2.18 billion throughout the adjustment period.

Surprisingly, household final consumption increased. It slightly dipped in the second week, and spiked to about PHP 2.6 billion a week between the third and the eighth week. It then dropped to largely its predisaster level, netting a gain in final consumption of about PHP 10.655 billion. This result may be driven by the deflation of consumer prices, which in turn followed the appreciation of the currency (Figure 7). Lower prices boosted household consumption, and residents are better off.

It follows from this result that the EV of Marikina City because of Typhoon Ondoy is positive. That is, its residents may even have more money than they had prior to the flood. While it lost in GDP by about PHP 2 billion, it gained resources from the rest of the world with access to lower-priced consumer goods. Figure 9 shows the EV of Marikina City. The total EV amounted to PHP 11,193.78 million.

The total amount of GDP losses estimated in this paper at around PHP 22.54 billion, 90 percent of which represents the loss of Pasig City, seems a reasonable assessment given the amount of direct losses (infrastructure, property loss) in Metro Manila, which has been estimated at PHP 22 billion by the World Bank (2011). However, the direct losses are significantly different from the indirect, output losses estimated by the paper, which are not usually discussed in damage studies.

Figure 6. Effects on weekly outputs of industries in Marikina City



Wk = week

Note: Predisaster output levels are set to 1.

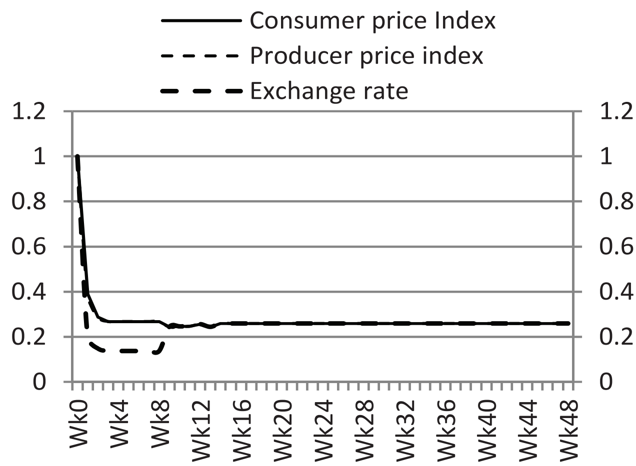
The sectors in the data include food manufacturing (food), textiles and garments (text), machinery (mach), other manufacturing (otm), construction (cons), utilities (util), transport services (tran), wholesale and retail trade (trad), financial intermediaries (fina), real estate (real), public administration (ppsr), hotel and tourism (htrt) and other services (otsr).

Source: Authors' calculation

CONCLUSION AND RECOMMENDATIONS

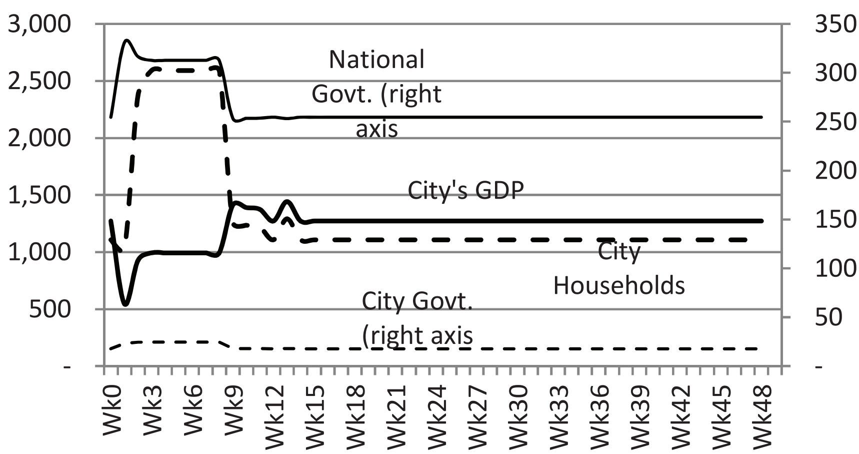
The adverse effects of extreme flooding on large areas of a city caused by Typhoon Ondoy are significant. In this study, the base case GDP of Pasig and Marikina Cities are estimated to be PHP 3.6 billion and PHP 1.3 billion a week, respectively. Using the equivalent variation of income, this study estimates that residents in Pasig City may be willing to pay up to PHP 13 billion for protection against the adverse effects of natural disasters such as Typhoon Ondoy. Marikina City residents, on the other hand, may have to pay a lot less for the same purpose, i.e., PHP 2 billion. The difference may be attributed to the former being more industrial compared to the latter.

Figure 7. Producer and consumer weekly price indices and exchange rate, Marikina City



Wk = week
Source: Authors' calculation

Figure 8. Effects on the city's GDP, household final consumption, and local public spending, Marikina City (in PHP million)

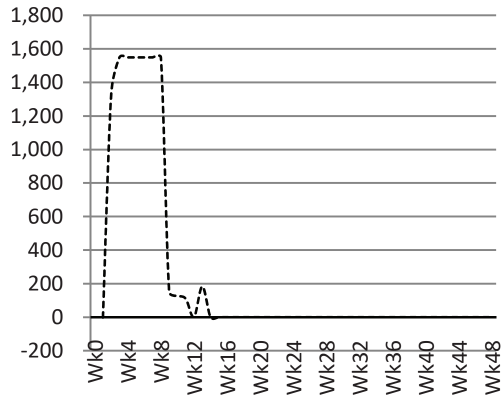


GDP = gross domestic product; Govt = government; Wk = week
Source: Authors' calculation

Differing results between the two cities

It is, however, interesting to note that the model produced different results on the exchange rate adjustments for both cities. A depreciation of the real exchange rate was observed in Pasig, while an appreciation of the exchange rate was noted in Marikina. How this may have come about may be traced to the following: (a) two different accounts of how the cities adjusted to the disaster in terms of factor availabilities, as well as the differences in the two city economies. We note that the focus group discussions with businessmen comprised two different groups of people. Each group may

Figure 9. Overall well-being of city residents, Marikina City (in PHP million)



Wk = week
Source: Authors' calculation

have a different recall of how the city economies of Pasig and Marikina had adjusted; and (b) Pasig is relatively industrial with a larger city GDP, while Marikina is more residential.

This study undertook two separate simulations for each city, but in both, the model has a flexible exchange rate policy. Being industrial, Pasig City has greater stakes in trade. It is a net exporter of goods. Disruption of production activities caused by disasters like Ondoy increased its external payments deficit from the rest of the world, prompting a depreciation of the exchange rate. This, in turn, pushed up prices in Pasig, reducing household consumption.

On the other hand, Marikina City is more residential and is a net importer of goods. When disaster hit the city's economy, incomes fell and with it the demand for goods. With a flexible closure rule, real exchange rate appreciated and consumer prices deflated, boosting household consumption.

In the real world, exchange rate regimes of cities belonging to a national economy like the Philippines follow that of the entire country. Had the closure been one of a fixed exchange rate regime in each model, one would expect income transfers to Pasig City, alleviating the plight of its residents. Such transfers may come in the form of intrahousehold, business transfers to households, or transfers from the rest of the world. On the other hand, resources would flow out of Marikina City, making its residents less better off than what this study's results imply.

Clearly, how the exchange rate market is closed, or better, how the city economies are modeled relative to the rest of the country, is an important determining factor for the results of studies like this.

Recommendation and possible improvements

Local government officials may be guided by this study's results: City residents are willing to invest billions of pesos to reduce their exposure and vulnerability to the adverse effects of extreme flooding. Rather than merely undertaking relief programs following a natural disaster, investing by local authorities in making the city less vulnerable to climate change shocks promises good returns.

This analysis can be improved by getting more objective data on the empirical links between the physical attributes of flooding and the displacement of the productive factors of production, or the flow of raw materials in affected areas. The procedure presented, albeit sufficient, leans on the side of using subjective information through interviews with stakeholders about the adjustment process.

Another important point is the use of weekly CGE models. Existing CGE models are calibrated to annual data because available data sets of national economies in the world are typically gathered on an annual basis. Admittedly, scaling down annual data into weekly quantities and values, and extracting a city's economy data from national using proportionate sizes of local to national economies, have several weaknesses. However, they have been done in this study because of the following: The policy questions in this study concern the impact on a city's economy, and their possible answers make use of businessmen's weekly recall of adjustments made in response to the calamity. Results of analysis would admittedly become more informative had the data, to which the weekly CGE model is calibrated, been gathered subnationally and weekly. However, getting the statistics authorities to do that regularly would be unlikely.

Nevertheless, this study provides a contribution to the literature on the effects of disasters, particularly on the impact of flooding at the city level. The information on the extent of damages could be useful for planning the extent of resources necessary to help mitigate the effects of disasters among the local governments.

REFERENCES

Armington, P.S. 1969. A theory of demand for products distinguished by place of production. *IMF Staff Paper* 16(1):159–178.

Aufret, P. 2003. High consumption volatility: The impact of natural disasters. World Bank Policy Research Working Paper 2962. Washington, D.C.: World Bank.

Benson, C. and J.E. Clay. 2004. Understanding the economic and financial impacts of natural disasters. World Bank Disaster Risk Management Series Paper No. 4. Washington, D.C.: World Bank.

Center for Research on the Epidemiology of Disasters (CRED). 2015. The human cost of natural disasters 2015. Brussels, Belgium: CRED.

Cororaton, C. 2003. Construction of Philippine Social Accounting Matrix for the use of CGE-microsimulation study. Poverty and Economic Policy. Manila, Philippines: Partnership for Economic Policy Network. http://www.pep-net.org/sites/pep-net.org/files/typo3doc/pdf/reconciliation-Philippines.pdf (accessed on June 15, 2016).

Gertz, A. and J. Davies. 2015. A CGE framework for modelling the economics of flooding and recovery in a major urban area. EPRI Working Paper No. 2015-2. Cape Town, South Africa: Economic Policy Research Institute.

Hallegate, S. and V. Pryzluski. 2010. The economics of natural disasters: Concepts and methods. World Bank Research Paper No. 5507. Washington, DC: World Bank.

Hunt, A. and P. Watkiss. 2011. Climate change impacts and adaptation in cities: A review of the literature. *Climate Change* 104(1):13–49.

International Federation of Red Cross (IFRC) and Red Crescent Societies. 2012. *World Disasters Report 2012*. Geneva, Switzerland: IFRC.

Israel, D. and R. Briones. 2014. Disasters, poverty, and coping strategies: The framework and empirical evidence from micro/household data–Philippine case. PIDS Discussion Paper No. DP 2014-06. Makati City, Philippines: Philippine Institute for Development Studies.

Markusen, J. and T. Rutherford. 2004. MPSGE: A users' guide. Lecture notes. Boulder, CO: Department of Economics, University of Colorado.

Pelling, M., S. Barakat, and A. Özerdem. 2002. The Macro-economic impact of disasters. *Progress in Development Studies* 2(4):283–305.

Porio, E. 2011. Vulnerability, adaptation, and resilience to floods and climate change-related risks among marginal, riverine communities in Metro Manila. *Asian Journal of Social Science* 39(4):425–445.

Rutherford, T. 1999. Applied general equilibrium modeling with MPSGE as a GAMS subsystem: An overview of the modeling framework and syntax. *Computational Economics* 14(1–2):1–46.

Rutherford, T. and S. Paltsev. 1999. From an input-output table to a general equilibrium model: Assessing the excess burden of indirect taxes in Russia. Denver, CO: Department of Economics, University of Colorado.

Rybczynski, T. 1955. Factor endowment and relative commodity prices. *Economica* 22 (88):336–341.

Skoufias, E. 2003. Economic crisis and natural disasters: Coping strategies and policy implications. *World Development* 31(7):1087–1102.

World Bank (WB). 2005. Natural disaster risk management in the Philippines: Enhancing poverty alleviation through disaster reduction. Pasig City, Philippines: WB.

———. 2011. Philippine postdisaster needs assessment. Pasig City, Philippines: WB.

Zoleta-Nantes, D. 2002. Differential impacts of flood hazards among the street children, the urban poor and residents of wealthy neighborhoods in Metro Manila, Philippines. *Mitigation and Adaptation Strategies for Global Change* 7(3):239–266.

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Legal and Policy Implications of the Trans-Pacific Partnership Agreement: Focus on Intellectual Property

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ABSTRACT

On October 5, 2015, after seven years of negotiations, 12 Pacific Rim countries[2] including the United States (US) signed the Trans-Pacific Partnership (TPP) Agreement, a new-generation free trade agreement (FTA) that aims to achieve higher levels of outcomes by building upon earlier agreements and establishing new-generation obligations among the participating parties.

On September 23, 2010, in his speech at the Council of Foreign Relations in New York City, former President Benigno Aquino III announced the Philippines' interest to join the TPP Agreement. With the US withdrawal from the TPP Agreement under the administration of President Donald Trump, it seemed, at first, that the rest of the signatories will not push through with its ratification. On May 21, 2017, however, the remaining 11 signatories vowed to revive the deal, leaving the door open for the return of the US (*The Strait Times* 2017). Thus, an examination of relevant TPP Agreement provisions and their legal and policy implications on the Philippines remains important. Moreover, similar new-generation FTAs are currently being negotiated by the Philippines, such as the Regional Comprehensive Economic Partnership among the members of the

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[2]Australia, Brunei, Canada, Chile, Japan, Peru, Malaysia, Mexico, New Zealand, Singapore, United States, and Viet Nam

Association of Southeast Asian Nations (ASEAN) and six states with which the ASEAN has existing free trade agreements,[3] and the European Union–Philippines Free Trade Agreement.

The Philippines is currently a signatory of a number of FTAs on a bilateral basis or as a member of the ASEAN. Many of these FTAs were prepared and signed before 2010 and have been shaped by developments during this period. As the Philippines participates in negotiations for these new-generation FTAs, it is crucial for the Philippines to have a critical assessment of its readiness to meet the obligations set out therein. Among others, the legal and policy implications of particular new-generation FTA provisions must be carefully examined.

This paper seeks to provide a study of the legal and policy implications of the intellectual property (IP) provisions of these new-generation FTAs through an analysis of the relevant IP provisions of the TPP Agreement. These provisions have drawn much attention and debate in the course of the negotiations, given the scope and depth of the new obligations introduced therein on the protection and enforcement of different forms of IP. This study gives special focus to the patent provisions of the TPP Agreement, particularly on the provisions for pharmaceutical products as these have been the subject of much debate with regard to their impact on access to medicines.

To achieve this purpose, a review of Chapter 18 of the TPP Agreement was undertaken. A review of the IP treaties and conventions ratified by the Philippines, the current IP laws and related laws enacted to implement these treaties, as well as the legal framework within which IP rights are protected and enforced, was also undertaken to assess their convergence with TPP obligations, draw out the gaps, and identify policy and regulatory changes and administrative actions that may be required for the Philippines to achieve readiness to join the TPP or similar FTAs.

INTRODUCTION

The protection and promotion of intellectual property (IP) rights is a national policy enshrined in the 1987 Philippine Constitution. Article IV Section 13 mandates the state to protect and secure the exclusive rights of scientists, inventors, artists, and other gifted citizens to their IP and creations, particularly when beneficial to the people, for such period as may be provided by law.

The primary law which governs IP protection and enforcement in the Philippines is the Intellectual Property Code (IP Code) which was enacted to comply with the country's commitments under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). It provides for the protection and enforcement of patents, utility models, industrial designs, trademarks and service marks, copyrights and related rights, among others, and sets out the legal framework for IP protection and enforcement in the Philippines.

In 2001, Republic Act (RA) 9150 was enacted amending certain sections of the IP Code to provide protection for layout designs (topographies) of integrated circuits.

[3] Australia, China, India, Japan, South Korea, and New Zealand

In preparation for its accession to the 1991 Act of the International Union for the Protection of New Varieties of Plants (UPOV) Convention (UPOV 1991), the Philippines enacted the Philippine Plant Variety Protection Act in 2002 to protect and secure the exclusive rights of breeders with respect to their new plant variety. However, for failure to make certain amendments to the law as recommended by the UPOV Council to better comply with UPOV 1991 (UPOV 2007), the Philippines is not yet able to accede to the convention despite having lapsed 15 years since the passage of the Plant Variety Protection Act.

In 2008, with the passage of the Universally Accessible Cheaper and Quality Medicines Act (Cheaper Medicines Act), the IP Code was amended (1) to allow, prior to the expiration of a drug patent, the testing, production, and Food and Drug Administration (FDA) registration of generic versions so that these could be sold immediately upon the expiration of the patents; (2) to prevent the evergreening of patents by establishing the nonpatentability of new uses for known substances; and (3) to allow parallel importation of patented medicines from countries.

In 2013, the IP Code was further amended by RA 10372 which was enacted, among others, to comply with the Philippines' treaty obligations under the World Intellectual Property Organization (WIPO) Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT). It also established the Bureau of Copyrights, which was granted original jurisdiction to resolve disputes relating to the terms of a license involving the author's right to public performance or other communication of his work, and was authorized to accept, review, and decide on applications for the accreditation of collective management organizations or similar entities. Under RA 10372, the director-general was likewise authorized to undertake IP enforcement actions, supported by the concerned government agencies.

Other laws that provide additional IP protection and remedies for infringement are the Electronic Commerce Act (RA 8792), the Optical Media Act (RA 9239), the Anti-Camcording Act (RA 10088), and the Anti-Cable Television and Cable Internet Tapping Act of 2013 (RA 10515).

The Philippines is a member of the following treaties administered by the WIPO: Berne Convention (1951), Universal Copyright Convention (1952), Paris Convention (1965), WIPO Convention (1980), Rome Convention (1984), Agreement on Trade-Related Aspects of Intellectual Property (1995), Patent Cooperation Treaty (2001), WIPO Copyright Treaty (2002), WIPO Performances and Phonograms Treaty (2002), and the Madrid Protocol (2012).

NEW IP OBLIGATIONS UNDER THE TPP

Trademarks

Types of signs registrable as trademarks

Under the IP Code, only visible signs are registrable as trademarks. Section 121.1 of the IP Code defines a "mark" as "any *visible sign* capable of distinguishing the goods (trademark) or services (service mark) of an enterprise and shall include a stamped or marked container of goods", and a "collective mark" as "any *visible sign* designated as such in the application for registration and capable of distinguishing the origin or any other common characteristic, including the quality of goods or services of different enterprises which use the sign under the control of the registered owner of the collective mark". These definitions are in keeping with Article 15.1 of the TRIPS Agreement which allows parties to require, as a condition for registration, that signs be visually perceptible.

This flexibility is removed under Article 18.18 of the Trans-Pacific Partnership (TPP) Agreement which provides that: "No Party shall require, as a condition for registration, that a sign be visually perceptible nor shall a Party deny registration of a trademark solely on the ground that the sign of which it is composed is a sound." Section 18.18 further provides that each party shall make best efforts to register scent marks. Under the TPP, the Philippines is required to amend the IP Code to remove visibility as a condition for trademark registration.

Well-known trademarks

In consonance with Article 16.3 of the TRIPS Agreement in relation to Article 6*bis* of the Paris Convention, Section 123(f) of the IP Code provides that a mark cannot be registered if it is identical with, or is confusingly similar to, or constitutes a translation of a well-known mark *registered* in the Philippines, even with respect to goods or services which are not similar to those for which registration is applied, provided, that use of the mark in relation to those goods or services would indicate a connection between those goods or services and the owner of the registered mark, and, provided further, that the interests of the owner of the registered mark are likely to be damaged by such use. On the other hand, unregistered well-known marks are protected only with respect to related goods and services but not those which are dissimilar.[4]

Article 18.22.2 of the TPP provides that the protection afforded by Article 6*bis* of the Paris Convention shall extend to goods or services that are not identical or similar to those identified by an unregistered but well-known trademark. This provision is a rewording and an expansion of Article 16.3 of the TRIPS Agreement. Under the TPP, the Philippines must amend the IP Code so that the protection afforded by Article 16.3 of the TRIPS Agreement to registered well-known marks will extend to unregistered well-known marks.

Domain names and cybersquatting

Article 18.28.1 of the TPP provides that each party shall make available, in connection with its system for the management of its country-code top-level domain names, an appropriate procedure for a nonjudicial resolution of domain name disputes. Article 18.28.1(b) further provides that each party shall make available online public access to a reliable and accurate database of contact information concerning domain name registrants, in accordance with each party's law regarding protection of privacy and personal data.

While cybersquatting is considered a punishable offense under the Cybercrime Prevention Act, the Philippines does not currently have such a system for nonjudicial resolution of disputes involving domain names registered by dotPH, the country's official domain registry. However, dotPH recognizes the decisions rendered by the WIPO and the Hong Kong Dispute Resolution Center involving domain name disputes. Under the TPP, the Philippines is obliged to establish and maintain its own system for nonjudicial resolution of domain name disputes.

Geographic indications

TPP Article 18.1 defines geographic indication (GI) as "an indication that identifies a good as originating in the territory of a Party, or a region or locality in that territory, where a given quality, reputation, or other characteristic of the good is essentially attributable to its geographical origin". TPP Article 18.19 states that: "Each Party shall also provide that signs that may serve as geographical indications are capable of protection under its trademark system."

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[4] Section 123(e), IP Code

The TPP definition of GI echoes the definition in Article 22.1 of the TRIPS Agreement. However, under the TRIPS Agreement, GIs are treated separately from trademarks. Further, the TRIPS Agreement does not require the parties to provide that signs that may serve as GI are to be protected under the trademark system.

Section 123.1(j) of the IP Code provides that a mark cannot be registered if it "consists exclusively of signs or of indications that may serve in trade to designate the kind, quality, quantity, intended purpose, value, geographical origin, time, or production of the goods or rendering of the services, or other characteristics of the goods or services". Applications for trademarks containing GI are accepted by the Intellectual Property Office of the Philippines (IPOPHL), and such applications are examined under trademark rules. However, for such application to be allowed and granted registration, the IPOPHL requires in practice, though not as a formal requirement under the IPOPHL Rules and Regulations on Trademarks and Service Marks, that the GI be disclaimed *or* that the applicant must present documents showing the GI owner's permission to register the GI. Thus, while applications for registration of marks containing GI are accepted, GI *per se* are not protected as trademarks since the IPOPHL requires a disclaimer of such GI. The registered owner of a trademark, which includes a disclaimed GI, is protected only with regard to the portions of the mark that are not disclaimed. The registrant cannot claim protection over the disclaimed GI.

The TPP does not mandate the adoption of any particular system or approach in protecting GI, as stated in Article 18.30 of the TPP text. Rather, it aims to prevent the creation of GI protections that will displace the rights of prior trademark owners. Thus, Articles 18.31 and 18.32 of the TPP provide for the opposition and cancellation of GI on various grounds. The potential impact of the foregoing provisions is that a later GI cannot override existing trademark rights, whether or not such marks are registered. Should the Philippines join the TPP and similar agreements, this may render future agreements with the European Union (EU) difficult to achieve if the EU demands full and unqualified recognition for its GIs. GI protection is already governed by Articles 24.5 and 24.6 of the TRIPS Agreement.

Copyright and related rights

With the amendment of the IP Code to comply with the provisions of the WCT and the WPPT, most of the TPP obligations relating to copyright are already provided for under the law. However, there are new obligations set forth in the TPP that would require further amendments to the IP Code.

Term of protection for copyright and related rights

Section 213.1 of the IP Code grants copyright protection for works during the life of the author and 50 years after his death. In case of works of applied art, Section 213.4 grants protection for 25 years from the date of making. The standard term for copyright protection is 50 years, in keeping with the periods provided under the Berne Convention, TRIPS, WCT, and WPPT.

Article 18.63 of the TPP extends the term of copyright protection to 70 years. It was pointed out that the extension of copyright term entails a real monetary cost for countries that are currently observing the standard of life plus 50 years, or 50 years from publication (Weatherall 2015). This represents a pure windfall for copyright owners and a transfer of wealth from users to copyright owners, most of whom will be located overseas since a majority of content consumed in most TPP countries is produced overseas (Weatherall 2015). An extension of copyright term in the Philippines would mean additional cost for the procurement of copyright content which, under the IP Code, would already be in public domain.

An important issue to be considered by the Philippines is whether the benefits of extending copyright term would, in the long run, outweigh the costs entailed by such extension. A 2014 WIPO study (Francisco et al. 2014) revealed that copyright-based industries (CBIs) altogether contributed PHP 661.23 billion, or 7.34 percent of the national gross domestic product (GDP). CBIs altogether employed 560,664, or 14.14 percent of total employment in all industries. Exports of CBIs are 3.33 percent and 2.03 percent of total exports in 2010 and 2012, respectively.

Technological protection measures

The TPP provisions on technological protection measures (TPMs) seek to provide stronger protection for these technologies by requiring parties to impose civil and criminal sanctions upon any person who (a) knowingly circumvents without authority any effective TPM that controls access to a protected work, performance, or phonogram; or (b) commercially deals in products or services that (i) are marketed for the purpose of circumventing any effective TPM; (ii) have only a limited commercially significant purpose or use other than circumvention of any effective TPM; or (iii) are primarily designed, produced, or performed for the purpose of circumventing any effective TPM. The TPP further requires that circumvention of TPM must be considered as an offense independent from copyright or related rights infringement.

The TPP provisions on TPM have no equivalent in the Berne Convention and the TRIPS Agreement as these agreements predate the rise of these technologies. On the other hand, Article 11 of WCT merely requires the parties to provide adequate legal protection and effective legal remedies against the circumvention of effective TPM, without providing specific modes of protection and remedies.

The IP Code does not consider the circumvention of TPM as a civil or criminal offense independent of infringement of copyright and related rights. Rather, in cases of copyright infringement, the amount of civil damages awarded to the copyright owner is doubled if the infringement involves circumvention of effective TPMs.[5] Moreover, in criminal cases, the maximum penalty is also imposed. Should the Philippines join the TPP Agreement and/or similar FTAs, the IP Code must be amended to conform with the obligations set out therein for TPM protection.

In making such amendments, the Philippines must be mindful that the TPP provisions protect a potentially very expansive set of technologies. As defined under Article 18.68.5, the TPMs covered are not limited to those designed to prevent or restrict acts related to the exploitation of copyright content, but include "pure" access controls. By protecting access controls, the TPP provisions on TPM should be strictly interpreted, bearing in mind their purpose, i.e., to provide adequate legal protection and remedies against circumvention of effective TPM used by authors, performers, and phonogram producers. Such interpretation would exclude TPM used for purposes unrelated to exploitation of copyright content from the anti-circumvention law.

Rights management information (RMI)

The TPP seeks to provide adequate and effective legal remedies to protect rights management information (RMI) by requiring TPP countries to impose civil and criminal sanctions upon any person "who without authority, and knowing, or having reasonable grounds to know, that it would induce, enable, facilitate, or conceal an infringement of the copyright or related right of authors, performers, or producers of phonograms: (a) knowingly removes or alters any RMI; (b) knowingly distributes or imports for distribution RMI knowing that the RMI has been altered without authority;

[5] Section 216 of the IP Code, as amended by RA 10372

or (c) knowingly distributes, imports for distribution, broadcasts, communicates, or makes available to the public copies of works, performances, or phonograms, knowing that RMI has been removed or altered without authority".

Under the IP Code, the acts of removing or altering RMI or commercially dealing in works with RMI that has been removed or altered, are not considered as independent offenses, whether civil or criminal, from infringement of copyright and related rights. Rather, in cases of copyright infringement, the amount of civil damages awarded to the copyright owner is doubled if the infringement involves such RMI-related acts.[6] In criminal cases, the maximum imposable penalty is also enforced.

Further, Article 33(b) of the Electronic Commerce Act, which penalizes piracy or infringement of copyrighted content through the use of telecommunications network (including the internet), includes among the prohibited acts the unauthorized copying, reproduction, dissemination, distribution, importation, use, removal, alteration, substitution, modification, storage, uploading, downloading, communication, making available to the public, or broadcasting of protected material, electronic signatures, or copyrighted works including legally protected sound recordings, or phonograms, *or information material on protected works*, by a minimum fine of PHP 100,000 and a maximum commensurate to the damage incurred, and a mandatory imprisonment of six months to three years.

The language of the TPP on RMI protection draws from Article 12 of the WCT but expands its scope. While the WCT is confined to electronic RMI, the TPP covers other forms of RMI. Footnote 96 of the TPP text, however, provides that a party may comply with the obligations under Article 18.69 by providing protection only to electronic RMI. This flexibility is important. In the nonelectronic context, there is a significant potential for overlap with rules against the manufacture, importation, or use of false or counterfeit labels, as well as rules relating to materials and implements used in the creation or manufacture of infringing goods. This can mean the multiplication of the offenses that a person commits in the act of copyright infringement. Multiplying the wrongful acts has the potential to lead to overcharging of defendants in the criminal context, and increases the extent of civil liability. Under the IP Code, RMI is not limited to electronic RMI.[7]

PATENTS AND UNDISCLOSED TEST OR OTHER DATA

Patentable subject matter

New uses, new methods, or new processes of using a known product

Article 18.37.1 of the TPP provides that each party shall make patents available for any invention, whether a product or process, in all fields of technology, provided that the invention is new, involves an inventive step, and is capable of industrial application. Article 18.37.2 further provides that each party confirms that patents are available for inventions claimed as at least one of the following: new uses of a known product, new methods of using a known product, or new processes of using a known product. This provision has no equivalent in the TRIPS Agreement.

Section 22.1 of the IP Code, as amended by the Cheaper Medicines Act, includes among nonpatentable subject matter, (a) the mere discovery of a new form or new property of a known

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[6] Section 216 of the IP Code, as amended by RA 10372

[7] Section 171.13, IP Code

substance which does not result in the enhancement of the known efficacy of that substance, or (b) the mere discovery of any new property or new use for a known substance, or (c) the mere use of a known process unless such known process results in a new product that employs at least one new reactant. This provision was enacted to prohibit the evergreening of patents and promote the development of generic drugs, to ensure greater access to cheaper and quality medicines in the country.

Section 18.37.2 of the TPP appears to be in conflict with Section 22.1 of the IP Code, which expressly prohibits the patenting of *mere discovery* of any new property or new use of a known substance, and which makes no mention of the protection of "new methods of using a known product" or "new processes of using a known product". From the language of Section 22.1 of the IP Code, it can be gleaned that a new use for a known substance may be granted patent protection, provided, that such new use (defined as second/further medical use) is not a *mere discovery*, that is, not inherent in the prior art.

The IPOPHL "Examination Guidelines for Pharmaceutical Patent Applications Involving Known Substances" provides that: For a medical application to be construed as a "further medical use" not inherent in the prior art, the new technical effect would have led to a truly new therapeutic application, such as the healing of a different pathology, or the treatment of the same disease with the same compound however carried out on a new group of subjects distinguishable from the previously suggested subjects for such treatment, or would have led to new dosage forms of the known composition.

Unlike Section 22.1 of the IP Code, Article 18.37.2 of the TPP does not qualify that the "new uses of a known product" should be more than just mere discovery. This could be interpreted to mean that even new uses inherent in the prior art may be covered. In such a case, this provision would be in conflict with the express provision of Article 22.1 of the IP Code. Should the Philippines join the TPP and similar agreements, it may have to amend the IP Code to comply with the obligation set out in Article 18.37.2. The Philippines must study the implications of this provision on access to medicines and assess its possible impact on public health.

Inventions derived from plants

Article 18.37.4 of the TPP provides that a party may also exclude from patentability plants other than microorganisms. However, each party confirms that patents are available at least for inventions that are derived from plants, provided, that they comply with the patentability requirements under Article 18.37.1 and do not fall under the excluded subject matter in Article 18.37.3(b). Article 18.37.4 does not define what "inventions derived from plants" means, which could refer, but may or may not be limited, to plant varieties.

Like the TPP, Article 27.3(a) of the TRIPS agreement allows parties to exclude from patentability plants other than microorganisms. However, TRIPS Article 27.3(a) grants the parties the option of protecting plant varieties by patents, or by an effective *sui generis* system, or any combination thereof.

Pursuant to Article 27.3(a) of the TRIPS Agreement and Section 22.4 of the IP Code, the Philippine Plant Variety Protection Act was enacted in 2002, which provides a sui generis protection for plant varieties. The enactment was in preparation for the Philippines' accession to the UPOV 1991. For this purpose, the law was submitted to the UPOV Council for assessment as to its compliance with UPOV 1991. As discussed above, however, the Philippines is not yet able to accede to the convention for failure to make certain amendments to the law as recommended by the UPOV Council (UPOV 2007). Article 18.7.2(d) of the TPP requires the parties to accede to the UPOV 1991.

UPOV 1991 is the most recent version of the UPOV treaties which provide for sui generis protection of plant varieties,[8] including discovered varieties. The first UPOV Act was drafted in 1961 and was later revised in acts adopted in 1972, 1978, and 1991 to grant more expansive rights to plant breeders. The 1978 Act permits its signatories to protect plant varieties either with a distinct breeder's right or with a patent. However, Article 2(1) precludes member-states from granting both forms of protection for one and the same botanical genus or species. The UPOV 1991 removed the UPOV 1978's ban on dual protection and now permits member-states to protect the same plant variety with both a breeders' right and a patent.

TPP Article 18.37.4 is both TRIPS plus and UPOV 1991 plus in that it requires countries to grant patent protection to plant varieties, in addition to the sui generis protection provided under UPOV 1991. In deciding to join the TPP, the Philippine government must study the implications of granting additional patent protection for plant varieties, in addition to that provided under the Philippine Plant Varieties Act, and ascertain the nature and extent of its impact on food security.

Patent term adjustment for patent office delays

Article 18.46.3 of the TPP provides that, "if there are unreasonable delays in a Party's issuance of patents, said Party shall provide the means to, and at the request of the patent owner, shall adjust the term of the patent to compensate for such delays." Article 18.46.4 further provides that "an unreasonable delay, at least, shall include a delay in the issuance of a patent of more than five years from the date of filing of the application in the territory of the party, or three years after a request for examination of the application has been made, whichever is later."

This provision has no equivalent in the TRIPS Agreement nor the IP Code. This provision will extend the monopoly rights of patent holders beyond the 20 years standard protection counted from the time of the filing of the patent application. Moreover, the extent of patent term adjustment and the standards for adjustment is not defined, and parties may be pressured into providing lengthy adjustment periods.

Other than the extension of monopoly rights, there does not seem to be any significant purpose underpinning this provision. The purpose of granting patent rights is to grant exclusive rights to the patent holder with regard to the commercial exploitation of his invention. Under Article 33 of the TRIPS Agreement (and under Section 54 of the IP Code), patent protection is granted for at least 20 years from filing of the application. This means that from the time that the patent application is filed, the applicant already enjoys patent protection. Under Section 46 of the IP Code, while the patent holder may not be able to enforce its patent rights until the patent is actually granted, the remedies of the patent holder upon the grant of the patent retroact to and cover infringements committed from the time of publication of the patent application. The retroactive effect of the patent holder's remedies for patent infringement ensures that the patent holder is not deprived of his exclusive rights during the period of patent examination.

Measures relating to agricultural chemical products

Article 18.47 of the TPP provides for data exclusivity for undisclosed data and other data for a new agricultural chemical product in two instances: (a) if a party, as a condition for granting marketing

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[8] UPOV 1991 Article 1(vi) defines a plant variety as a "plant grouping within a single botanical taxon of the lowest known rank" which can be "defined by the expression of the characteristics resulting from a given genotype or combination of genotypes; distinguished from any other plant grouping by the expression of at least one of the said characteristics; and considered as a unit with regard to its suitability for being propagated unchanged".

approval, requires the submission of undisclosed test or other data concerning the safety and efficacy of the product or (b) if a party, as a condition for granting marketing approval, permits the submission of a prior marketing approval of the product in another territory.

In the first instance, Article 18.47.1 provides that the party shall not allow persons, without the consent of the person that previously submitted such information, to market the same or a similar product on the basis of that information or the marketing approval granted to the person that submitted such test or other data, for at least 10 years from the date of marketing approval of the new agricultural chemical product in the territory of the party. In the second instance, Article 18.47.2 requires at least 10 years data exclusivity for undisclosed test or other data concerning the safety and efficacy of the product in support of that prior marketing approval, or other evidence of the prior marketing approval in the other territory. The language of the provision shows that its real object is marketing exclusivity.

This provision is TRIPS plus. Article 39.3 of the TRIPS Agreement does not mandate data exclusivity for new agricultural chemical products, but only requires the protection of such data against unfair commercial use and disclosure. The clear objective of this provision is to prevent the early market entry of the same or similar agricultural chemical products, whether or not the new agricultural chemical product is covered by a patent. Article 18.47 of the TPP is applicable whether or not a new agricultural product is patentable, and even if the patent has already expired. This provision effectively extends the term of patent protection of products, for which the patent term has already expired, and provides monopoly rights even for unpatented products.

Article 18.54 of the TPP provides that if a product is subject to a system of marketing approval in the territory of a party pursuant to Article 18.47, and is also covered by a patent in the territory of that party, said party shall not alter the period of protection that it provides pursuant to Article 18.47 earlier than the end of the period of protection specified therein. That is, a party cannot provide that the period of data exclusivity shall terminate upon the expiration of the patent. That is, if the patent of an agricultural chemical product is about to expire in two years, for example, the period of data exclusivity granted to a patentee that submitted undisclosed test data or test data for the approval of such product will not expire with the expiration of the patent. Data exclusivity protection will be provided for the full period of at least 10 years from the date of marketing approval granted to such product, even if such period exceeds the period of patent protection.

In deciding to join FTAs with a similar provision, the Philippine government must study whether Article 18.47 has implications on public interest concerns such as food security in order to ascertain the nature and extent of its impact.

Measures relating to pharmaceutical products

Patent term adjustment for unreasonable curtailment

Article 18.48.2 of the TPP provides that, with respect to a pharmaceutical product (or pharmaceutical substance) that is subject to a patent, each party shall make available an adjustment of the patent term to compensate the patent owner for unreasonable curtailment of the effective patent term as a result of the marketing approval process. In the alternative, Footnote 46 provides that a party may alternatively make available a period of additional sui generis protection for unreasonable curtailment of the effective patent term as a result of the marketing approval process. Each party may provide for conditions and limitations, provided that the party continues to give effect to TPP Article 18.48.

Patent term extension for delays in marketing approval is not provided under the TRIPS Agreement nor the IP Code. The object of this provision is to allow pharmaceutical patent holders to maximize profits from the commercialization of their products. As the expiration of patent means the entry of generic products in a party's territory and the decrease in the price of drugs that may consequently ensue, delays in the grant of marketing approval can mean lost profits.

This provision extends patent monopoly rights beyond the 20 years limit established by the TRIPS Agreement. Moreover, Article 18.48.2 does not define what "unreasonable curtailment" means, nor does it define the extent and standards for patent term adjustment. Parties may be exposed to disputes concerning their interpretation of what constitutes "unreasonable curtailment" and be pressured into providing lengthy adjustment periods. It is important that the term "unreasonable delay" be defined to provide a definite and reasonable period for the grant of marketing approval and avoid disputes resulting from unreasonable expectations from applicants.

Patent term extensions due to administrative delays in granting patent or marketing approval "represent an essentially unfair and dysfunctional mechanism" (Correa 2015), as it penalizes the public with a longer monopoly for the failure of the administration to process patent and marketing approval applications within a reasonable time. It also puts pressure on the authorities to make decisions without sufficient consideration of the reasons that may lead to the refusal of an application (Correa 2015).

Protection of undisclosed test or other data

As in the case of new chemical agricultural products, Article 18.50 of the TPP provides for data exclusivity for undisclosed data and other data for a new pharmaceutical product in two instances, but for a period of five years.

This provision is TRIPS plus. Article 39.3 of the TRIPS Agreement does not mandate data exclusivity for new pharmaceutical products but only requires the protection of such data against unfair commercial use. The clear objective of this provision is to prevent the early market entry of the same or similar products, whether or not the new pharmaceutical product is covered by a patent. TPP Article 18.50 is applicable whether or not a new pharmaceutical product is patentable and even if the patent has already expired. This provision effectively extends the term of patent protection.

In addition, Article 18.50.2 of the TPP requires the parties to either (a) grant data exclusivity for a period of at least three years with respect to new clinical information submitted as required in support of a marketing approval of a previously approved pharmaceutical product covering a new indication, new formulation, or new method of administration or, alternatively, (b) grant data exclusivity for a period of at least five years to new pharmaceutical products that contain a chemical entity that has not been previously approved in that party.

Data exclusivity for new forms or uses of a known pharmaceutical product is a form of evergreening. Data exclusivity applies whether or not such product is covered by a patent or the patent has already expired. An off-patent drug presented as a new indication, a new formulation, a new method of administration, or a new combination is covered by the TPP data exclusivity provisions and can delay entry of generic medicines in a party's territory.

Article 18.54 of the TPP provides that, if a product is subject to a system of marketing approval in the territory of a party pursuant to Article 18.50 and is also covered by a patent in the territory of that party, the party shall not alter the period of protection that it provides pursuant to Article 18.50, earlier than the end of the period of protection specified therein.

Under the TPP, the Philippines must assess the impact of this provision on access to medicines and negotiate for flexibilities that may mitigate its negative impact, such as those granted to Malaysia and Peru.

Measures relating to the marketing of certain pharmaceutical products

In cases where a party permits, as a condition for the marketing approval of a pharmaceutical product, persons, other than the person originally submitting the safety and efficacy information, to rely on evidence or information concerning the safety and efficacy of a product that was previously approved, the TPP requires said party to make available a regulatory mechanism that links marketing approval for pharmaceutical products to patent status (patent linkage). Article 18.51 provides two options to comply with this obligation.

The first option is for the party to make available (a) a system to provide notice or to allow notification to a patent holder (or the licensee or holder of marketing or approval), prior to the marketing of such a pharmaceutical product, that such other person is seeking to market that product during the term of an applicable patent claiming the approved product or its approved method of use; (b) adequate time and opportunity for such a patent holder to seek available remedies, prior to the marketing of an allegedly infringing product; and (c) procedures, such as judicial or administrative proceedings, and expeditious remedies, such as preliminary injunctions or equivalent effective provisional measures, for the timely resolution of disputes concerning the validity or infringement of an applicable patent claiming an approved pharmaceutical product or its approved method of use.

As an alternative, a party may adopt or maintain a system other than judicial proceedings that precludes, based upon patent-related information submitted to the marketing approval authority by a patent holder or the applicant for marketing approval, or based on direct coordination between the marketing approval authority and the patent office, the issuance of marketing approval to any third person seeking to market a pharmaceutical product subject to a patent claiming that product, unless by consent or acquiescence of the patent holder.

This is a TRIPS plus provision. It seeks to provide an additional protection for pharmaceutical owners who claim that patent linkage will prevent infringement that may occur if generic versions of a patented product are approved for commercialization. This overlooks the fact that most patents do not cover the drugs as such, but different forms thereof, including pharmaceutical formulations and combinations, and that the role of drug regulatory agencies is to protect public health, not to take part in private disputes about intellectual property protection.

Patent linkage offers pharmaceutical patent holders an advantage not available to patent holders in other areas of technology, i.e., the use of the health and regulatory mechanism to facilitate the enforcement of their patents, but also because patent linkage can create an additional burden on medicines regulators.

The development implications of linkage provisions may be substantial, as they may unduly restrain generic competition that reduces drug prices and increases access to medicines. Even spurious patents may function as barriers to the market entry of generic medicines. Patent linkage can facilitate abuse, since the financial benefits to patent holders of deterring generic market entry may outweigh the risk of penalties. In joining the TPP or similar agreements, the Philippines must assess the impact of this provision on access to medicines as well as the administrative and budgetary considerations relative to its implementation.

Biologics

Article 18.52 of the TPP provides two options for the protection of biologics. With respect to the first marketing approval in a party of a new pharmaceutical product that is or contains a biologic, said party may either (a) provide effective market protection through the implementation of Article 18.50.1 (Protection of Undisclosed Test or Other Data) and Article 18.50.3, *mutatis mutandis*, for a period of at least eight years from the date of first marketing approval of that product in that party or (b) provide effective market protection: (i) through the implementation of Article 18.50.1 (Protection of Undisclosed Test or Other Data) and Article 18.50.3, mutatis mutandis, for a period of at least five years from the date of first marketing approval of that product in that party; (ii) through other measures; and (iii) recognizing that market circumstances also contribute to effective market protection to deliver a comparable outcome in the market.

This provision is TRIPS plus. The TRIPS Agreement does not have express provisions for biologics. The clear objective of this provision is to grant market exclusivity to biologics, which may not be patentable in all cases, and prevent the early market entry for the same products or biosimilars, whether or not the new biologic is covered by a patent. Article 18.52 is applicable whether or not a new biologic is patentable and whether the patent granted has already expired. This provision effectively extends the term of protection for biologics covered by patent and provides monopoly rights for unpatented biologics.

Article 18.54 further provides that if a product is subject to a system of marketing approval in the territory of a party pursuant to Article 18.52 and is also covered by a patent in the territory of that party, the party shall not alter the period of protection that it provides pursuant to 18.52 in the event that the patent protection terminates on a date earlier than the end of the period of protection specified therein. Data exclusivity protection will be provided for the full period of at least eight years under Option 1 and five years under Option 2, from the date of marketing approval granted to such product, even if such period exceeds the period of patent protection.

With regard to biologics, there are two issues of concern: (a) whether biologics should be granted data exclusivity protection and (b) how long should the data exclusivity protection be if such is granted. Unlike drugs, which are typically manufactured through chemical synthesis and generally have well-defined chemical structures, biologics are mostly very large, complex molecules or mixtures of molecules, manufactured in a living system such as a microorganism, or plant, or animal cells. Advocates for data exclusivity argue that, because of the nature of biologics, patents may provide less clear and less predictable intellectual property protection for biologics than for small molecule drugs. Biologics rely on multiple patents, including narrower product patents and process patents that may be more vulnerable to inventing around than small molecule product patents. Data exclusivity provisions are designed to reduce uncertainty and provide some stability and predictability for developers and investors against costly litigation and early patent disruption. They also provide an important incentive for products that spend a long time in basic research or clinical development after their core patents are filed.

Critics of data exclusivity, on the other hand, contend that the patent system has a proven record of protecting and stimulating biotechnology innovation. It is argued that pioneer biologic drugs are covered by more and varied patents than small-molecule branded products, including manufacturing and technology platform patents. Patent cases between pioneer manufacturers reveal that patents such as process, manufacturing, and method of use claims can be infringed by a branded competitor. These cases show that the range of patents claiming a biologic product provides a strong assurance that at least one of a biologic drug product's patents will cover a follow-on biologic drug product. There is no evidence that the patents claiming the compound or molecule of pioneer biologic drugs have been designed around more frequently than those claiming small-molecule drug products. There are a variety of ways to draft claims broadly enough to cover the types of drug structure variations expected in follow-on biologics.

Most countries do not provide data exclusivity protection for biologics. Where biologics are granted data exclusivity, state practices vary on the length of data exclusivity protection. In the

United States, data exclusivity protection is for 12 years and in Australia, the data exclusivity period for biologics is 5 years.

The TPP requires countries to apply the provision on biologics to a very broad range of products. Article 18.52.2 provides that: "each Party shall apply Article 18.52 to, at a minimum, a product that is, or, alternatively, contains, a protein produced using biotechnology processes, for use in human beings for the prevention, treatment, or cure of a disease or condition." This captures a very broad array of products, and reduces the prospect for governments to narrow the scope of the obligation and define for themselves which products it applies to.

The IP Code does not contain any express provisions on biologics. Should the Philippines join the TPP or similar agreements, the Philippines must assess the impact of this provision on access to medicines. The Philippines may also negotiate for flexibilities that can mitigate its negative impact, such as those granted to Malaysia and Peru in Annexes 18-C and 18-D, respectively.

ENFORCEMENT

Article 18.71.2 requires TPP parties to make available the enforcement procedures set forth in Article 18.74 (Civil and Administrative Procedures and Remedies), Article 18.75 (Provisional Measures), and Article 18.77 (Criminal Procedures and Penalties) to the same extent in the digital environment with respect to acts of trademark infringement, as well as copyright or related rights infringement. Under Philippine laws, civil, criminal, and administrative remedies are available in instances of trademark infringement and copyright and related rights infringement. However, these laws were enacted in compliance with the provisions of the Paris Convention, the Berne Convention, the TRIPS Agreement, the WCT, and the WPPT, and may have to be amended to comply with the TRIPS plus obligations under the TPP.

Criminal procedures and penalties

Article 18.77.1 of the TPP provides that each party shall provide for criminal procedures and penalties to be applied at least in cases of willful trademark counterfeiting or copyright or related rights piracy on a commercial scale. Willful copyright or related rights piracy "on a commercial scale" includes, at least, (a) acts carried out for commercial advantage or financial gain and (b) significant acts, not carried out for commercial advantage or financial gain, that have a substantial prejudicial impact on the interests of the copyright or related rights owner in relation to the marketplace.

Criminal penalties for trademark and copyright infringement are provided under Sections 170 and 217, respectively, of the IP Code, which was enacted in compliance with the obligations in the TRIPS Agreement.

Internet service providers

Article 18.82 of the TPP requires parties to ensure that legal remedies are available to address copyright infringement in the online environment by providing enforcement procedures that permit copyright holders to take effective action against such infringement.[9] In so doing, Article 18.82 requires parties to maintain appropriate safe harbors for internet service providers (ISPs) which shall

[9] It is notable that Section J of the TPP IP Chapter makes no mention about trademark infringement. While the section is confined to copyright infringement, there appears to be no prohibition for parties to apply the internet service providers safe harbor provisions in cases of trademark infringement.

include: (a) legal incentives for ISPs to cooperate with copyright owners to deter or take action to deter the unauthorized storage and transmission of copyrighted materials and (b) limitations or safe harbors in its law that preclude monetary relief against ISPs for copyright infringements that they do not control, initiate, or direct. In this regard, Article 18.82 requires parties to prescribe in its law conditions for ISPs to qualify for the limitations described in Article 18.82.1(b), or, alternatively, to provide for circumstances under which ISPs do not qualify for such limitations.[10] Such limitations shall include those in respect of the functions enumerated in Article 18.82.2 such as routing, caching, storage, hosting, and linking.

In order to qualify for safe harbors in the performance of its functions, the ISP must expeditiously remove or disable access to material residing on their networks or systems upon obtaining actual knowledge of the copyright infringement, or becoming aware of facts or circumstances from which the infringement is apparent.[11] The ISP that removes or disables access to material in good faith shall be exempt from any liability, provided that it takes reasonable steps in advance or promptly after to notify the person whose material is removed or disabled.[12] The TPP does not require but allows a system of counternotices, which allows the ISP to restore the material subject of the counternotice, unless the person giving the original notice seeks judicial relief within a reasonable period of time.[13]

Article 18.82.5 of the TPP requires each party to ensure that monetary remedies are available in its legal system against any person that makes a knowing material misrepresentation in a notice or counternotice that causes injury to any interested party as a result of an ISP relying on the misrepresentation.

The TPP provides that eligibility for safe harbor provisions shall not be conditioned on the ISP monitoring its service or affirmatively seeking facts indicating infringing activity.[14] Moreover, the failure of an ISP to qualify for safe harbor provisions does not itself result in liability, without prejudice to the availability of other limitations and exceptions to copyright or any other defenses under a party's legal system.[15]

TPP Article 18.82.7 requires parties to provide judicial or administrative procedures that enable a copyright owner, which has made a legally sufficient claim of copyright infringement, to obtain expeditiously from the ISP information in the provider's possession identifying the alleged infringer, in cases in which that information is sought for the purpose of protecting or enforcing that copyright. Should the Philippines join the TPP, it must ensure that the implementation of this provision is consistent with the provisions of the Data Privacy Act.[16]

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[10] Footnote 154 states that: Party may comply with the obligations in paragraph 3 by maintaining a framework in which: (a) there is a stakeholder organization that includes representatives of both ISPs and right holders, established with government involvement; (b) that stakeholder organization develops and maintains effective, efficient, and timely procedures for entities certified by the stakeholder organization to verify, without undue delay, the validity of each notice of alleged copyright infringement by confirming that the notice is not the result of mistake or misidentification, before forwarding the verified notice to the relevant ISP; (c) there are appropriate guidelines for ISPs to follow in order to qualify for the limitation described in paragraph 1(b), including requiring that the ISP promptly removes or disables access to the identified materials upon receipt of a verified notice, and be exempted from liability for having done so in good faith in accordance with those guidelines; and (d) there are appropriate measures that provide for liability in cases in which an ISP has actual knowledge of the infringement or awareness of facts or circumstances from which the infringement is apparent.

[11] TPP Article 18.82.3(a)
[12] TPP Article 18.82.3(b)
[13] TPP Article 18.82.(4)
[14] TPP Article 18.82(6)
[15] TPP Article 18.82(7)
[16] RA 10173

While Section 30 of the Electronic Commerce Act provides for the instances where an ISP shall not be civilly or criminally liable for acts defined in Section 5[17] thereof, the act does not contain the takedown requirement provided for in the TPP, for the purpose of qualifying for safe harbor provisions. Should the Philippines join the TPP, the Electronic Commerce Act must be amended to include this requirement and comply with the other obligations set out in the TPP, such as providing legal incentives for ISPs to cooperate with copyright owners to deter or take action to deter the unauthorized storage and transmission of copyrighted materials.

RECOMMENDATION

For the Philippines to be ready to join the TPP or similar agreements, it must be in a position where it can comply with the new obligations set out therein, including the TRIPS plus obligations provided in the IP chapter. For this purpose, the Philippines must be ready to amend its IP laws and regulations and its law enforcement system to establish a legal framework that will accommodate the expanded IP protection and enforcement rights afforded to IP holders under the TPP.

In compliance with Article 18.7.2(d) of the TPP, the Philippines must accede to UPOV 1991. In this regard, the Philippines must amend the Plant Variety Protection Act to comply with the March 2007 recommendations of the UPOV Council, so that the Philippines can deposit its instrument of accession to the treaty. More than the accession to UPOV 1991, the Philippines, pursuant to Article 18.37.4 of the TPP, must also be prepared to make available patent protection to plant varieties in addition to the sui generis protection granted by the Plant Variety Protection Act. The implications of the UPOV Council's suggested amendments, as well as the impact of the TPP's required additional patent protection, will have to be carefully studied, especially with regard to food security concerns of the Philippines.

The Philippines must likewise amend the IP Code to accommodate the new TPP obligations on trademark protection and enforcement. For one, the Philippines must expand the scope of its trademark protection by removing the requirement that a trademark must be visible to be granted trademark protection. In this regard, the Philippines must establish very clear standards and requirements for the registrability of nonvisible marks, including the particularly controversial scent marks, should the Philippines choose to protect them. Further, Section 123(f) of the IP Code must be amended so that Article 6*bis* of the Paris Convention shall apply mutatis mutandis even to unregistered well-known marks, such that their protection also extends to dissimilar goods or services.

Pursuant to Article 18.77.5 of the TPP, the IP Code must be amended to provide for criminal procedures and penalties for aiding and abetting the commission of the following acts: (a) willful trademark counterfeiting and (b) willful importation and domestic use, in the course of trade and on a commercial scale, of an infringing label or packaging.

Pursuant to Article 18.74.12 of the TPP, Section 157.1 of the IP Code must likewise be amended to provide that in civil judicial proceedings for trademark infringement, the courts shall have the authority, at the right holder's request, to order the destruction of counterfeit goods, except in exceptional circumstances, without compensation of any sort.

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[17] Offering the transmission, routing, or providing of connections for online communications, digital or otherwise, between or among points specified by a user, of electronic documents of the user's choosing; or the necessary technical means by which electronic documents of an originator may be stored and made accessible to a designated or undesignated third party.

Pursuant to the TPP provisions on GI, the Philippines, in granting recognition or protection to GI, must ensure that a later geographical indication cannot override existing trademark rights, whether or not such marks are registered. And should the Philippines amend the IP Code to protect GI through the trademark system, or enact a law for the sui generis protection of GI, these IP Code amendments or sui generis law should include provisions for the opposition and cancellation of GI, in accordance with Articles 18.31 and 18.32 of the TPP. Compliance with this TPP obligation may render future trade agreements with the EU (or any jurisdiction promoting full GI protection) difficult to achieve, if the EU demands full and unqualified recognition for its GI. Thus, the Philippines must carefully consider whether such a possible tradeoff, with regard to access to the European market, would be outweighed by the potential trade benefits of the TPP.

The Philippines must likewise amend the IP Code to accommodate the new TPP obligations on patent protection and enforcement. In connection with the TPP provisions on patentable subject matter, Sections 22 and 26 of the IP Code must be amended to grant protection to *at least one* of the following: new uses of a known product, new methods of using a known product, or new processes of using a known product. The implications of these amendments to access of medicines must be seriously considered. The grant of protection to any one of the required patentable subject matter under Article 18.37.2 of the TPP is in conflict with the Cheaper Medicines Act, as it makes possible the evergreening of pharmaceutical patents and prevents the early entry of generic medicine into the Philippines.

In compliance with TPP Articles 18.46.3 and 18.48.2, the IP Code must also be amended to include provisions for patent term extensions resulting from unreasonable delays in the grant of patents and unreasonable curtailment of effective patent term resulting from delayed marketing approval of pharmaceutical products. In the latter case, the Philippines may alternatively make available a period of additional sui generis protection due to the unreasonable curtailment of the effective patent term. The implications of these amendments to access of medicines must be carefully studied. The extension of patent term due to delay in the grant of patents or marketing approval will prevent the early entry of generic drugs into the country. Should the Philippines join the TPP and similar agreements, the Philippines may negotiate for the maximum transition period granted to a TPP country in connection with the implementation of the TPP patent term extension provisions, to mitigate their negative impact.[18]

Closely connected to these new patent obligations are the data exclusivity and patent linkage provisions of the TPP. Pursuant to TPP Articles 18.50 and 18.52, and in connection with the grant of the first marketing approval for new pharmaceutical products/substances (and new indication, new formulation, or new method of administration; or alternatively, new pharmaceutical products that contain a chemical entity that has not been previously approved), and new pharmaceutical products that are or contain a biologic, the Philippines must ensure that data exclusivity protection (or marketing exclusivity) must be granted for the undisclosed data and other data submitted to secure such marketing approval, for the periods stated in the TPP provisions. The TPP provisions on data exclusivity have the effect of delaying the entry of generic drugs into the country. Thus, their implications on access to medicines and public health must be carefully studied. Should the Philippines join the TPP and similar agreements, the Philippines may negotiate for flexibilities that can mitigate their negative impact, such as those granted to Malaysia and Peru in Annexes 18-C and

[18] Viet Nam has a transition period of five years to put into effect provisions for patent term adjustment due to delay in regulatory approval and a transition period of three years to put into effect provisions for patent term adjustment due to delay in patent grant.

18-D, respectively. Further, the Philippines may negotiate for the maximum transition period granted to a TPP country in connection with the implementation of the TPP data exclusivity provisions.[19]

In connection with the marketing approval of generic medicines, the Philippines must make available either of the two mechanisms of patent linkage under TPP Article 18.51 to afford pharmaceutical patent holders the regulatory mechanism that would enable them to prevent the entry of generic products that possibly infringe on their patents. The TPP provisions on data exclusivity and patent linkage can delay the entry of generic drugs into the country, including noninfringing ones. Their implications on access to medicines and public health must be carefully studied. Moreover, the demands of patent linkage on the human resource and financial capability of the FDA must be carefully considered. Should the Philippines join the TPP and similar agreements, the Philippines may negotiate for the maximum transition period granted to a TPP country in connection with the implementation of the TPP patent linkage provisions.[20]

Pursuant to Article 18.47 of the TPP, and in connection with the grant of the first marketing approval for new agricultural chemical products, the Philippines must ensure that data exclusivity protection (or marketing exclusivity) for a period of 10 years must be provided for the undisclosed data and other data submitted to secure such marketing approval. The implications of this TPP obligation will have to be carefully studied with regard to its impact on food security.

The Philippines must also be prepared to comply with the expanded copyright protection granted under the TPP. The IP Code must be amended to provide for the extension of the periods of copyright protection, from the TRIPS standard of 50 years to 70 years, pursuant to TPP Article 18.63. The Philippines must carefully consider the impact of copyright term extension, not only with regard to the amount of lost savings for royalties payable for works that should already be in the public domain, among other possible negative impacts, but also the long-term benefits of copyright extension. The Philippines must assess whether the copyright term extension would, in the long run, be actually beneficial to the country, considering the economic contribution of the copyright-based industries in the Philippines in terms of contribution to Philippine GDP and employment.

Pursuant to Article 18.77.5 of the TPP, the IP Code must be amended to provide for criminal procedures and penalties for aiding and abetting the willful importation or exportation of pirated copyright goods on a commercial scale.

The Philippines must also provide more effective measures for the deterrence of IP infringement, including the criminalization of certain acts. In connection with the TPP provisions on TPM (Article 18.68) and RMI (Article 18.69), the IP Code must be amended to make the acts identified in these provisions to be independent offenses, separate and distinct from copyright infringement, for which civil and criminal procedures and remedies shall be made available to the copyright or related rights holder. In this regard, the IP Code must also be amended to grant the courts, in civil judicial proceedings concerning such acts, with the authority provided under Article 18.74.17(a) of the TPP, such as the power to grant provisional remedies and award damages. With regard to TPM protection, the Philippines must be mindful that the TPMs to be covered are limited to those designed to prevent or restrict acts related to the exploitation of copyright content and must not include “pure” access controls or TPM the use of which is unrelated to exploitation of copyright content. Concerning RMI

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[19] Vietnam has a transition period of 10 years to put into effect provisions for data exclusivity for biologics, new pharmaceutical products/substances, and new clinical information/combinations.

[20] Malaysia has a transition period of 4.5 years to put into effect provisions for patent linkage.

protection, care must be taken that the possible overlapping of remedies for violations involving nonelectronic RMI will not lead to excessive liabilities for a single offense.

Pursuant to Article 18.78 of the TPP, the IP Code (or other existing laws penalizing the violation of trade secrets) must be amended to include provisions that will ensure that persons have the legal means to prevent trade secrets lawfully in their control from being disclosed to, acquired by, or used by others, **including state-owned enterprises**, without their consent in a manner contrary to honest commercial practices.

Pursuant to Article 18.79.1 of the TPP, the Anti-Cable Television and Cable Internet Tapping Act must be amended: (a) to impose criminal penalties on persons committing the following acts: manufacture, assembly, modification, import, export, sale, lease, or distribution of a tangible or intangible device or system, with knowledge or having reason to know that the device or system meets at least one of the following conditions: (i) it is intended to be used to assist; (ii) it is primarily of assistance; or (iii) its principal function is solely to assist, in decoding an encrypted program-carrying satellite signal without the authorization of the lawful distributor; (b) to provide for civil remedies for a person that holds an interest in an encrypted program-carrying satellite signal or its content and that is injured by an activity described in Article 18.79.1; and (c) to provide for criminal penalties or civil remedies for willfully manufacturing or distributing equipment knowing that the equipment is intended to be used in the unauthorized reception of any encrypted program-carrying cable signal.

To ensure the effective enforcement of the IP rights granted under the TPP, the Philippines must grant additional powers to its judicial and administrative authorities. Pursuant to TPP Article 18.74.13, the IP Code must be amended to provide that in civil judicial proceedings concerning the enforcement of an IP right, the courts shall have the authority, on a justified request of the right holder, to order the infringer or the alleged infringer to provide to the right holder or to the courts, at least for the purpose of collecting evidence, relevant information that the infringer or alleged infringer possesses or controls, which may include information regarding any person involved in any aspect of the infringement or alleged infringement, and the means of production or the channels of distribution of the infringing or allegedly infringing goods or services, including the identification of third persons alleged to be involved in the production and distribution of such goods or services and of their channels of distribution. In this regard, care must be taken that the mere accusation of infringement does not create the foundation for a fishing expedition. Courts should develop appropriate principles in the exercise of this broad power. Moreover, such authority shall be without prejudice to Philippine laws governing privilege, the protection of confidentiality of information sources, or the processing of personal data.

In connection with Article 18.75.2 of the TPP, Rule 58, Section 5 of the 1997 Rules of Civil Procedure, which provides a stricter standard for granting a temporary restraining order (TRO), may have to be amended such that the applicant needs only to provide any reasonably available evidence in order to satisfy the judicial authority, with a sufficient degree of certainty, that the applicant's right is being infringed or that the infringement is imminent. It must be noted, however, that such amendment would have the effect of having two different standards for issuance of TRO in civil cases—a less strict standard for IP cases and a stricter standard for other cases.

Pursuant to TPP Article 18.76.3, Customs Administrative Order No. 6-2002 must also be amended to authorize the Bureau of Customs (BOC) to require a right holder initiating procedures to suspend the release of suspected counterfeit or confusingly similar trademark or pirated copyright goods, to provide a reasonable security or equivalent assurance sufficient to protect the defendant and the competent authorities, and to prevent abuse. Such security or equivalent assurance shall not unreasonably deter recourse to these procedures. The security may be in the form of a bond conditioned to hold the defendant harmless from any loss or damage resulting from any suspension of the release of goods in the event the competent authorities determine that the article is not an infringing good.

Pursuant to Article 18.76.4 of the TPP, if the BoC has detained or suspended the release of goods that are suspected of being counterfeit trademark or pirated copyright goods, the BoC shall be given the authority to either: (a) inform the right holder without undue delay of the names and addresses of the consignor, exporter, consignee, or importer; a description of the goods; the quantity of the goods; and, if known, the country of origin of the goods or (b) at least in cases of imported goods, to provide the required information to the right holder normally within 30 working days of the seizure or determination that the goods are counterfeit trademark or pirated copyright goods. Care should be taken that this provision will not authorize a fishing expedition on the part of right holders and provide the opportunity for companies to use border measures chiefly in order to extract information about competing activities. Moreover, this authority shall be without prejudice to Philippine laws pertaining to privacy or the confidentiality of information.

The Philippines must also establish administrative mechanisms to comply with certain provisions of the TPP. Under Article 18.28 of the TPP on domain names, the Philippines must make available, in connection with the management of its country code top-level domain name, a nonjudicial procedure for the resolution of domain name disputes. In this regard, the Philippines may consider granting the IPOPHL Alternative Dispute Resolution Center jurisdiction over such domain name disputes.

In deciding to join the TPP, the Philippines must carefully consider whether it is in a position to comply with the expanded IP protections provided therein, not only in terms of being able to amend its laws and implement such amendments, but whether the expected benefits of joining the TPP would outweigh the possible negative impacts of such new obligations. If it is not in such a position, the Philippines should establish and implement short-term and long-term strategies that will enable it to accede to the TPP, or any similar agreements, to facilitate its economic integration into regional and international free trade areas, and help the Philippines derive maximum benefits from such integration.

REFERENCES

Correa, C. 2015. Intellectual property in the Trans-Pacific Partnership: Increasing the barriers for the access to affordable medicines. South Centre Research Paper 62. Geneva, Switzerland: The South Centre.

Francisco, E., J. Corpuz, C. Lao, and M. Timbang. 2014. Updating the 2006 WIPO study of the economic contribution of copyright-based industries in the Philippines using methodologies established by the World Intellectual Property Organization. Metro Manila, Philippines: Intellectual Property Office of the Philippines. http://www.ipophil.gov.ph/images/WhatsNew/philippines%20updating%202006%20wipo%20study%20economic%20contribution%20cbis%20final%20report%20edited%2025%20nov%202014.pdf (accessed on January 26, 2017).

International Union for the Protection of New Plant Varieties (UPOV). 1991. International convention for the protection of new varieties of plants—Act of 1991. Geneva, Switzerland: UPOV. http://www.upov.int/export/sites/upov/upovlex/en/conventions/1991/pdf/act1991.pdf (accessed on January 26, 2017).

———. 2007. Examination of the conformity of the Philippine Plant Variety Protection Act of 2002 with the 1991 Act of the UPOV Convention. Proceedings of UPOV 24th Extraordinary Session C (Extr.)/24/2, March 30, Geneva, Switzerland.

Republic Act No. 8792. 2000. An act providing for the recognition and use of electronic commercial and noncommercial transactions and documents, penalties for unlawful use thereof and for other purposes. Manila, Philippines: Congress of the Philippines. http://www.fda.gov.ph/attachments/article/29048/RA%208792%20E%20Commerce%2Law.pdf (accessed on January 10, 2017).

Republic Act No. 9150. 2001. An act for the protection of layout-designs (topographies) of integrated circuits, amending for the purpose certain sections of Republic Act No. 8293, otherwise known as the Intellectual Property Code of the Philippines and for other purposes. Manila, Philippines: Congress of the Philippines. http://www.wipo.int/wipolex/en/text.jsp?file_id=224674 (accessed on January 26, 2017).

Republic Act No. 10372. 2012. An act amending certain provisions of Republic Act No. 8293, otherwise known as the "Intellectual Property Code of the Philippines" and for other purposes. Manila, Philippines: Congress of the Philippines. http://www.ncda.gov.ph/disability-laws/republic-acts/republic-act-no-10372-an-act-amending-certain-provisions-of-republic-act-no-8293-otherwise-known-as-the-intellectual-property-code-of-the-philippines-and-for-other-purposes/WT/DS362, 2009 (accessed on January 10, 2017).

The Straits Times. 2017. Saving the Trans-Pacific Partnership: What are the TPP's prospects after the US withdrawal? http://www.straitstimes.com/asia/se-asia/saving-the-trans-pacific-partnership-what-are-the-tpps-prospects-after-the-us (accessed on June 27, 2017).

Trans-Pacific Partnership Agreement. 2015. Chapter 18: Intellectual property. Washington, D.C.: Office of the United States Trade Representative. https://ustr.gov/trade-agreements/free-trade-agreements/trans-pacific-partnership/tpp-full-text (accessed on January 10, 2017).

Weatherall, K. 2015. Section by section commentary on the TPP final IP chapter—Part 2—Copyright. Berkeley, CA: Bepress. https://works.bepress.com/kimweatherall/32/ (accessed on January 26, 2017).

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The Philippines' Readiness for the TPP: Focus on Investor-State Dispute Settlement

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ABSTRACT

While the Trans-Pacific Partnership (TPP) has seen some rough sailing with the United States' withdrawal therefrom, it remains the acknowledged state of the art for current economic cooperation agreements, and it stands out as the first of its kind as a megaregional agreement. With the remaining TPP 11[2] having signed the new Comprehensive and Progressive Trans-Pacific Partnership on March 8, 2018, and the ASEAN plus six trading partners signaling their continuing work on the Regional Comprehensive Economic Partnership as the second megaregional in the works, this article reviews and analyzes investor protection clauses of the original TPP in the context of Philippine policy concerns and the attempt of the TPP's provisions to both enhance and balance investor protection with good governance in the areas of environment and labor regulations.

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[2] Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Viet Nam

INTRODUCTION

The Trans-Pacific Partnership Agreement

The Trans-Pacific Partnership (TPP) was formally signed on February 4, 2016 in Auckland by 12 countries with the aim of regional economic integration, harmonization of regulations, and elimination of tariffs and quotas on goods and services, among others. It will enter into force 60 days after all original signatories notify the Depositary (in this case, New Zealand) in writing of the completion of their applicable legal procedures or, in the event that not all original signatories notify the Depositary, 60 days after a two-year ratification period (or anytime thereafter) where original signatories comprising at least 85 percent of the combined gross domestic product (GDP) of the TPP economies notify the Depositary. Since the presentation of this paper, with the United States (US) having officially notified its withdrawal from the TPP and the remaining 11 signatories expressing their commitment to pursue the TPP without the US, the 85-percent threshold is expected to be decreased given the reduction in the size of the TPP combined GDP.

Of the 30 chapters and 4 annexes of the TPP, this assessment study focuses on Chapter 9, particularly its provisions governing investor-state dispute settlement (ISDS), the protection of investments, and the treaty exceptions relating to labor and the environment.

ISDS has traditionally been promoted as a key driver of increased foreign direct investment (FDI) into a host country by assuring foreign investors the full protection of their investments under international law. This is done through the binding legal mechanisms provided to foreign investors that permit the state to be called to arbitration when the latter has purportedly violated the provisions of a Bilateral Investment Treaty (BIT). As part of strengthening the rule of law framework and increasing the confidence of foreign investors that are wary of being subjected to the rigors of domestic judicial proceedings should a dispute arise, the TPP ISDS provisions afford normative protection to all TPP investors and grant them the right to collect monetary damages, as well as challenge the TPP host member's conduct, including any expropriation measures, all through binding arbitration and panel proceedings.

State-to-state dispute settlement under Chapter 28

From the outset, it should be made clear that the arbitration panels established under Chapter 9 for investor and state disputes are distinct from the arbitration panels for state-to-state dispute settlement (SSDS) under Chapter 28.

While ISDS relates legally as a remedy mechanism given to private investors for Chapter 9 Section A violations, SSDS under Chapter 28 deals with compliance or implementation violations by state parties and allows TPP states to remedy treaty violations by their TPP partners.

These are two distinct dispute settlement systems, and a specific situation does overlap in the event that a Chapter 9 award is not complied with by a state party, as for example, a government fails to pay monetary damages pursuant to a Chapter 9 ISDS award. In this situation, a TPP party can then be sued for violation of its treaty obligation to comply and abide in good faith with ISDS awards[3] and a Chapter 28 SSDS proceeding, which could in turn lead to remedies for treaty violations, such as suspension of concessions or monetary damages.[4]

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[3] TPP Article 9.28 (11)

[4] TPP Article 28.19

TPP ISDS Chapter 9A – The investor protections

The Investments Chapter requires that parties to the TPP accord "no less favorable" treatment to investors and investments from another party than what it accords its own investors/investments or those of another party or nonparty. It also provides for a "minimum standard" in the treatment of investments, including the applicability of customary international law, fair and equitable treatment, and full protection and security.

The state's sovereign right of expropriation is limited to instances when all of the following requirements are met:

a) Public purpose
b) Nondiscrimination
c) Prompt, adequate, and effective compensation
d) Due process of law

It does not allow for a state to include performance requirements on the investment (such as preference for domestic goods, export performance, restriction of sale within the territory, technology transfer requirements).[5]

Article 9.10 prohibits state parties from requiring that only persons of a particular nationality can be appointed to senior management positions. However, parties are allowed to require that a "majority of the board of directors" must be of a particular nationality. It remains to be seen if this will be interpreted to mean a simple majority, or as in the Philippines' case on certain industries, a higher majority.

The consistent inclusion of investor-state dispute settlement provisions in trade agreements is a manifestation of the importance given by states on investor protection. The TPP's ISDS provisions are merely the latest iteration of a long-accepted practice in international trade and investment and economic cooperation agreements. ISDS cases filed under the United Nations Conference on Trade and Development (UNCTAD) have increased from 100 between 1987 and 2002 to 600 between 2002 and 2013, with 57 being filed in 2013 alone.

The practice is not without controversy. A common criticism is that allowing an investor to dispute an act of a sovereign nation is in itself an attack on the very sovereignty of that nation. A clash between profit and public good is central to criticisms of ISDS mechanisms. From a sociocultural context, it can be a disconcerting experience for local or national officials to realize that a panel of three foreign experts sitting thousands of miles away could issue an order that requires a change in their regulatory policies, or even more directly, payment of a monetary claim. The criticism is magnified when seen in the context of disputes, for example, between the commercial interests of an investor on one hand, and environmental or health policy on the other.

THE TPP ISDS MECHANISM

TPP ISDS: Chapter 9B – The legal mechanism

The TPP provides for a mechanism that allows investors from state parties to proceed against a host state that it perceives to have breached its commitments under the agreement.

[5] This is subject to the exceptions allowed by Article 9.12 on nonconforming measures.

Section B of Chapter 9 provides for arbitration of disputes between an investor and a state party that is transparent,[6] neutral, and through internationally accepted procedures under the International Centre for Settlement of Investment Disputes (ICSID) or United Nations Commission on International Trade Law (UNCITRAL). It also provides nondisputing parties an opportunity to be heard through *amicus curiae*[7] and nondisputing party submissions.[8] The former, however, is subject to the permission of the arbitration panel.

It also prohibits forum shopping by way of requiring a waiver from the disputing party of *alternative* venues.[9] However, the claimant is allowed to seek interim injunctive relief for the sole purpose of preserving the claimant's or the enterprise's rights and interests during the pendency of the arbitration, as long as it does not include a prayer for an award for damages.[10]

The TPP ISDS section provides that prior to any dispute proceedings, every effort should be made between the investor and the state to resolve the matter. Article 9.17 states that the investor and the state "should initially seek to resolve the dispute through consultation and negotiation, which may include the use of nonbinding, third party procedures, such as good offices, conciliation, or mediation". A dispute under ISDS can only be initiated six months from the start of consultation and negotiation, if the matter was not resolved.

Under Section 9.18, claims can be made when there is a breach of any provision of: Section A of Chapter 9, an investment authorization, or an investment agreement, and only if there is loss or damage incurred. As it is, however, grounds for claims under Section A are already broad compared to other investment agreements (i.e., only claims against treaty breaches are allowed under the Association of Southeast Asian Nations [ASEAN] Comprehensive Investment Agreement [ACIA]). The claimant, at his election, can choose from among the following arbitration rules: a) ICSID, b) ICSID Additional Facilities, or c) UNCITRAL.[11] If both the claimant and respondent agree however, they can choose to proceed under other arbitration rules.[12] The statute of limitations on claims is three years and six months "from the date on which the claimant first acquired, or should have first acquired, knowledge of the breach alleged".[13]

The arbitration panel consists of three arbitrators, with each disputing party appointing one arbitrator each, and the secretary general of ICSID selecting the presiding arbitrator who shall not have the same nationality as the respondent party or the claimant, unless otherwise agreed upon.[14] It shall be held in a venue agreed upon by the parties or the tribunal, provided that it is under the jurisdiction of a state signatory to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards, otherwise known as the New York Convention. While Article 9.24 is explicit in the use of international law and the TPP agreement as the governing law in resolving disputes based on the TPP Agreement, it is noteworthy to mention that it includes as a footnote, the statement that "[f] or greater certainty, this provision is without prejudice to any consideration of the domestic law of the respondent when it is relevant to the claim as a matter of fact".[15] The applicability of domestic law

[6] TPP Article 9.23
[7] TPP Article 9.22 paragraph (par.) 3
[8] TPP Article 9.23 par.2
[8] TPP Article 9.20 par.2
[10] TPP Article 9.20 par.3
[11] TPP Article 9.18 par.4
[12] TPP Article 9.18 par.4(d)
[13] TPP Article 9.20 par.1
[14] TPP Article 9.21
[15] TPP Chapter 9 Footnote 34

is more explicit if the dispute arises, not from a provision of the TPP Chapter on Investments but from an investment authorization or investment agreement. In such cases, the TPP clearly indicates that the applicable laws are the following:

a) The rules of law applicable to or specified in the pertinent investment authorization, or investment agreement, or as the disputing parties may agree otherwise or
b) If, in the pertinent investment agreement, the rules of law have not been specified or otherwise agreed:
    - the law of the respondent, including its rules on the conflict of laws or
    - such rules of international law as may be applicable.

Arbitral awards are limited to monetary damages and any applicable interest and restitution of property,[16] but may include costs of arbitration and attorney's fees, particularly in frivolous actions.[17] Punitive damages are not allowed.[18] Awards are not immediately executory. The successful party must wait between 90 and 120 days (depending on which arbitral rules are applied) before they can seek enforcement, and only if within the said period there has been no request to revise or annul the decision.

Definition of an investment

The ACIA and the ASEAN–Australia–New Zealand Free Trade Area had defined investments as "[e] very kind of asset owned or controlled by an investor".

The TPP includes in its definition of an investment those that are owned indirectly by an investor, and goes further to include assets that have the "characteristics of an investment", including "commitment of capital or other resources, the expectation of gain or profit, or the assumption of risk."[19]

Minimum Standard Treatment

Minimum Standard Treatment is a staple of trade agreements that was developed through customary international law. It requires that a host state treat foreign investors equally and fairly, and without prejudice.

The TPP expressly provides that equitable treatment as defined by customary international law is enforceable. This builds upon the definition of the Minimum Standard Treatment under the North American Free Trade Agreement (NAFTA) which only speaks of "international law", which caused divergent views on whether this covered only treaties or conventions. The ACIA does not even speak of international law at all when it defines the parameters from which to base equity in the treatment of investments.

"Most favored nation"

The most favored nation clause, likewise a staple in bilateral and multilateral trade agreements, requires host states to treat investors of one member-state equally as it treats investors from other states. The TPP's definition of this clause clarifies that this only applies to substantive norms, and not procedural norms. It states that "[f]or greater certainty, the treatment referred to in this Article does

[16] TPP Article 9.28
[17] TPP Article 9.28 par.4
[18] TPP Article 9.28 par.6
[19] TPP Article 9.1

not encompass international dispute resolution procedures or mechanisms, such as those included in Section B." It is clear, therefore, that under the TPP, requiring investors from member-states to go through dispute resolution proceedings, when this is not accorded nonmember-states, is not a violation of the TPP. This affords better predictability and avoids the divergent arbitral rulings that plagued other trade agreements.[20]

Enforcement

A significant improvement in the TPP is that it provides investors with an avenue to elevate their case should a member-state fail to comply with the ruling of the arbitration team. Article 9.28.11 provides for the creation of a panel where it may produce a determination that the failure to abide by or comply with the final award is inconsistent with the obligations of this agreement. It may also prepare a recommendation that the respondent should abide by or comply with the final award. The significance of this is that, by making such a finding, the panel elevates the dispute into one between state parties under Article 28, and therefore becomes more compelling.

Treatment in cases of strife

Most investment agreements provide for restitution, compensation, and the like when an investment is affected by armed or civil conflict.[21] Most require that equal treatment be given to all investments that incurred losses by reason of the strife, insofar as restitution and compensation are concerned. For example, a member-state cannot legislate that local investments will have priority over claims of damages.

The TPP expressly provides for liability in situations of requisitioning or the unnecessary destruction of the investment or part thereof by the member-state, which shall be liable for compensation, restitution, or similar modes.[22]

An investor therefore enjoys more certainty in terms of recovering their losses when bringing a claim for damages and restitution before the TPP.

Amicus curiae

The TPP[23] allows for the filing of *amicus curiae* (literally friend of the court) briefs, or nondisputing party briefs. The notable trend in trade agreements is the provision for amicus curiae in dispute proceedings (Levine 2011).

ISDS, as opposed to regular commercial arbitration, involves the state and therefore will have implications beyond the interest of the two parties. It has been argued that ISDS disputes are less commercial disputes than they are "global administrative law" disputes, arbitrating issues concerning state sovereignty (Levine 2011). It is from this premise that amicus curiae are being incorporated as an integral part of trade agreements. By allowing nondisputing parties to participate in the discussion, a broader view of the issue, outside and beyond the interest of the investor and the state, can be considered (Levine 2011). For example, nongovernment organizations can provide subject matter expertise on the environment or human rights—subjects that may not be the primary interest of the disputing parties.

The TPP more specifically outlines the procedural requirements for an amicus curiae including the requirement that the amicus curiae disclose any affiliation to "any disputing party; and identify

[20] Supra note (Ko-Yung 2015)

[20] Article 1105 par.2 of NAFTA, Article 12 of ACIA, Article 11.5 par.4 of the Korea Free Trade Agreement

[22] TPP Article 9.6

[23] TPP Article 9.22 par.3

any person, government, or other entity that has provided, or will provide, any financial or other assistance in preparing the submission".[24]

Consolidation

The TPP allows for the consolidation of cases. The arbitration panel may, subject to the provided standards, approve a request of one party to consolidate.

Opting out

States appear to be free to opt out of the ISDS, or at least exempt certain investment policies from it. Annex 9-H of the Investment Chapter lists down policies such as those from Australia, Canada, Mexico, and New Zealand that are not covered by ISDS jurisdiction.

Criticisms

The potential ramification of an ISDS clause does suggest that the sovereignty criticism is not without merits. It could be argued that a government should not enter into international agreements that would undermine its ability to actively and freely alter its public policies. The criticism rests on constitutional democracy precepts of legislative or regulatory prerogatives, that it is not for the courts or judicial authorities, international or national, to protect corporations against policy decisions reflected in laws and regulations made by democratically elected governments (Abbott et al. 2014). As with any international agreement, relinquishing a certain amount of control is not novel and each state has to consider the economic benefits to be gained in investment sectors in exchange for a higher and internationally binding level of quasi-judicial oversight and assurance of ISDS. Generally speaking, research findings also show that ISDS proceedings by investors are more often initiated against states with weak institutions and rule of law, such as Argentina and Venezuela. On the other hand, however, they also show that arbitral panels often rule in favor of the state, and that, in the event of an award to the investor, the claimant investors are awarded on the average a fraction or much less than the claimed amount of damage or compensation (Miller and Hicks 2015).

In 1994, R.J. Reynolds Tobacco Company successfully challenged Canada under NAFTA's Investment Chapter as part of an international strategy to lobby against Canada's proposed 'plain packaging' legislation concerning cigarettes. In 2012, a similar case emerged when Philip Morris, among other tobacco companies, intended to challenge Australia's plain packaging legislation under the Australia–Hong Kong Bilateral Investment Treaty (ATS No. 30). However, in December 2015, the Permanent Court of Arbitration Tribunal unanimously declined jurisdiction (Philip Morris Asia v. Australia, PCA Case 2012-12).

In 2015, the system of ISDS was criticized by Argentina following disputes with a foreign investor. Between 2003 and 2007, during the financial crisis, 25 percent of all ISDS cases in ICSID were launched against Argentina mainly challenging the emergency measures implemented in order to address their precarious domestic economic situation. If all the investors seeking compensatory claims were awarded their claimed damages, it would have amounted to USD 80 billion. As of 2015, the awarded claims in favor of investors amounted to USD 900 million (Sahargun 2006; Dugan et al. 2012). The flaws with the ISDS system were prominent during this period as the tribunals were reluctant to recognize a state's exceptional financial circumstances demanding swift emergency laws. Breaching substantive clauses of BITs in favor of rectifying the economy was not granted as a

[24] TPP Article 9.22 par.3

legitimate defense. In practice, it echoes the sovereignty criticism mentioned above. Is it legitimate for an international tribunal to rule on economic policies and implementation measures carried out by a sovereign state, which has been introduced in order to stabilize the state?

Indeed, Bolivia, Ecuador, and Venezuela have decided to withdraw from several BITs in addition to withdrawing from the ICSID. South Africa will not renew expiring investment agreements and has withdrawn from some BITs. Indonesia, according to some news reports, was also considering terminating more than 60 BITs (Bland and Donnan 2014).

On the other hand, research indicates that there are positive influences to be drawn from BITs (Colen et al. 2014). The increase stems from the legal certainty that investors can rely upon in terms of the rule of law, such as transparency, stability, and neutral judicial recourse which has been supported through studies by Grosse and Trevino (2005), Neumayer and Spess (2005), Gallagher and Birch (2006), and UNCTAD (2009), among others. The results should not be considered conclusive as others have suggested that BIT may not be the cause of increased FDI, and even in some aspects retard the FDI (Hallward-Driemeier 2003). The fact that certain corporations invest through certain countries, by forum shopping, to protect its investments in a third country does suggest that the availability of a system of ISDS and neutral legal protection can be a determining factor in the investment strategy and decisionmaking of international private investors (Sauvant and Sachs 2009).

TPP exceptions

The TPP includes specific clauses and provisions that allow certain carve outs and exceptions that assure state governments of broader discretion in the areas of environment, labor, and tobacco control as well as a general "denial of benefits" provision that is to be applied on a case-specific basis.

Denial of benefits/Indirect claims

Article 9.14 also allows for situations when a state may deny investors the remedial measures otherwise provided them under the ISDS. Essentially, these allow state parties to deny benefits in situations where an investment of, or from a nonparty state otherwise not qualified under Chapter 9, attempts to circumvent the agreement by establishing an enterprise in a party-state.

Environmental issues

The ISDS is not unique to the TPP. Many trade agreements have ISDS provisions. As the latest iteration of ISDS in trade agreements however, the TPP has the advantage of foresight and claims to have addressed certain loopholes or contentious issues that have been the source of criticism of prior trade and investment agreements, primarily due to what many perceive to be overstepping the sovereignty of states.

For example, while Article 9.7 as a general rule prohibits indirect expropriation, which is defined to exist when "an action or series of actions by a Party has an effect equivalent to direct expropriation without formal transfer of title or outright seizure,"[25] Annex 9-B explains that this does not preclude a state from issuing regulations that are "designed and applied to protect legitimate public welfare objectives, such as public health, safety, and the environment". The state therefore cannot, in the general sense, be accused of indirect expropriation under the ISDS if the deprivation of property of the investment is caused by justified regulations on health, safety, and environment. This appears

[25] TPP Annex 9-B par.3

to address concerns particularly from environmental groups that ISDS provisions prioritize private investments over the right of the state to protect the environment.

To be sure, Article 9.15 states that "[n]othing in this Chapter shall be construed to prevent a Party from adopting, maintaining, or enforcing any measure otherwise consistent with this Chapter that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental, health, or other regulatory objectives."

While the TPP is trumpeted as a milestone in environmental protection on trade agreements, as including for the first time enforceable and significant provisions on environmental protection (Patel 2015),[26] it remains to be seen how this will be reflected in the application of the TPP's ISDS.

For example, in the Philippine setting, will the state be protected from a case filed by a foreign mining company that was denied a mining permit by the Mines and Geosciences Bureau?

Under the NAFTA, in the case of Bilcon of Delaware Inc. et al. versus Canada (2015), an investor was denied an application to develop a quarry in Nova Scotia, Canada, based on the recommendation by a Joint Review Panel (JRP) that the quarry violated the "community core values" of the affected citizens. The investors argued that Canada violated its obligations under NAFTA to apply an international minimum standard of fair treatment under Article 1105 which states that "[e]ach Party shall accord to investments of investors of another Party treatment in accordance with international law, including fair and equitable treatment and full protection and security." They claimed that by encouraging investments in the mining industry, Canada created a reasonable expectation from investors that their licenses would be approved, or at least, that they would be judged based on an expected criterion.

The arbitration panel agreed with the investors. According to the panel, it was not fair and equitable that an investor was encouraged by a state to invest in its territory—and who in fact invested therein based on such encouragement—to be denied the opportunity to proceed with the investment. Moreover, by relying heavily on community core values which, by the admission of the JRP, was a form of community referendum, the JRP's decision was "effectively to impose a moratorium on projects of the category involved here—a kind of zoning decision".[27]

According to the NAFTA panel, encouraging investors to invest, and requiring them to comply with regulations that are, in the end, subject to arbitrary policy outside the technical requirements set forth, violates the minimum standard of fair treatment.

The applicability of such a ruling in the Philippines, should it be a signatory to the TPP, leads to an interesting issue particularly in relation to the often-cited Supreme Court decision in Oposa v. Factoran (1993). In the novel case filed by minors who claim to represent their generation "as well as generations yet unborn", petitioners seek that all existing timber licenses be cancelled by the government and for it to cease from accepting or approving new timber licenses.

The trial court dismissed the case because it found that what petitioners were asking for would amount to a violation of the nonimpairment of contracts clause in the 1987 Philippine Constitution, particularly, the impairment of the licenses granted to the logging companies. The Supreme Court, in disagreement, stated that to limit the state to this interpretation would provide "undue and unwarranted benefits and advantages to the timber license holders because he would have forever

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[26] Rohan Patel, US Special Assistant to the President and Deputy Director of Intergovernmental Affairs, states that "the TPP is packed with fully enforceable, first-ever provisions that can affect real-world change and address environmental challenges and crises that threaten ecosystems, livelihoods, and economies alike."

[27] Bilcon v. Canada par. 454

bound the government to strictly respect the said licenses according to their terms and conditions regardless of changes in policy and the demands of public interest and welfare" (Oposa v. Factoran 1993). It further cited Section 20 of the Forestry Reform Code[28] which states that:

> "*Provided*, that when the national interest so requires, the President may amend, modify, replace, or rescind any contract, concession, permit, licenses, or any other form of privilege granted herein."

The Supreme Court, in other words, held that license holders do not have an absolute right to the continuity of their license, if it later on becomes contrary to state policy. In the Philippines, perfected licenses cannot bind the state to a certain policy. The state can revoke licenses should it adopt a policy that would be violated.

It would also be interesting to study how a TPP ISDS panel might rule in a scenario where state policy is declared unconstitutional. Will the state be bound by its policy which investors had relied upon even if, years after, the law which had provided for that policy is found to be unconstitutional?

It will be remembered that provisions of the Philippine Mining Act of 1995 were found to be unconstitutional by the Supreme Court on January 27, 2004, particularly the provisions that allow for Financial and Technical Assistance Agreement (FTAA) with foreign investors (La Bugal-B'laan Tribal Association et al. v. Ramos 2004).[29] Ten months thereafter, on December 1, 2004, the Supreme Court did a complete turnaround and found FTAAs to be constitutional. In 2012, President Aquino issued Executive Order (EO) 79 which set a moratorium on new mining licenses. In this context, would the panel recognize the right of an investor that relied upon the FTAA policy under the Philippine Mining Act (prior to it being declared unconstitutional) during its deliberations (held prior to it being declared constitutional again)? Would the Philippines be liable to investors who were denied licenses due to EO 79 because they made their initial investments prior to its issuance and arguably, had reasonable expectations for their license to be granted?

It appears that conflict of laws can be avoided. The TPP signatory state is not bound to violate its own policy (and therefore its sovereignty) in order to comply with arbitration findings. Awards in the TPP's ISDS are limited to monetary damages and restitution of property. It cannot require specific performance. Neither is it allowed to award punitive damages. The panel, therefore, using the above scenario as an example, need not decide on the primacy of domestic law versus the "fair and equitable treatment" guarantee of the TPP. This is because it cannot compel the state to issue a license to the mining company anyway. It could only ask the state to pay back the investments made, and order the restitution of property, if any.

The ISDS provision in this scenario, therefore, creates equilibrium, so to speak, where the state can continue to exercise its sovereign right to define policy that it deems best for its constituents, subject to its obligation to compensate investors who may suffer losses resulting from the change in policy. An investor is, therefore, protected by the knowledge that its investments would be returned should the state no longer support its investment due to a policy shift or change in regulatory priorities.

Labor and management

Republic Act (RA) 9285 states that labor disputes covered by the Labor Code cannot be submitted to arbitration. A labor dispute as defined by the Labor Code includes "any controversy or matter

[28] Presidential Decree No. 705
[29] G.R. 127882 January 27, 2004

concerning terms and conditions of employment or the association or representation of persons in negotiating, fixing, maintaining, changing, or arranging the terms and conditions of employment, regardless of whether the disputants stand in the proximate relation of employer and employee". This essentially covers only disputes between employers and employees and not labor policies.

Therefore, should the country sign the TPP, investors are free to bring suit against the Philippines if it feels that its labor policies have violated its right as an investor under the TPP.

Minimum wage

Chapter 19 of the TPP on Labor Rights includes general provisions affirming International Labour Organization (ILO) standards, and the need for TPP states to adopt labor laws and rules that govern acceptable conditions of work, including minimum wages rules.[30]

In the case of Veolia Propreté v. Arab Republic of Egypt,[31] the investor was affected by the changes in the nation's minimum wage requirements. Egypt had entered into a waste management contract with Veolia that included a cost-overrun clause wherein the government undertakes to increase payments to the company should the government promulgate laws or regulations that would cause any increase in the cost of performance. In this case, Egypt had increased its minimum wage requirement, and Veolia sued the Egyptian government to pay for cost overruns incurred related to the wage increase. The case is still pending in arbitration.

Should a case be filed against the Philippine government for costs accrued due to an increase in the minimum wage, the issue would be more of a contractual controversy than labor. In this situation, the tribunal could only rule whether or not the Philippines has to pay the private company more. It may not rule for the minimum wage law to be amended.

Nationality of directors

Article 9.10 of the TPP states that "[n]o Party shall require that an enterprise of that Party that is a covered investment appoint to a senior management position a natural person of any particular nationality."

On the other hand, Article XII Section 14 paragraph (par.) 2 of the Philippine Constitution states that "the practice of all professions in the Philippines shall be limited to Filipino citizens, save in cases prescribed by law." The exception prescribed by law can be found in Article 40 of the Labor Code which states that an employment permit can be issued to a foreigner only "after a determination of the nonavailability of a person in the Philippines who is competent, able, and willing at the time of application to perform the services for which the alien is desired". The exception to the exception is for enterprises registered in preferred areas of investments, in which case, they may be permitted to work upon the recommendation of the agency supervising the enterprise.

Can an investor sue the Philippine government for its failure to provide a work permit to a foreigner it appointed to a senior management position? It would appear that this may be so unless properly reserved as an exception.

The TPP does, however, allow the state parties to require that a "majority of the board of directors" be residents or of a particular nationality,[32] and an example of this would be the residency requirement in Section 23 of the Philippine Corporation Code. In this situation, the existing Philippine provision is consistent with the TPP provisions.

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[30] TPP Article 19.3 (2)

[31] ICSID Case No. ARB/12/15

[32] TPP Article 9.10(2)

Labor standards
The TPP devotes an entire chapter on labor standards, primarily expressing the state parties' commitment to the ILO declaration and universally accepted labor standards such as freedom of association, elimination of forced labor and child labor, and the prohibition of discrimination.[33]

Importantly, it also contains a "nonderogation clause" which states that it is inappropriate for member-states to encourage trade or investment by weakening or reducing the protections afforded in each party's labor laws.

While grounds that can be raised in ISDS are only those found under the chapter on investments, the spirit of Chapter 19 should still be upheld when arbitrators decide the cases before them with the general mandate of raising labor standards and preserving the welfare of workers.

Tobacco control
Annex 9-B par. 3 of the TPP explains that the prohibition against indirect expropriation would not preclude a state from issuing regulations that are "designed and applied to protect legitimate public welfare objectives, such as public health, safety, and the environment".[34] The state, therefore, cannot be found liable for indirect expropriation if the alleged loss of an investment is caused by justified regulations on health, safety, and environment. This appears to address concerns, particularly from environmental groups, that ISDS prioritizes business interests over the right of the state to protect public health, safety, or the environment.

Article 9.15 clarifies that "[n]othing in this Chapter shall be construed to prevent a Party from adopting, maintaining, or enforcing any measure… that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental, health, or other regulatory objectives."

This appears to give the state leeway in developing its local regulations. In the example of tobacco, this can be construed to mean the installation of health warnings in packaging, or the prohibition of smoking within a certain age group. The TPP provides for a first-time carve out allowing any state party to remove from the ISDS system any claims relating to tobacco control measures. Chapter 29.5 specifically allows a state party to opt out and deny benefits of ISDS, both in advance or even at the later stage of the pendency of an ISDS proceeding relating to tobacco control measures.

PHILIPPINE GAP ANALYSIS: POLICY RECOMMENDATIONS

ISDS is not new to the Philippines as it has been an integral part of many bilateral investment agreements that the Philippines had entered into and ratified, which has reached a total of 38 (UNCTAD 2009). In terms of actual investment arbitrations, for example, the NAIA Terminal 3 controversy was brought before ICSID by the German investor, Fraport AG (ICSID 2012), pursuant to the Germany-Philippines BIT signed by the Ramos administration on April 18, 1997, and which entered into force on February 1, 2000. Similarly, the Philippines was also brought before ICSID in the leading case of SGS v. Philippines, pursuant to the Philippines-Switzerland BIT also signed by the Ramos administration on March 31, 1997, and which entered into force on April 23, 1999. In

[33] TPP Chapter 19
[34] TPP Chapter 19

this case, where the author acted as one of the counsels for the Philippines, the Swiss investor sought settlement of payments due for preshipment inspection services rendered.[35]

It is noteworthy that these specific cases and even other cases involving the Philippines have since been resolved and settled among the parties, consistent with the very objectives of the ISDS system of enhancing the rule of law and the provision of a neutral forum by which disputes can be processed without a disruption of the economic relations between the state parties. As business partnerships and investments grow, a certain low percentage of these ventures could be expected to result in a failure or a dispute, and the more efficiently these disputes can be processed through an impartial international system of ISDS, the less disruption there would be in the economic relations between the state parties. The prior experience of the Philippines with the ISDS system, and the resulting full satisfaction and compliance, is the best assurance to potential future investors that there is indeed available to them an ISDS system that provides for a rule of law and a neutral mechanism to resolve any potential future dispute. This aspect is at the core and foundation of the system of BITs and economic partnership agreements, that problems can be resolved and general economic relations can continue under an international rule of law system.

The Philippines also has mature legislation on arbitration. RA 9285 or the Alternative Dispute Resolution Act of 2004 addresses the recognition and enforcement of foreign arbitration proceedings.

Enforcement of awards

Article 9.28 par. 10 states that each party shall provide for the enforcement of an award in its territory. Section 42 of RA 9285 states that the New York Convention shall govern the enforcement of arbitral awards made under that convention.

Philippine law takes a more conservative approach with regard to awards made outside of the New York Convention. These will be recognized and enforced by local courts only if said state "extends comity and reciprocity to awards made in the Philippines".[36]

Interestingly, however, Section 43 states that courts may "enforce a nonconvention award as a convention award". Rule 13.14 states that enforcement shall be "as if it were a Convention Award". It appears, therefore, that in the Philippines, the standard for recognition of non-New York Convention is the New York Convention. A disjunction appears when the arbitral award was made under ICSID, for example, and in a non-New York convention state. While both ICSID and the New York Convention have safeguards against patently wrong awards, the remedial measure in ICSID is defined within the ambit of the arbitration process, while the New York Convention prescribes when domestic courts can refuse to recognize arbitral awards.

Article 54 par. 1 of ICSID states that "[e]ach Contracting State shall recognize an award rendered pursuant to this Convention <u>as binding</u> and enforce the pecuniary obligations imposed by that award within its territories <u>as if it were a final judgment</u> of a court in that State." Once an award from an ICSID proceeding reaches Philippine shores, if the ICSID Convention is to be followed, it should have the force and effect of a final judgment and all the court has to do is enforce it. However, if Philippine courts would consider the award as a "convention award", then it may refuse to recognize it based on grounds defined by Rule 13.4 of the Special Rules of Court on Alternative Dispute Resolution which practically copies verbatim the grounds enumerated in the New York Convention.[37]

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[35] A third ICSID case involving the Philippines is currently pending under the Belgium-Philippines BIT of 1998.
[36] Rule 13.12 Special Rules of Court On Alternative Dispute Resolution A.M. No. 07-11-08-SC
[37] Rule 13.12 Special Rules of Court On Alternative Dispute Resolution A.M. No. 07-11-08-SC

If this interpretation is to be followed, parties on the losing end of TPP ISDS awards under ICSID rules will have another layer to contest the award in the Philippines.

To date, there is still no known case where the Supreme Court upheld a lower court's refusal to recognize a foreign arbitral award. The Supreme Court has taken a liberal stance insofar as recognizing foreign arbitral rulings to the point of recognizing the personality of a corporation not doing business in the Philippines to petition for the recognition of a foreign arbitral award, a privilege normally denied such corporations under regular court procedure.[38]

Appeals of awards

Arbitration proceedings are generally final and parties cannot resort to an appeal. The TPP does not provide for an appeal mechanism. However, they do provide an opening for such a remedy in the future. Article 9.22 par. 11 of the TPP, in what may appear to be a small concession to critics who fear the inability of a sovereign state to correct a possible erroneous decision, states that:

> In the event that an appellate mechanism for reviewing awards rendered by investor-State dispute settlement tribunals is developed in the future under other institutional arrangements, the Parties shall consider whether awards rendered under Article 9.28 (Awards) should be subject to that appellate mechanism. The Parties shall strive to ensure that any such appellate mechanism they consider adopting provides for transparency of proceedings similar to the transparency provisions established in Article 9.23 (Transparency of Arbitral Proceedings).

The Supreme Court has on occasion ruled that parties may not stipulate among themselves the availability or unavailability of an appeal. In Chung Fu Industries (Philippines) Inc. v. Court of Appeals (GR No. 96283, February 25, 1992), the Court said:

> "Where the parties agree that the decision of the arbitrator shall be final and unappealable as in the instant case, the pivotal inquiry is whether subject arbitration award is indeed beyond the ambit of the court's power of judicial review. We rule in the negative."

It ruled that the courts can intervene in an arbitral award in cases such as mistake fraud, violence, intimidation, falsity, or concealment of documents. A court's refusal to entertain such contests on the validity of an arbitral ruling is grounds for a petition for certiorari under Rule 65, according to the Court.

It can be argued that this 1992 decision which was based primarily on Civil Code provisions on arbitration and compromise is no longer valid doctrine after the legislation of the Alternative Dispute Resolution Act of 2004, which clearly lays down the grounds when a court can refuse to recognize a foreign arbitral ruling.

Transparency and confidentiality

Transparency of arbitral proceedings is widely stipulated in trade agreements. The TPP includes provisions that arbitral proceedings shall be transparent as a general rule. Confidential information will have to be identified as such by a party before it may be exempted from the transparency provision.

[38] Rule 13.12 Special Rules of Court On Alternative Dispute Resolution A.M. No. 07-11-08-SC

In Philippine law, however, it is the opposite. Confidentiality is the general rule. Section 23 of RA 9285, otherwise known as the "Alternative Dispute Resolution Act of 2004", states that international commercial arbitration proceedings "shall not be published except (1) with the consent of the parties or (2) for the limited purpose of disclosing to the court of relevant documents in cases where resort to the court is allowed herein".

Philippine nonconforming measures/reservations

A state party to the TPP may opt not to comply with the measures set forth in Chapter 9 on Article 9.4 (National Treatment), Article 9.5 (Most-Favored-Nation Treatment), Article 9.10 (Performance Requirements), and Article 9.11 (Senior Management and Boards of Directors) should they have existing policies that do not conform to the TPP, provided that the "nonconforming measures" are indicated in annexes to the TPP. A state party must indicate as Annex I laws and regulations that it has in place that will not conform to the abovementioned TPP provisions. It shall indicate in Annex II any sectors, subsector, or activities which shall not fall under the TPP.

Any state or investor can raise as an issue violations of Articles 9.4, 9.5, 9.10, and 9.11 if it pertains to laws and even constitutional provisions if a state fails to include it in their annexes. It is, therefore, very important for the Philippines to lay down comprehensively its nonconforming measures.

Our Constitution and statutes have numerous provisions that will have to be included as a nonconforming measure for the TPP as a whole, and also its investment chapter. What follows are just a few examples.

Foreign ownership

It is the policy of the Philippine Constitution that the "State shall protect Filipino enterprises against unfair foreign competition and trade practices."[39] It shall also "regulate and exercise authority over foreign investments within its national jurisdiction and in accordance with its national goals and priorities."[40]

Among the nonconforming provisions of the Constitution are the following:

> "Section 2. Article XII. All lands of the public domain, waters, minerals, coal, petroleum, and other mineral oils, all forces of potential energy, fisheries, forests or timber, wildlife, flora and fauna, and other natural resources are owned by the State. With the exception of agricultural lands, all other natural resources shall not be alienated. The exploration, development, and utilization of natural resources shall be under the full control and supervision of the State. The State may directly undertake such activities, or it may enter into co-production, joint venture, or production-sharing agreements with Filipino citizens, or corporations or associations at least sixty *per centum* of whose capital is owned by such citizens. Such agreements may be for a period not exceeding twenty-five years, renewable for not more than twenty-five years, and under such terms and conditions as may be provided by law. In cases of water rights for irrigation, water supply fisheries, or industrial uses other than the development of water power, beneficial use may be the measure and limit of the grant.

[39] Section 1, Article XII of the Philippine Constitution

[40] Section 10 Article XII of the Philippine Constitution

> The State shall protect the nation's marine wealth in its archipelagic waters, territorial sea, and exclusive economic zone, and reserve its use and enjoyment exclusively to Filipino citizens.
>
> The Congress may, by law, allow small-scale utilization of natural resources by Filipino citizens, as well as cooperative fish farming, with priority to subsistence fishermen and fishworkers in rivers, lakes, bays, and lagoons.
>
> The President may enter into agreements with foreign-owned corporations involving either technical or financial assistance for large-scale exploration, development, and utilization of minerals, petroleum, and other mineral oils according to the general terms and conditions provided by law, based on real contributions to the economic growth and general welfare of the country. In such agreements, the State shall promote the development and use of local scientific and technical resources.
>
> The President shall notify the Congress of every contract entered into in accordance with this provision, within thirty days from its execution.
>
> Section 10 Article XII. The Congress shall, upon recommendation of the economic and planning agency, when the national interest dictates, reserve to citizens of the Philippines or to corporations or associations at least sixty *per centum* of whose capital is owned by such citizens, or such higher percentage as Congress may prescribe, certain areas of investments.
>
> The Congress shall enact measures that will encourage the formation and operation of enterprises whose capital is wholly owned by Filipinos.
>
> In the grant of rights, privileges, and concessions covering the national economy and patrimony, the State shall give preference to qualified Filipinos.
>
> Section 11 Article XII, which allows for a maximum of only 40% foreign ownership in public utilities. It further limits foreign participation in the governing body of said corporations to their proportionate share in its capital. Lastly, it requires that all the executive and managing officers of such corporation or association must be Filipino citizens."

In addition, there are numerous statutory limitations on foreign investments, including those in the fields of recruitment infrastructure and development, rice and corn administration financing, defense, construction, gambling, and those related to national security.

Preference for Filipino labor and goods

Section 12 Article XII expressly provides for preference to the use of "Filipino labor, domestic materials, and locally produced goods, and adopt measures that help make them competitive".

Technology transfer

Section 14 Article XII lays down a policy of promoting the development of local professionals and scientists by regulating technology transfer. This is essentially a labor policy ensuring that local professionals are hired so that they are given the opportunity to learn from the technologies being developed or applied by foreign corporations. In furtherance of this goal, the same section states that "[t]he practice of all professions in the Philippines shall be limited to Filipino citizens, save in cases prescribed by law."

Section 2 of the Intellectual Property Code (RA 8293) likewise states, as a matter of policy, that "[t]he use of intellectual property bears a social function. To this end, the State shall promote the diffusion of knowledge and information for the promotion of national development and progress and the common good."

Legal services

The practice of law in the Philippines is limited to Philippine citizens. This is both a requirement of Article XII Section 14 in general, as well as Rule 138 Section 2 of the Rules of Court. Notably, previously restricted professions have been removed from the Philippine negative list, such as architecture, criminology, and accountancy.

Viet Nam includes the practice of law in their negative list with the qualification that foreign lawyers are simply restricted from appearing in court and from participating in legal documentation and certification.[41]

Retail trade

The deceptively named Retail Trade Liberalization Act of 2000 likewise limits foreign participation in retail trade and will have to be named an exception if it seeks to be consistent with law. This act limits foreign ownership of retail business to those with a paid-up capital of no less than USD 2.5 million, with an investment of no less than USD 830,000 for each store. Enterprises that specialize in luxury goods, however, can be foreign owned with a minimum investment capital of USD 250,000 per store.

To be sure, EO 184 of 2015 enumerates the latest iteration of a comprehensive negative list of the Philippines. It consists of List A which are limitations by the Constitution and laws, including those abovementioned, and List B which consists of prohibitions by reason of security, defense, risk to health, morals, and the protection of small- and medium-scale enterprises. It is attached as Annex "A" therein. These will necessarily have to be considered to be included as exceptions.

The 90-day express interpretation clause

The TPP contains an important provision relating to the powers of the TPP Commission (the body of Ministers), and by default the powers of the ISDS Tribunal, to decide issues relating to the validity of a defense based on the reservations or annexes that a TPP contracting party may submit.

> Article 9.25: Interpretation of Annexes
>
> 1. If a respondent asserts as a defense that the measure alleged to be a breach is within the scope of a nonconforming measure set out in Annex I or Annex II, the tribunal shall, on request of the respondent, request the interpretation of the Commission on the issue. The Commission shall submit in writing any decision on its interpretation under Article 27.2.2(f) (Functions of the Commission) to the tribunal within 90 days of delivery of the request.
>
> 2. A decision issued by the Commission under paragraph 1 shall be binding on the tribunal, and any decision or award issued by the tribunal must be consistent with that decision. If the Commission fails to issue such a decision within 90 days, the tribunal shall decide the issue.

Based on this provision in Chapter 9, there is a limited time period for the Commission to act, and in default of action by the Commission, the Tribunal will be able, as a matter of law, to decide the legal viability, or nonviability, of a defense to the Chapter 9 obligations based on a reservation in the allowed annexes.

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[41] TPP Annex I Schedule of Viet Nam

CONCLUSION

In summary, the Philippines is familiar with and capable of engaging in the legal requirements of the TPP Chapter on ISDS.

However, more importantly, a thorough review of Philippine laws and regulations that relate to prohibited measures, as currently reflected in the TPP Chapter 9 Section A discussed above, would be necessary in order to minimize the range of measures that investors could find objectionable or inconsistent with the general spirit and objectives of the TPP Investment Chapter. This is the crux of an investment and partnership agreement such as the TPP, as it is designed to provide incentives to cross-border investment by guaranteeing a certain level of investor protection and procedures that ensure and enhance a system governed by the rule of law.

In the same vein, where the national policy has been well considered and determined to be inclined toward preserving certain prerogatives and exceptions, the work of the negotiating parties involved should be directed toward appropriately ensuring that these prerogatives and exceptions are duly reflected in the required annex of reservations under the negative list system adopted in the TPP, lest the failure to reserve results in the Philippines being subject to unnecessary or unexpected ISDS cases before TPP arbitration tribunals.

As already mentioned, the final arbiter, of whether a certain policy prerogative or sovereign right to discriminate, or a different standard would be followed than those prescribed in the TPP, would be the TPP Commission itself or the TPP ISDS Tribunal. A faulty or imprecise crafting of the Philippines' reservations and intended policies would lead to unnecessary legal disputes as well as a level of uncertainty for the very investors that such an agreement is supposed to attract.

A comprehensive review, therefore, and even a potential rationalization, of the Philippines' Investment Negative List, and all relevant laws, rules and regulations, would therefore be an important exercise and opportunity, should the Philippines move toward joining the second round of TPP accessions.

The existence of reservations and exceptions are neither good nor bad in and of itself. They are a clear recognition of the sovereignty of each state party to legislate and regulate within their respective jurisdictions. However, it would be in the economic interest of each state party to ensure that their reservations are made based on a full study and updated economic information and policy directions, and are reflective of current and well-considered economic or noneconomic policy considerations, and not merely a wholesale incorporation of historical or outdated legislation or remnants of past regulatory practice that in certain instances are no longer applicable or as relevant to present circumstances. In drawing up the reservations and exceptions, there is therefore presented to policymakers an opportunity for a full review of the existing laws and regulations, and where opportune or appropriate in the national interest, to allow for policymakers to present legislative amendments for consideration, as well as for the updating of laws and regulations through the executive and legislative processes.

REFERENCES

Abbott, R., F. Erixon, and MF Ferracane. 2014. Demystifying investor-state dispute settlement (ISDS). ECIPE Occasional Paper No. 5. Brussels, Belgium: European Centre for International Political Economy. http://ecipe.org/publications/isds/ (accessed on April 21, 2016).

Bland, B. and S. Donnan. 2014. Indonesia to terminate more than 60 bilateral investment treaties. Financial Times Report. London, England: Nikkei Inc. https://www.ft.com/content/3755c1b2-b4e2-11e3-af92-00144feabdc0 (accessed on April 21, 2016).

Colen, L., A. Guariso, and D. Persyn. 2014. What type of FDI is attracted by bilateral investment treaties? LICOS Centre for Institutions and Economic Performance Discussion Paper 346/2014. Leuven, Belgium: LICOS Centre for Institutions and Economic Performance.

Department of Foreign Affairs and Trade (DFAT), Australian Government. 1993. Agreement with Hong Kong concerning the promotion and protection of investments. Hong Kong, September 15, 1993. Canberra, Australia: DFAT. http://www.info.dfat.gov.au/Info/Treaties/treaties.nsf/AllDocIDs/0F9AF0445B552630CA256B6C000A7C91 (accessed on April 21, 2016).

Dugan, C.F., N. Rubins, B. Sabahi, and D. Wallace. 2012. *Investor-state arbitration*. New York, NY: Oxford University Press.

Executive Order 184. 2015. Promulgating the tenth regular foreign investment negative list. Manila, Philippines: Office of the President of the Philippines.

Gallagher, K.P. and M.B.L. Birch. 2006. Do investment agreements attract investment? Evidence from Latin America. *Journal of World Investment and Trade* 7(6):961–974.

Grosse, R. and L.J. Trevino. 2005. New institutional economics and FDI location in Central and Eastern Europe. *Management International Review* 45(2):123–145.

Hallward-Driemeier, M. 2003. Do bilateral investment treaties attract foreign direct investment? Only a bit—and they could bite. Policy, Research Working Paper Series No. WPS 3121. Washington, DC: World Bank. http://documents.worldbank.org/curated/en/113541468761706209/Do-bilateral-investment-treaties-attract-foreign-direct-investment-Only-a-bit-and-they-could-bite (accessed on April 21, 2016).

International Centre for Settlement of Investment Disputes (ICSID). 2012. Fraport AG Frankfurt Airport Services Worldwide v. Republic of the Philippines (ICSID Case No. ARB/11/12). ICSID. Washington, DC: ICSID. https://icsid.worldbank.org/en/Pages/cases/casedetail.aspx?CaseNo=ARB/11/12 (accessed on April 21, 2016).

Ko-Yung, T. 2015. "Investor-state dispute settlement under the Trans-Pacific Partnership". *The California International Law Journal* 23(1):19–25. https://media2.mofo.com/documents/150800investorstatedisputesettlement.pdf (accessed on April 21, 2016).

Levine, E. 2011. "Amicus curiae in international investment arbitration: The implications of an increase in third-party participation". *Berkeley Journal of International Law* 29(1):199–224.

Miller, S. and G. Hicks. 2015. Investor-state dispute settlement: A reality check. A report of the CSIS Scholl Chair in International Business. Washington, D.C.: Center for Strategic and International Studies. https://www.csis.org/analysis/investor-state-dispute-settlement-0 (accessed on April 21, 2016).

Neumayer, E. and L. Spess. 2005. Do bilateral investment treaties increase foreign direct investment to developing countries? *World Development* 33(10):1567–1585.

North American Free Trade Agreement (NAFTA). Can-Mex-US, January 1, 1994.

Office of the United States Trade Representative (USTR). 2017. TPP full text. Washington, D.C.: USTR. http://ustr.gov/trade-agreements/free-trade-agreements/trans-pacific-partnership/tpp-full-text (accessed on April 21, 2016).

Patel, R. 2015. What environmental and conservation advocates are saying about TPP's environment chapter. The White House, President Barrack Obama (blog), November 6. https://www.whitehouse.gov/blog/2015/11/04/what-environmental-and-conservation-advocates-are-saying-about-tpps-environment (accessed on April 21, 2016).

Presidential Decree 705. 1975. Forestry Reform Code. Manila, Philippines: Office of the President of the Republic of the Philippines.

Republic Act 8293. 1997. Intellectual Property Code of the Philippines. Manila, Philippines: Congress of the Philippines.

Republic Act 9285. 2004. Alternative Dispute Resolution Act of 2004. Manila, Philippines: Congress of the Philippines.

Republic of the Philippines. 1987. *Philippine Constitution*. Article III on non-impairment of contracts. Section 10. Manila, Philippines: Republic of the Philippines.

Sahargun, D. 2006. Investor-state arbitration and Argentina: A state of necessity at the International Centre for the Settlement of Investment Disputes. *ILSP Law Journal* 1(4):219–229.

Sauvant, K.P. and L.E. Sachs. 2009. *The effect of treaties on foreign direct investment*. New York, NY: Oxford University Press.

United Nations Conference on Trade and Development (UNCTAD). 2009. Investment policy hub–Philippines. Geneva, Switzerland: UNCTAD. http://investmentpolicyhub.unctad.org/IIA/CountryBits/166 (accessed on April 21, 2016).

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The TPP Agreement and Government Procurement: Opportunities and Issues for the Philippines

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ABSTRACT

This paper assesses the alignment of the Philippine Government Procurement Reform Act (GPRA) with respect to the Trans-Pacific Partnership (TPP) Agreement, and examines the policy reforms in government procurement that the country may have to implement if it accedes to the TPP. It takes stock of the legal gaps between the current public procurement law of the country—Republic Act (RA) 9184 also known as the Government Procurement Reform Act—and the obligations of TPP parties in Chapter 15 of the agreement covering government procurement (GP-TPP).

The level of alignment between the GPRA and the GP-TPP, especially in business processes with respect to undertaking public procurement, is fairly high. It is understandable since both share the objective of ensuring open, transparent, and competitive bidding in the selection of suppliers. The gaps identified in the rules of public procurement in the Philippines are those relating to the specific obligations of parties in GP-TPP, the most important of which is the preference given by the procurement law and its implementing rules to local products and bidders (GPRA-IRR). With the passage of RA 10667 or the Philippine Competition Act of 2015, local preference in public procurement may have to be revisited to

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advance competition in the procurement market. Thus, the key consideration to be made by the Philippines is to determine whether joining the TPP and acceding to a party's obligations in GP-TPP would accrue net positive benefits to the country as a whole. Taking note of the need to implement compensating measures to minimize adjustment costs of local firms currently enjoying preference, the paper argues that opening up the procurement market to foreign suppliers belonging to TPP countries would confer net benefits to the Philippine government and Filipinos in general.

INTRODUCTION

Government procurement of goods and services has long been regarded as a significant market opportunity, representing from 10 to 15 percent of the gross domestic product (GDP) of the procuring entity's economy (Djankov et al. 2016).[2] Yet, the majority of countries in the world have kept their respective public procurement markets to themselves. The exception to this is the group of 19 parties comprising 47 World Trade Organization (WTO) members, which are contracting parties to the plurilateral WTO Government Procurement Agreement (WTO-GPA), most of which are developed countries.[3,4] Another set of 31 WTO members participates in the GPA Committee as observers. Out of these, 10 members are in the process of acceding to the Agreement (WTO 2017).

The Philippines is not a contracting party to the WTO-GPA and has not even applied to be accorded the observer status, unlike its neighbors including Indonesia, Malaysia, Thailand, and Viet Nam. Other important trading partners of the country—China, India, and Australia—are observers as well to the WTO-GPA.

This paper assesses the alignment of the Philippine Government Procurement Reform Act (GPRA) with respect to the Trans-Pacific Partnership (TPP) and examines the policy reforms in government procurement that the country may have to implement if it accedes to the agreement. We take stock of the legal gaps between the public procurement law of the country, Republic Act (RA) 9184 (GPRA) and its implementing rules and regulations (GPRA-IRR), and the obligations of TPP parties under the agreement's government procurement chapter (GP-TPP). The level of alignment between the GPRA and the GP-TPP, especially in business processes with respect to undertaking public procurement, is fairly high. It is understandable since both share the objective of ensuring open, transparent, and competitive bidding in the selection of suppliers.

Acceding to GP-TPP, however, opens our local public procurement market to competition from TPP parties, and this runs squarely against the local preference provision of GPRA. The passage of RA 10667 or the competition law in 2015 may imply a need to revisit this flag law provision in

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[2] In 2002, the total size of the government procurement sector was estimated to be in the range of 15–20 percent of GDP across the Organisation for Economic Co-operation and Development (OECD) and non-OECD economies (OECD 2002); 13 percent and 12 percent of GDP across OECD economies in 2007 and 2011, respectively (OECD 2013).

[3] Considering that the European Union (EU) represents 28 countries, 47 countries are contracting parties of the agreement. These include Armenia, Canada, the EU, Hong Kong, Iceland, Israel, Japan, Korea, Liechtenstein, Montenegro, the Kingdom of the Netherlands with respect to Aruba, New Zealand, Norway, Singapore, Switzerland, the Separate Customs Territory of Taiwan, Penghu, Kinmen, and Matsu ("Chinese Taipei"), and the United States.

[4] The first version of the plurilateral agreement came out in 1979 and entered into force in 1981. It was issued in 1994 as a plurilateral agreement attached to the Uruguay Round Final Act. A revised version of the agreement came out in 2012.

GPRA. We explore the possible net benefits of opening up the government's procurement market to TPP parties. In particular, we assess whether international competition in itself brings a larger benefit to the country, exceeding any possible loss that may be incurred by the government's local suppliers of goods and services. This paper further explores whether opening to foreign competition would usher in more cooperation between local and foreign suppliers than is presently observed. In the following section, we assess the legal gaps between the TPP and the country's procurement laws, noting as well the public procurement disciplines in other trade agreements such as the WTO-GPA, the European Union-Singapore Free Trade Agreement (EU-SGFTA), and the Korea-United States FTA (KorUS FTA).

ALIGNMENT OF GPRA WITH THE GP-TPP

The government procurement disciplines in preferential trade agreements are near replicas of those under the plurilateral WTO-GPA. Following the comparative approach by Kim (2010), Table 1 presents the respective government procurement chapters of three FTAs—the EU-SGFTA, KorUS FTA, and TPP—and compared with the revised WTO-GPA. The procurement rules of the

Table 1. The revised WTO-GPA and the respective chapters on government procurement in the free trade agreements under TPP, EU-Singapore, and Korea-US

Provisions	Revised WTO-GPA	EU-SG FTA[a]	Kor-US FTA[b]	TPP
1. Definitions	I	10.1	17.11	Art 15.1
2. Scope and coverage	II	10.2	17.2	Art 15.2
3. Valuation of contracts	II	10.2.6	17.4.2	Art 15.2.8
4. Security and nondisclosure	III	10.3	17.3*[c]	Art 15.17
5. National treatment and nondiscrimination	IV	10.4.1	17.3*	Art 15.4
6. Use of electronic means	IV	10.4.3	17.4.1	Art 15.4.8
7. Conduct of procurement	IV	10.4.4		Art. 15.18
8. Rules of origin	IV	10.4.5	17.3*	Art 15.4.5
9. Offsets	IV	10.4.6	17.3*	Art 15.4.6
10. Measures not specific to procurement	IV	10.4.7	17.3*[d]	Art 15.4.7
11. Consideration for developing countries	V			Art 15.5[i]
12. Information on the procurement system (publish contract clause, etc.)	VI	10.5		Art 15.6
13. Notice of intended procurement	VII	10.6.1	17.6.1	Art 15.7
14. Summary notice	VII	10.6.3		Art. 15.7
15. Notice of planned procurement (future procurement plans)	VII	10.6.4	17.6.2	Art 15.7.6
16. Conditions for participation	VIII	10.7	17.5	Art 15.8
17. Qualification procedures for suppliers	IX	10.8.1	17.3*	Art 15.9

Table 1. (continued)

Provisions	Revised WTO-GPA	EU-SG FTA[a]	Kor-US FTA[b]	TPP
18. Selective tendering	IX	10.8.4	17.3*[e]	Art 15.9.3
19. Multi-use lists	IX	10.8.7		Art. 15.9.6 and 15.9.6.7
20. Information on procuring entity decisions	IX	10.8.14		Art 15.9.9
21. Technical specifications	X	10.9.1	17.7	Art 15.12
22. Tender documentation	X	10.9.8	17.3*	Art 15.13
23. Tender modification	X	10.9.13		Art 15.13.4
24. Time period and deadlines	XI	10.1	17.8	Art 15.14
25. Negotiation	XII	10.11	17.3*	Art 15.11
26. Limited tendering	XIII	10.12	17.3*	Art 15.10
27. Electronic auctions	XIV	10.13		
28. Treatment of tenders (receiving, opening, and treating of tenders)	XV	10.14.1	17.3*	Art 15.15
29. Awarding of contracts	XV	10.14.4	17.3*	Art 15.15
30. Information provided to suppliers (informing of award decisions)	XVI	10.15.1		Art 15.16.1
31. Publication of award information	XVI	10.15.2	17.3*[f]	Art 15.16.3
32. Maintenance of documentation, reports, and electronic traceability	XVI	10.15.3		Art 15.16.4[j]
33. Collection and reporting of statistics (report on committee statistics)	XVI	10.15.4		
34. Provision of information to parties	XVII	10.16.1		Art 15.17.1
35. Nondisclosure of information	XVII	10.16.2	17.3*[g]	Art 15.17.2
36. Domestic review procedures	XVIII	10.17	17.3*[h]	Art 15.19
37. Notification of proposed modification	XIX	10.18.1	17.9.1	Art.15.20.1[k]
38. Objection to notification	XIX		17.9.2	Art.15.20.4[k]
39. Consultations	XIX	10.18.4	17.9.3	Art.15.20.5[k]
40. Revision on modification	XIX		19.9.4	Art.15.20.6[k]
41. Implementation of modification	XIX	10.18.6		
42. Withdrawal of substantially equivalent coverage	XIX			
43. Arbitration procedures	XIX			
44. Committee responsibilities	XIX			Art 15.23l
45. Establishment of committee on trade in services, investment, and government procurement		10.19		Art 15.23l

Table 1. (continued)

Provisions	Revised WTO-GPA	EU-SG FTA[a]	Kor-US FTA[b]	TPP
46. Establishment of government procurement working group			17.1	
47. Consultation and dispute settlement	XX			Art. 15.19(2)
48. Institutions	XXI			Art. 15.23
49. Final provisions	XXI			
50. Domestic legislation	XXI	2x		
52. Future negotiations and future work programs	XXI			Art 15.24
53. Adjustment to GPA provisions		10.2		

Art. = Article; EU-SG FTA = European Union-Singapore Free Trade Agreement
Kor-US FTA = Korea-United States Free Trade Agreement; TPP = Trans-Pacific Partnership
WTO-GPA = World Trade Organization–Government Procurement Agreement

Notes:

* Article 17.3 of the Kor-US FTA on Government Procurement includes Incorporation of GPA Provisions, which, for all covered procurement, the parties shall apply Appendices II through IV of the GPA, and a list of articles of the GPA, *mutatis mutandis*.

[a] The EU-SG FTA Chapter on Government Procurement refers to the provisions on the revised WTO-GPA, which came into force on April 6, 2012.

[b] The Kor-US FTA Chapter on Government Procurement refers to the provisions on the original 1994 WTO-GPA. While the revised GPA has come into force for most parties, the GPA 1994 remains in force for those parties who are still in the process of ratifying the revised agreement. Therefore, two versions of the GPA coexist until all parties to the agreement are bound by the revised agreement (WTO). For purposes of comparison, the researcher indicated the section that applies to the original WTO-GPA.

[c] Originally from 1994 WTO-GPA Article XXIII – Exceptions to the Agreement

[d] Originally from 1994 WTO-GPA Article III.3 – National Treatment

[e] Originally from 1994 WTO-GPA Article X – Selection Procedures

[f] Originally from 1994 WTO-GPA Article XVIII – Information and Review as Regards Obligation of Entities

[g] Originally from 1994 WTO-GPA Article VII.2 – Tendering Procedures

[h] Originally from 1994 WTO-GPA Article XX.2 – Challenge Procedures

[i] Provisions are subsumed under Article 15.5 – Transitional Measures which states that "A Party that is a developing country (developing country Party) may, with the agreement of the other Parties, adopt or maintain one or more of the following transitional measures, during a transition period set out in, and in accordance with Section J of the Party's Schedule to Annex 15-A."

[j] Provisions only for Maintenance of Documentation and Reports. No mention of electronic traceability.

[k] Provisions are subsumed under Article 15.20 – Modifications and Rectifications of Annex, though the provision only applies to modification of schedule to Annex 15-A.

[l] Article 15.23 of the agreement establishes a Committee on Government Procurement (Committee), composed of government representatives of each party

Source: WTO-GPA, and the procurement chapters of the FTA deals under TPP, EU-Singapore, and Korea-United States

FTAs follow very closely the procurement practices, standards, and procedures needed to ensure a competitive selection of procurement suppliers, national treatment, and nondiscrimination among the parties in these agreements.

WTO-GPA procurement rules

The government procurement disciplines in multilateral or preferential trade agreements proceed from three important principles: nondiscrimination, competition, and transparency. Nondiscrimination requires parties to treat other parties no less favorably than their respective most-favored trading partners or nation. However, protectionism surfaces in another form: preference for local goods and local suppliers. The practice discriminates against bidders who are citizens of third parties. Another manifestation of nondiscrimination is the principle of national treatment or providing equal treatment in policy and regulation of both local and foreign products.

Secondly, procurement rules ensure competition in order to obtain the highest value from procurement contracts. Competitive public bidding is the most important method of attaining the lowest calculated most responsive bid.

Open bidding has transaction costs, i.e., it takes considerable time to get the most favorable value from procurement activities. Thus, most governments allow exceptions to open bidding if it had failed to produce the preferred competitive supplier of the goods, works, and services that the government requires. Selective tendering allows for inviting multi-use lists of accredited suppliers to submit bids.

The alternative methods to open tenders in government procurement contracts include limited bidding, selected bidding, negotiated procurement, and other methods such as the shopping method for commonly used and widely available products. These methods are usually resorted to if open bidding had not been successful or not practical given the nature of the product, infrastructure works, or services being procured.

The third is the principle of transparency. It is essential to ensure a level playing field for all potential suppliers who submit their respective bids to get the chance of being selected. Transparency guarantees accountability in conducting tenders and facilitates competitive bidding by providing all necessary information needed by bid participants in preparing their respective responsive bids.

Philippine versus TPP procurement rules

Philippine procurement reform

Competitive public bidding for government procurement began as early as the American occupation in the 1900s. Executive Order (EO) 40 issued on October 8, 2001 by the Macapagal-Arroyo administration consolidated existing rules and procedures for all national government agencies, and required the use of the government electronic procurement system.[5] It was followed two years later in January 2003 by RA 9184, otherwise known as the GPRA, which sought to codify all pertinent laws and rules governing government procurement. The act created the Government Procurement Policy Board (GPPB) as the agency to oversee its implementation. RA 9184 was designed to cover

[5] Previous procurement laws, rules, and regulations preceding EO 40 include the following: Act No. 22 passed on October 15, 1900 by the US-Philippine Commission introduced competitive bidding in public procurement; several EOs were issued by Presidents Manuel Quezon and Diosdado Macapagal to emphasize the need for public bidding for government contracts on equipment and services; President Ferdinand Marcos issued Presidential Decree 1494 prescribing guidelines for government infrastructure projects; and Presidents Corazon Aquino and Joseph Estrada issued their respective procurement-related EOs such as EO 359, series of 1989 which created the Procurement Policy Board, the predecessor of the GPPB.

everything the government needs to buy, construct, or provide, which covers (a) acquisition of goods as well as maintenance and related services, (b) consulting services, and (c) infrastructure projects.

RA 9184 stipulated how public bidding should proceed, beginning with an invitation to bid posted in the Philippine Government Electronic Procurement System (PhilGEPS), or an "advertisement" in a newspaper of general circulation, to the submission, opening, and evaluation of bids, and awarding of the contract to the winning bidder. For projects with an approved budget contract (ABC) of at least PHP 1 million, at least one prebid conference is held to discuss the project requirements and other details with interested bidders. Other interested parties are invited to attend the prebid conference.

PhilGEPS is the repository of information on all government procurement opportunities, notices, results of biddings, awards, and reasons for the award. The online site continuously adapts to the changes in the public procurement environment.

An overview of GP-TPP rules

The TPP Agreement Chapter 15 (GP-TPP) applies to the purchase, rental, or lease, with or without an option to buy, build-operate-transfer (BOT) contracts, and public works concession contracts by a designated procuring entity of a contracting party of a good, service, or any combination that the party has declared to be so in its Annex 15-A (henceforth Annex).

The procuring entity is any of the government agencies, corporations, or other instrumentalities designated by the contracting party in Schedules A through C of its Annex.

The objects of the procurement activity are goods, services, or any combination thereof, as enumerated in Sections D, E, and F in its Annex. The rules of TPP, however, do not apply to any procurement activity which meets any of these conditions: First, if the value as defined in the request for tender falls below the threshold value as declared by the contracting party under Section H of its Annex. Second, if the objects of procurement are among those excluded under Article 15-2.

What GP-TPP excludes

Article 15-2 lists the commonly excluded items under this agreement. These are classified into (a) purchase, rental, or lease of lands, buildings, or any immovable properties; (b) delivery of financial assistance, such as cooperative agreements, grants, loans, equity infusions, guarantees, subsidies, fiscal incentives, and sponsorship arrangements; (c) services of a fiscal agent and depository services; (d) public sector employment; (e) services relating to the redemption, sale, or distribution of public debt; (f) management and liquidation of the assets of regulated financial institutions; (g) delivery of international assistance and aid; (h) procurement funded by international organizations, considering that they already have their respective procurement rules; (i) procurement conducted under the particular procedure or condition of an international agreement relating to the stationing of troops or relating to joint implementation by the signatory countries of a project; and (j) procurement of goods or services outside the territory of the contracting party.

Valuation

For purposes of determining whether the procurement is covered by this agreement, the rule says that the procuring party or its designated procuring entities shall indicate the maximum value of the procurement for the entire duration of the procurement activity. Several factors need to be considered in the all-in valuation rule: (a) remuneration, including any premium, fee, commission, interest, or other revenue stream that may be provided for under the contract; (b) value of any options; and

(c) values of similarly situated procurement in time. If the procurement value cannot be estimated, it is deemed covered, if it is not explicitly excluded.

Exceptions

A party (henceforth also includes its designated procuring entities) may maintain measures in its public procurement activities intended to protect (a) public morals, order, or safety; (b) human, animal or plant life, or health, and the environment only with respect for this purpose; and (c) intellectual property. It covers as well measures relating to the good or service of a person with disabilities, of philanthropic or not-for-profit institutions, or of prison labor, and environmental measures needed to protect human, animal or plant life, or health.

The only qualifications are that their application does not constitute a disguised restriction to international trade, and that it does not constitute an arbitrary or unjustifiable discrimination of other parties.

Table 2. Comparing the provisions on government procurement under the Philippines' IRR-GPRA and the TPP Agreement

Provisions	IRR-GPRA	TPP	Remarks
1. Definitions	Sec. 3	Art. 15.1	Both measures have their respective definitions of terms.
2. Scope and coverage	Sec. 4	Art. 15.2	IRR-GPRA covers all types of procurement except those which other laws regulate, e.g., BOT law on private-public partnership projects. TPP covers those declared by members as covered. Not covered for all parties: immovable assets, foreign aid, stationing of troops and other defense-related spending, spending outside the territory of the party, public sector employment, fiscal agency or depository services, liquidation and management services for regulated financial institutions, or services related to the sale, redemption, and distribution of public debt, including loans and government bonds, notes, and other securities.
3. Valuation of contracts		Art. 15.2.8	IRR-GPRA notes that specific terms, including limitations and restrictions, for application of alternative procurement methods are provided for in "Annex H" of the IRR. This includes small-value procurements, i.e., the amount involved does not exceed threshold amounts prescribed in "Annex H" of the IRR.
4. Security, integrity, and nondisclosure	Sec. 9; Sec. 3(e)	Art. 15.17; 15.18	IRR-GPRA protects the security, integrity, and confidentiality of transactions. TPP has similar provisions. Both measures provide for obligations to provide information on transactions related to ascertaining compliance.

Table 2. (Continued)

Provisions	IRR-GPRA	TPP	Remarks
5. National treatment and nondiscrimination		Art. 15.4	IRR-GPRA has no counterpart to these obligations in TPP. While the GPRA identifies instances when foreign bidders may participate in a public procurement, e.g., when no qualified local suppliers bid in a public tender, this flexibility falls short of the obligation of parties in TPP on nondiscrimination and national treatment.
6. Use of electronic means	Sec. 8	Art. 15.4.8	Both measures include obligations to provide information on transactions related to ascertaining compliance.
7. Conduct of procurement	Sec. 2 and 47.	Art. 15.18	Both measures provide for similar obligation to adhere to good conduct of procurement, i.e., avoiding conflicts of interest, transparency, and consistency in the use of procurement methods and avoiding corrupt practices. The IRR-GPRA can strengthen the intent of the law by adopting these provisions in TPP as a separate provision.
8. Rules of origin		Art. 15.4.5	IRR-GPRA has presently no counterpart rules of origin provision. The provision is typical in regional trade agreements like TPP to distinguish the goods and services of parties entitled to preferential market access from those of third parties.
9. Offsets		Art. 15.4.6	IRR-GPRA has no provision on procurement offsets, or any pledges or commitments of suppliers to the public procuring entity in order to win a public tender. However, Rule X of the IRR requires all public tenders to be done through competitive bidding, except as provided in Rule XVI of the IRR, which is on alternative procurement. Offsets are not among the conditions for a bid to be under an alternative procurement method. However, it strengthens the intent of the IRR-GPRA for competitive bidding if it states as a matter of principle that procuring entities shall not seek, consider, and enforce offsets in any public procurement activity.
10. Measures not specific to procurement		Art. 15.4.7	IRR-GPRA has no counterpart provision. The TPP provision, Article 15.4.7 being a procurement-related rule, regards nonprocurement specific measures as outside its scope, and sees no need to rule on them. Other parts of the TPP Agreement require the disciplines of national treatment and nondiscrimination on goods trade (see TPP Chapter 2), on trade in goods, and in services (see TPP Chapters 10 and 11).

Table 2. (Continued)

Provisions	IRR-GPRA	TPP	Remarks
			Disciplines on customs formalities are laid down in TPP Chapter 5. In the same vein, IRR-GPRA has a defined scope on procurement activities as provided for in Section 4 of the IRR.
11. Consideration for developing countries		Art. 15.5i	IRR-GPRA has no counterpart provision. This TPP provision is typical in multilateral and preferential trade agreements, but the need for it is much less compelling in a national procurement law particularly of a developing country like the Philippines.
12. Information on the procurement system (publish contract clause, etc.)		Art. 15.6	IRR-GPRA has no counterpart provisions.
13. Notice of intended procurement	Sec.8	Art. 15.7	Both measures provide for this obligation.
14. Summary notice	Sec.8	Art. 15.7	Both measures provide for this obligation.
15. Notice of planned procurement (future procurement plans)	Sec. 21	Art. 15.7.6	Both measures provide for this obligation.
16. Conditions for participation	Sec. 23 and 24	Art. 15.8	Both measures provide for this obligation. However, as a general policy, the Philippine government notes preference for Filipino nationals in the award of government's procurement contracts.
17. Qualification procedures for suppliers	Sec. 23.1 and 24.1	Art. 15.9	Both measures provide for this obligation. Qualification requirements in the IRR-GPRA, e.g., "Class A" documents for bidders other than joint ventures, or "Class B" documents in the case of the latter, establishing financial, legal, and technical qualifications such as getting a mayor's permit, to do business or "are applied equally to all potential bidders including foreigners". Preferences for local suppliers in any bidding arise in the eligibility requirements of bidders but may be waived if no preference is made.
18. Selective tendering	Sec. 49	Art. 15.9.3	Both measures provide for this obligation.
19. Multi-use lists		Art. 15.9.6 and 15.9.6.7	IRR-GPRA has no counterpart provisions.
20. Information on procuring entity decisions	Sec. 37.1.6	Art. 15.9.9	Both measures provide for this obligation.

Table 2. (Continued)

Provisions	IRR-GPRA	TPP	Remarks
21. Technical specifications	Sec. 17.2; and 18	Art. 15.12	Both measures provide for this obligation.
22. Tender documentation	Sec. 17.1 and 17.3	Art. 15.13	Both measures provide for this obligation.
23. Tender modification	Sec. 26.1	Art. 15.13.4	Both measures provide for this obligation.
24. Time period and deadlines		Art. 15.14	"Annex C" of the IRR-GPRA indicates the earliest possible time and maximum period allowed for the procurement of goods, services, infrastructure projects, and consulting services.
25. Negotiation	Sec. 53	Art. 15.11	Both measures provide for this obligation.
26. Limited tendering	Sec. 49	Art. 15.10	Both measures provide for this obligation.
27. Treatment of tenders (receiving, opening, and treating of tenders)	Sec. 29 to 33	Art. 15.15	Both measures provide for this obligation.
28. Awarding of contracts	Sec. 37.1.5	Art. 15.15	Both measures provide for this obligation. The IRR-GPRA has provided standards on when the decision has to be made, i.e., 7 days for goods from the time the head of the procuring entity receives the recommendation of the bids and awards committee, 4 days for infrastructure worth PHP 50,000 or below, and 15 days for government corporations.
29. Information provided to suppliers (informing of award decisions)	Sec. 37.1.2	Art. 15.16.1	Both measures provide for this obligation. The IRR-GPRA informs the losing bidders as well.
30. Publication of award information	Sec. 37.1.6	Art. 15.16.3	Both measures provide for this obligation.
31. Maintenance of documentation, reports, and electronic traceability	Sec. 8 and Sec. 14.1(d)	Art. 15.16.4	Both measures provide for this obligation.
32. Provision of information to parties	Sec. 19	Art. 15.17.1	Both measures provide for this obligation.

Table 2. (Continued)

Provisions	IRR-GPRA	TPP	Remarks
33. Nondisclosure of information	Sec. 29, 53.7, 8.2.2(c); 9(c)	Art. 15.17.2	Both measures provide for this obligation.
34. Domestic review procedures	Sec. 55 and 56	Art. 15.19	Both measures provide for this obligation.
35. Notification of proposed modification		Art..15.20.1	IRR-GPRA has no counterpart provisions. The provision is typical in regional trade agreements like TPP.
36. Objection to notification		Art..15.20.4	IRR-GPRA has no counterpart provisions. The provision is typical in regional trade agreements like TPP.
37. Consultations		Art..15.20.5	IRR-GPRA has no counterpart provisions. The provision is typical in regional trade agreements like TPP.
38. Revision on modification		Art..15.20.6	IRR-GPRA has no counterpart provisions. The provision is typical in regional trade agreements like TPP.
39. Arbitration procedures	Sec. 59	Art. 15.19(2)	Both measures provide for this obligation.
40. Committee responsibilities		Art. 15.23	IRR-GPRA has no corresponding provisions.
41. Establishment of Government Procurement Working Group			Both measures do not provide for this obligation, which is in the WTO-GPA.
42. Consultation and dispute settlement	Rule XVII	Art. 15.19(2)	Both measures provide for this obligation.
43. Institutions	Rule XX	Art. 15.23	Both measures provide for a policymaking body. The Government Procurement Policy Board was created by the Philippines for procurement matters. The TPP creates its Committee on Government Procurement. If the Philippines accedes to the TPP, it would be required to nominate a member in the latter.
44. Final provisions	Rule XXV		TPP has no final provisions.
45. Future negotiations and future work programs		Art. 15.24	IRR-GPRA has no counterpart provisions. The provision is typical in regional trade agreements like TPP.

Art. = Article; BOT = build-operate-transfer; Sec. = Section; TPP = Trans-Pacific Partnership;
IRR-GPRA = Implementing Rules and Regulations-Government Procurement Reform Act;
WTO-GPA = World Trade Organization-Government Procurement Agreement
General Source: Trans-Pacific Partnership Agreement Chapter 15; Government Procurement Policy Board

Comparing both measures
Table 2 compares the provisions of the implementing rules and regulations of the Philippines' Government Procurement Reform Act (IRR-GPRA) and the GP-TPP agreement. It must be noted that there are measures on public procurement other than RA 9184 in the Philippines. A good example is the Build-Operate-and-Transfer (BOT) Law that covers public-private partnership (PPP) projects.[6] The TPP's set of rules covers the items that parties declared as covered, but has several exclusions.

The purpose of Article 15.2.8 in TPP on valuation of contracts is to come up with a procedure in valuing procurement transactions to determine if the value exceeds declared threshold amounts. If the Philippines will accede to TPP, it will have to follow the agreed-upon procedure.

Both the IRR-GPRA and the GP-TPP chapter contain provisions to ensure the security, integrity, and confidentiality of public procurement transactions. It is unclear whether Article 3e, which requires public monitoring of the procurement process and the implementation of awarded contracts, compels authorities to disclose information upon request by interested parties. In the 2016 IRR-GPRA, observers were allowed access to procurement documents.[7]

The government procurement market is virtually closed to foreigners, except when the goods or services procured are not supplied locally in significant quantities. Thus, the need for articulating the principles of nondiscrimination or national treatment fails to surface.

The use of information technology is encouraged in both the GPRA and in TPP-GP, not only for disseminating information but also for e-procurement.

Good conduct of procurement requires consistency in the application of procurement methods such as open, selective, or limited bidding. In IRR-GPRA, these rules are laid down. Generally, open tendering is the default method, unless circumstances defined by the rules allow the use of alternative procurement methods.

Less prominent is the provision to avoid conflicts of interest and corrupt practices, although the entire procurement law is structured to uphold the integrity of public spending. Although it is understood that government employees already have this obligation, the point is that incorporating this into the rules would give a stronger deterrence against corruption.

Several provisions in TPP are in the context of importing goods or services which a government is procuring, such as rules of origin, nondiscrimination, and national treatment. The IRR-GPRA does not have any counterpart provisions because they are unnecessary.

With respect to procurement offsets, meanwhile, there is nothing in the IRR-GPRA that prevents offsets explicitly as in the TPP. By being silent about offsets, the rules may accord procuring entities the legal right to undertake offset agreements. This practice weakens competition which the procurement rules aim to institutionalize in the public procurement process.

It is correct to assume that such offset agreements, which are practiced and regarded legal in lump-sum defense procurement, circumvent competition in government procurement. Offset agreements are like countertrade transactions. It is practiced to mitigate the import payments of the procuring country by asking the exporting supplier to buy from companies in its territory. When the market is naturally oligopolistic or monopolistic as in national defense-related procurement, these side deals may naturally come out in the negotiations for the procurement package. But when there

[6] This is RA 6957 as amended by RA 7177.

[7] Furthermore, RA 6713 obliges government agencies to provide documents to interested parties upon request. EO 2, series 2016 on the freedom of information also upholds the right of Filipinos to access "…information, official records, public records, and documents and papers pertaining to official acts, transactions, or decisions, as well as government research data used as basis for policy development".

are other foreign suppliers, competition should remain to be the norm in the selection of suppliers for the main transaction.

Another matter is the publication of procurement laws, rules, and related information. Nothing in the IRR-GPRA requires this action, although publishing these in the Official Gazette of the country is already a long-held practice. Should the country open itself to international trade, the GPPB's Technical Support Office or some other agency shall be the enquiry point on all matters related to procurement, including explanations on any changes in the rules.

National treatment and nondiscrimination

Both measures similarly provide for this obligation. The TPP provision requires parties to observe nondiscrimination and national treatment principles for both local and foreign procuring entities which are citizens of TPP parties. The qualification requirements in the IRR-GPRA, e.g., "Class A" documents for bidders other than joint ventures or "Class B" documents in the case of the latter, establishing financial, legal, and technical qualifications such as getting a mayor's permit to do business, are applied equally to all potential bidders including non-Filipino entities. Preferences for local suppliers in any bidding arise in the eligibility requirements of bidders.

Procurement business processes

There is a fairly high level of alignment between the IRR-GPRA and the GP-TPP with respect to business procedures. This is understandable since both measures have the intent of ensuring open, transparent, and competitive bidding in the selection of suppliers.

The disparity between the Philippine procurement rules and the TPP Agreement relate to the obligations of TPP contracting parties to other parties. The IRR-GPRA is understandably silent about these provisions since the country is not a TPP member at present. Specifically, the most important difference is on the preference of GPRA for local suppliers.

Foreign-funded procurement and preference for local suppliers

The 2016 Revised Implementing Rules and Regulations of RA 9184 defines foreign-funded procurements as the "acquisition of goods, consulting services, and the contracting for infrastructure projects by the Government of the Philippines (GoP) which are wholly or partly funded by foreign loans or grants pursuant to a treaty or international or executive agreement", and can be used interchangeably with "foreign-funded projects" or "foreign-assisted projects" (Section 5, Definition of Terms). Eligibility requirements for foreign-funded procurement are limited to partnerships, corporations, and joint ventures, with additional qualifications (Table 3).

Flexibilities on foreign-funded procurement of infrastructure projects. According to IRR-GPRA Section 23, joint ventures in which Filipino ownership or interest is less than 75 percent may be eligible where the structures to be built require the application of techniques and/or technologies which are not adequately possessed by a person/entity meeting the 75 percent Filipino ownership requirement. However, the IRR maintains that **Filipino ownership or interest should not be less than 25 percent**.[8]

[8] Also stated in Appendix 9 Item 4.2 of the 2016 IRR-GPRA, page 222

Table 3. Eligibility requirements for foreign-funded procurement under the Philippines' IRR-GPRA

	Goods	Infrastructure Projects	Consulting Services
	Section 23. Eligibility Requirements for the Procurement of Goods and Infrastructure Projects, pages 59–60	Section 23. Eligibility Requirements for the Procurement of Goods and Infrastructure Projects, pages 61–62	Section 24. Eligibility Requirements and Short-Listing for Consulting Services, page 65
Sole proprietorship	No	No	No
Cooperative	No	No	No
Partnership	Yes, with partnerships duly organized under the laws of the Philippines and of which at least 60 percent of the interest belongs to citizens of the Philippines	Yes, with partnerships duly organized under the laws of the Philippines and of which at least 75 percent of the interest belongs to citizens of the Philippines	Yes, partnerships duly organized under the laws of the Philippines and of which at least 60 percent of the interest belongs to citizens of the Philippines
Corporation	Yes, with corporations duly organized under the laws of the Philippines, and of which at least 60 percent of the outstanding capital stock belongs to citizens of the Philippines	Yes, with corporations duly organized under the laws of the Philippines, and of which at least 75 percent of the outstanding capital stock belongs to citizens of the Philippines	Yes, with corporations duly organized under the laws of the Philippines and of which at least 60 percent of the outstanding capital stock belongs to citizens of the Philippines
Joint venture	Yes, provided that Filipino ownership or interest of the joint venture concerned shall be at least 60 percent	Yes, provided that Filipino ownership or interest of the joint venture concerned shall be at least 75 percent	Yes, provided that Filipino ownership or interest thereof shall be at least 60 percent

IRR-GPRA = Implementing Rules and Regulations – Government Procurement Reform Act
General Source: 2016 IRR-GPRA, Rule VIII – Receipt and Opening of Bids

Flexibilities on foreign-funded procurement of consultancy services. According to IRR-GPRA Section 24, consulting services in which the foregoing persons/entities wish to engage involving the practice of regulated professions should be performed by Filipino citizens and registered professionals authorized by the appropriate regulatory body. Furthermore, Section 24.3.3 notes that foreign consultants may be hired in cases where there is absence of Filipino consultants who "have the sufficient expertise and capability to render the services required under the project…. in order to manifest trust and confidence in and promote the development of Filipino consultancy".[9]

As a general policy, the government notes preference for Filipino nationals in the award of government procurement contracts. However, the Guidelines in the Determination of Eligibility of Foreign Suppliers, Contractors, and Consultants to Participate in Government Procurement Projects (Appendix 9 of the 2016 IRR-GPRA) further notes that most-favored-nation (MFN) status and nondiscrimination treatments are likewise complied with, under specified qualifications:

[9] Also stated in Appendix 9 Item 4.3 of the 2016 IRR-GPRA, page 223

> 1.0 General Policy. In line with the economic policies enunciated in the Constitution, particularly on the promotion of Filipino labor, domestic materials, and locally produced goods, RA 9184, in consonance with RA 5183, adopts as **general principle the preference for Filipino nationals in the award of government procurement contracts**.
>
> However, in light of the **principles of economic exchange and expansion of trade and exports with other countries on the basis of equality and reciprocity, with due regard to the government's initiatives in the prohibition and/or regulation of monopolies and other situations that restrain trade and fair competition**, qualified foreign nationals may be eligible to participate in the public procurement of goods, infrastructure projects, and consultancy services; provided, however, that provisions on domestic preference, MFN status, and nondiscrimination treatments under applicable laws and treaties are complied with.

Item 4.1 of 2016 IRR-GPRA Appendix 9 lists the circumstances where foreign bidders are eligible to participate, which include:

- 4.1.1. When the goods sought to be procured **are not available from local suppliers**, subject to Item 5 herein; or
- 4.1.2. When there is a need **to prevent situations that defeat competition or restrain trade**, subject to Item 6 herein; or
- 4.1.3. When the foreign supplier, manufacturer, and/or distributor is a citizen, corporation, or association of a country the laws or regulations of which **grant reciprocal rights or privileges** to citizens, corporations, or associations of the Philippines, irrespective of the availability of goods from local suppliers, subject to Item 7 herein 73; or
- 4.1.4. When **provided for under any treaty or international or executive agreement.**

Reciprocity rule. Item 7.0 of 2016 IRR-GPRA Appendix 9 further defines reciprocity rule in the procurement of goods, where Filipino nationals are allowed to participate in the (foreign reciprocating) government procurement markets. Item 7.2 notes that procuring entities should confirm the list of countries in the provided Annex "I" of the IRR and as shown in the GPPB website. However, the said list is unavailable in the 2016 IRR-GPRA Annex "I" which presents Guidelines on Termination of Contracts.

- 7.1. In the procurement of goods, a supplier, manufacturer, and/or distributor who is a citizen, corporation, or association of a country whose laws or regulations grant reciprocal rights or privileges **allowing Filipino nationals to participate in public procurement in their country, are allowed to participate in government procurement projects**.
- 7.2. The procuring entity shall confirm from the list of countries, **provided in Annex "I" of the IRR and as shown in the GPPB website, with which the Philippines enjoys reciprocal rights on matters of eligibility of its nationals in public procurement abroad**. Pending the issuance of the list or in case the foreign bidder's country is not in said list, the bidder claiming eligibility by reason of their country's extension of reciprocal rights to Filipinos, shall submit a certification from the relevant government office of their country stating that Filipinos are allowed to participate in their government procurement activities for the same item/product.
- 7.3. The said certification shall be validated during postqualification of bidders.

In another electronic copy of the Guidelines in the Determination of Eligibility of Foreign Suppliers, Contractors, and Consultants to Participate in Government Procurement Projects also found at the GPPB website referred to as Annex "A", Item 7 on reciprocity rules changes Annex "I" to a list maintained by the Department of Foreign Affairs (DFA).

7.1. In the procurement of goods, a supplier, manufacturer, and/or distributor who is a citizen, corporation, or association of a country whose laws or regulations grant reciprocal rights or privileges allowing Filipino nationals to participate in public procurement in their country, are allowed to participate in government procurement projects.

7.2. **The procuring entity shall confirm from the list of countries, maintained by the DFA and as shown in the GPPB website**, with which the Philippines enjoys reciprocal rights, on matters of eligibility of its nationals in public procurement abroad. If the country of the prospective foreign bidder is not in the list, the procuring entity shall require from the said bidder the submission of a sworn statement that the country of which he is a citizen or in which the corporation or partnership is organized and registered, grants reciprocal rights or privileges to Filipino citizens, corporations, or associations, citing its country's relevant laws.

7.3. The sworn statements mentioned above shall be validated during postqualification of bidders.

Section 4 of the 2016 IRR-GPRA defines the Scope and Application of the IRR. According to Section 4.2, treaties, international, or executive arrangements prevail over IRR-GPRA. Section 4.4 also states that the implementing rules, which include policies on foreign-funded procurement, do not apply to: (a) foreign grants (i.e., official development assistance) covered by RA 8182 as amended by RA 8555, unless the government and the foreign grantor or international financing institution agree otherwise; (b) acquisition of real property, which is governed by RA 10752, to include right-of-way site or location for national government infrastructure projects; and (c) nongovernment-financed public-private sector infrastructure or development projects and other procurement covered by RA 6957 as amended by RA 7718.

4.2. Any treaty or international or executive agreement to which the GoP is a signatory affecting the subject matter of the act and this IRR shall be observed. In case of conflict between the terms of the treaty or international or executive agreement and this IRR, the former shall prevail.

Read in conjunction with Section 4, Rule XII of the 2016 IRR-GPRA includes Section 43, which further clarifies rules on procurement of domestic and foreign goods. While it maintains obligations of allowing foreign procuring entities consistent under the government's international treaties or agreements, Section 43.1 specifies where preference can be given to domestically produced goods, supplies, and materials:

43.1.1. Consistent with the GoP's obligations under international treaties or agreements, goods may be obtained from domestic or foreign sources: Provided, however, that the procurement thereof shall be open only to eligible suppliers, manufacturers, and distributors: Provided, further, **that in the interest of availability, efficiency, and timely delivery of goods, the procuring entity may give preference to the purchase of domestically produced and manufactured goods, supplies, and materials**

that meet the specified or desired quality, in accordance with the provisions of Commonwealth Act 138.

43.1.2. The procuring entity shall give **preference to materials and supplies produced, made, and manufactured in the Philippines**, subject to the conditions herein below specified. **The award shall be made to the lowest domestic bidder, provided his bid is not more than 15 percent in excess of the lowest foreign bid.**

43.1.3. A domestic bidder can only claim preference if it secures from the Department of Trade and Industry a certification that the articles forming part of its bid are **substantially composed of articles, materials, or supplies grown, produced, or manufactured in the Philippines.**

Section 43.2 provides procedures and guidelines on the valuation of foreign and domestic bids, where foreign bids shall be increased by 15 percent upon evaluation.

43.2.1. **The preference shall be applied when the lowest foreign bid is lower than the lowest bid offered by a domestic bidder**. The procuring entity shall ensure that both bids are responsive to the minimum requirements as specified in the bidding documents.

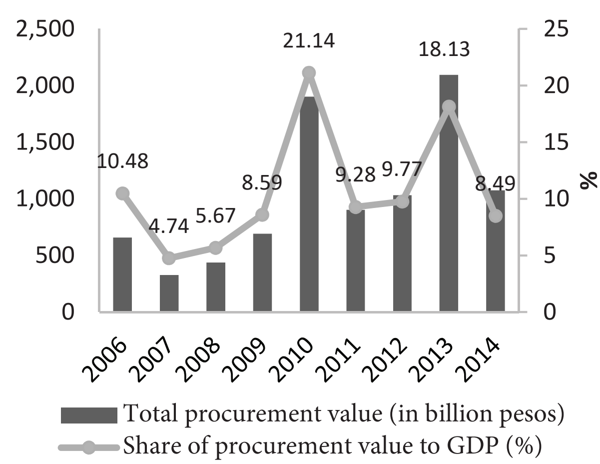
43.2.2. For evaluation purposes, **the lowest foreign bid shall be increased by 15 percent**.

43.2.3. **In the event that the lowest bid offered by a domestic bidder does not exceed the lowest foreign bid as increased**, the procuring entity shall award the contract to the domestic bidder at the amount of the lowest foreign bid.

43.2.4. If the domestic bidder refuses to accept the award of contract at the amount of the foreign bid within two calendar days from receipt of written advice from the Bids and Awards Committee, the procuring entity shall award the contract to the bidder offering the foreign bid.

43.2.5. The award of contract shall be subject to postqualification and submission of all the documentary requirements under this IRR.

Figure 1. Total approved budget for government procurement contracts, in PHP billion; (overlay) percentage share of total ABC to GDP, 2006–2014



ABC = approved budget contract; GDP = gross domestic product

Source: Philippine Government Electronic Procurement System (PhilGEPS)

These highlighted provisions are inconsistent with the revised WTO-GPA and GP-TPP, which recognizes "that measures regarding government procurement should not be prepared, adopted, or applied so as to afford protection to domestic suppliers, goods, or services, or to discriminate among foreign suppliers, goods, or services". Furthermore, the revised WTO-GPA provides against discrimination, as stipulated in its General Provisions (Article IV):

a) With respect to any measure regarding covered procurement, each party, including its procuring entities, shall accord immediately and **unconditionally** to the goods and services of any other party and to the suppliers of any other party offering the goods or services of any party, **treatment no less favorable** than the treatment the party, including its procuring entities, accords to (emphasis by the authors):
    i. domestic goods, services, and suppliers and
    ii. goods, services, and suppliers of any other party.

It should be noted, on the other hand, that WTO-GPA and other FTAs still provide consideration toward developing countries, recognizing the "need to take into account the development, financial, and trade needs of developing countries, in particular the least developed countries". Article V – Developing Countries of the WTO-GPA provides "transitional measures" that are applied "in a manner that does not discriminate" among the other parties, based on the development needs and the agreement of the parties. These can be in the form of (a) Price preference programme (Article 5.3.a), (b) Offset (Article 5.3.b), (c) Phased-in addition of specific entities or sectors (Article 5.3.c), and/or (d) A threshold that is higher than its permanent threshold (Article 5.3.d).

THE PHILIPPINE GOVERNMENT PROCUREMENT MARKET

The size of the country's government procurement market from 2006 to 2014 is shown in Figure 1. The measure is the sum of the approved budgets for procurement as listed in the General Appropriations Act. The amount had risen from PHP 657 billion in 2006 to PHP 1.073 trillion in 2014. The highest level was recorded at PHP 2.093 trillion in 2013.[10] The figure also shows the shares of total ABC to GDP in the same period. These range from a low 4.74 percent in 2007 to 21.1 percent in 2010. The simple average share from 2006 to 2014 is 10.7 percent. An independent estimate of the share about 20 years back—1994 to 1998—was 9.85 percent including defense-related spending (see Box 1).

As enacted in the GPRA, all national government agencies, local government units, government-owned and -controlled corporations, government financial institutions, and state colleges and universities are to post procurement announcements, bids and awards in the procurement of goods and general support services, consulting services, and civil works.

The bulk of government procurement is primarily spent on purchasing goods during the early parts of the previous decade, with total spending reaching 59 percent in 2006, and 77 percent in 2007 (Figure 2). With the Aquino administration infusing more public spending in infrastructure projects, civil works has gotten the highest share of procurement for the most part of the decade. Since 2008, civil works spending comprise more than half of the total government procurement, reaching as high as 65 percent in 2012. Procurement for consulting services is stable at 1–2 percent per year.

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[10] We noted that PhilGEPS reported a very big amount, PHP 900 trillion in 2011, which is likely a mistake. It is possible that this very large figure is in billion pesos. But without any further information from PhilGEPS, we assume that the correct amount is PHP 900 billion, which is what we used in Figure 1.

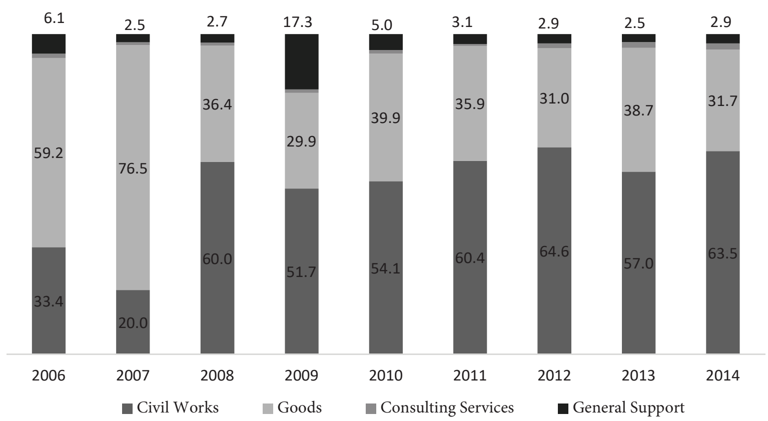
Box 1. What is government procurement?

It is the total value of goods and services purchased by all government units of a given country or territory in a given year for their respective own final consumption and investments. The value may also be expressed as a percentage of a country's gross domestic product. In OECD (2002), the paper estimates procurement as the sum of the final consumption expenditure of the government less consumption of fixed capital (CFC) and indirect taxes (IT) plus government revenues (SALES) and gross fixed capital formation (GFCF), i.e., $GP = FCE - CFC - IT + Sales + GFCF$.

Not all of this market is contestable. Defense-related spending, and compensation of public employees for their services to the government, are excluded.

Source: Organisation for Economic Co-operation and Development (2002)

Figure 2. Composition of government procurement by category, 2006–2014



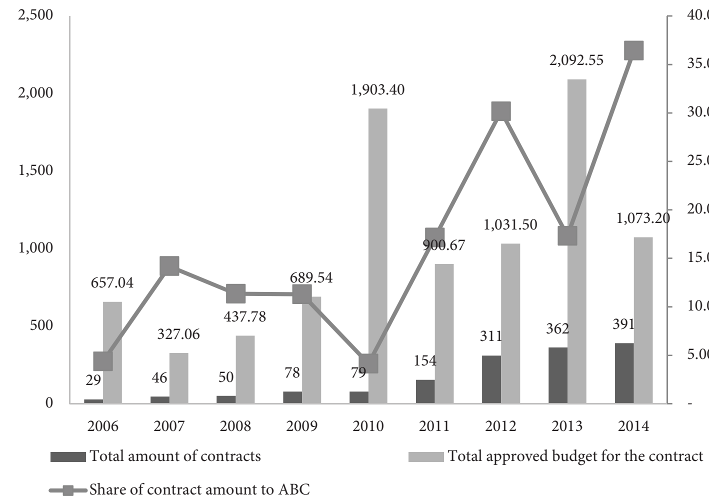
Source: PhilGEPS

There appears to be a substantial underspending as the total value of procurement contracts, on average from 2006 to 2014, is only about 16 percent of the total ABC (Figure 3). There had been years when the absorption rate was only at 4 percent.

The IRR-GPRA explicitly specifies preferential treatment toward local suppliers and local goods and services. The GPRA determines the eligibility requirements and limitations for the procurement of goods, infrastructure projects, and consulting services. Moreover, Rule XII Section 43.1 of the IRR-GPRA determines the scope and application of procurement to domestic and foreign goods, where it is stipulated that "…the procuring entity may give preference to the purchase of domestically produced and manufactured goods, supplies, and materials that meet the specified or desired quality, in accordance with the provisions of Commonwealth Act No. 138".

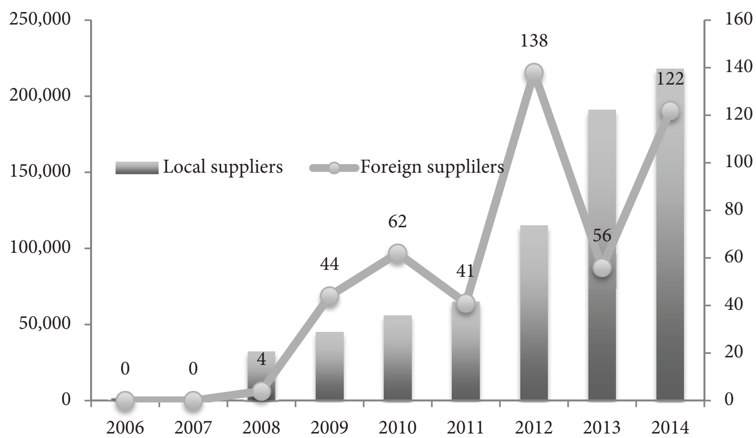
Accordingly, the number of local suppliers far exceeds that of foreign contractors. It is, however, important to note that a significant number of contractors are joint-venture entities, comprising both local and foreign suppliers/contracting companies.

Figure 3. Total value and authorized budget of government procurement contracts, 2006–2014, in PHP billion; (overlay) percentage share of contract values in total ABC



ABC = approved budget contract
Source: PhilGEPS

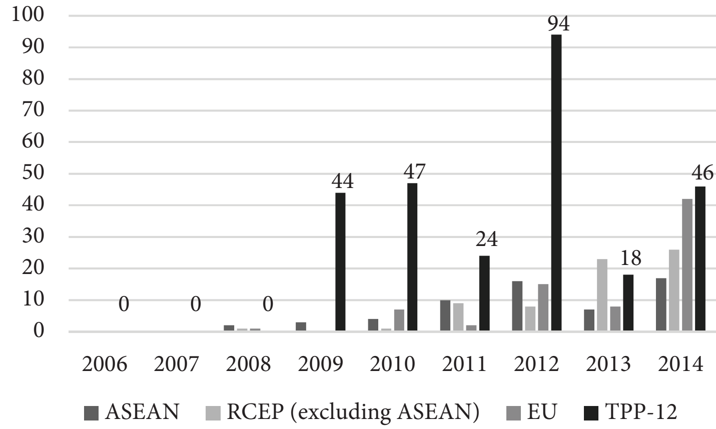
Figure 4. Number of procurement contracts awarded to domestic and foreign service suppliers, 2006–014



Source: PhilGEPS

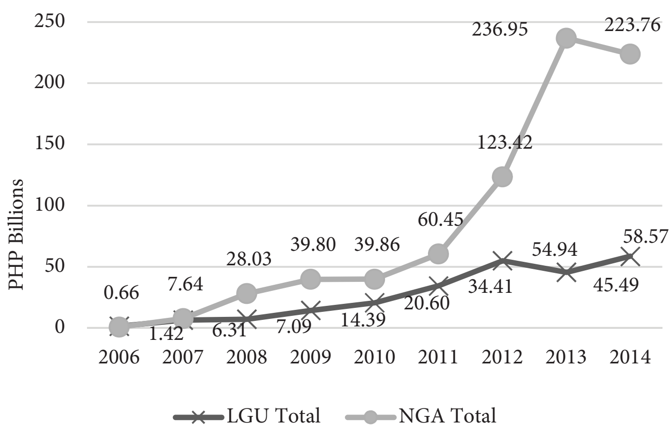
Still, almost all procurement contracts in the Philippines are given to Filipino entities (Figure 4). Since 2006 until August 2015, PhilGEPS listed 39 countries that have been awarded a procurement contract at least once. More than half of these notices are for procurement of goods and were awarded to five countries, namely, the US, Singapore, Republic of Korea, China, and France. In terms of amount, procurement supported with foreign funds is chiefly spent on goods (69% of total procurement), followed by infrastructure spending (26% of total procurement). The highest total procurement were deals secured to suppliers from China, Viet Nam, Indonesia, Japan, and Spain.

Figure 5. Number of procurement contract awards, by economic bloc membership, 2006–2014



ASEAN = Association of Southeast Asian Nations; EU = European Union
RCEP = Regional Comprehensive Economic Partnership; TPP = Trans-Pacific Partnership
Source: PhilGEPS

Figure 6. Procurement of LGUs and NGAs, from 2006 to 2014



LGUs = local government units; NGAs = national government agencies
Source: PhilGEPS

The correlation is high between the number of procurement awards and citizenship of foreign bidders in the trading partners of the country. Figure 5 exhibits the total number of award notices with bidders coming from other Association of Southeast Asian Nations (ASEAN) member-states, Regional Comprehensive Economic Partnership, EU, and TPP member-countries. Eighty percent of all such awards since 2006 were given to the country's major trading partners. Despite the Philippines not being a part of TPP, TPP member-countries have the biggest share of notices awarded, with as high as 94 award notices, or 70 percent of the total foreign notices awarded in 2012. Increase in approved notices from EU, ASEAN, and ASEAN bilateral partners were likewise observed in 2014.

Table 4. National government agencies and local government units with the largest approved budget contracts, 2005–2014

Year	National Government Agency	Local Government Unit
2005	Department of National Defense – Procurement Unit	City of San Fernando, La Union
2006	Department of Agriculture – Region I	Province of Agusan del Sur
2007	Department of National Defense – Procurement Unit	Province of Leyte
2008	Department of Public Works and Highways – Main	City of Bais, Negros Oriental
2009	Department of Public Works and Highways – Sultan Kudarat	City of Makati
2010	Department of National Defense – Procurement Unit	City of Quezon
2011	Department of National Defense – Procurement Unit	Province of Zamboanga del Sur
2012	Department of Transportation and Communications – Main	Municipality of Merida, Leyte
2013	Department of National Defense – Procurement Unit	City of Pasay
2014	Department of National Defense – Procurement Unit	Municipality of Cawayan, Masbate

Source: PhilGEPS

The Philippines has established ties through economic partnerships and/or agreements. Indonesia, Singapore, and Viet Nam are members of the ASEAN to which the Philippines is a contracting party. ASEAN, as a regional economic bloc, has bilateral agreements with China, Korea, and Japan through the establishment of the ASEAN-China Free Trade Area in 2002, the ASEAN-Korea Free Trade Area in 2007, and the ASEAN-Japan Comprehensive Economic Partnership in 2008. The Philippines also has a bilateral agreement with Japan through the Philippines-Japan Economic Partnership Agreement in 2008.

One feature of the Philippine government procurement market that stands out is that most of the procurement contracts go to local suppliers. This is true for both national and local government procurement entities.

The bulk of procurement activities are by the national government (Figure 6). Since 2007, national government agencies acquire the greater share—as high as 80 percent in 2013—of total domestic procurement. Top procurement entities from the national government include the Department of National Defense, Department of Transportation and Communications, and the Department of Public Works and Highways (DPWH). On the other hand, various cities and some municipalities claim top spots in terms of agencies with highest approved budgets for contracts among local government units (Table 4).

PhilGEPS classifies procured goods and services into more specific types of business categories. Vehicles, drugs and medicines, fuel additives, and guns and weapons are among the most procured goods across the years, while civil works procurement is chiefly spent on construction projects, general contractor, and surveying services. To point out the difference between local and foreign participation in procurement across business categories, Table 5 compares the number of unique local and foreign bidders for construction projects. In 2014, unique foreign bidders were outnumbered by unique local bidders for construction bidders 1:1500.

Table 5. Total number of unique bidders for construction projects, local and foreign participants, 2006–2014

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Local bidders	>5	>50	>150	>200	>700	>2000	>3000	>3000	>3000
Foreign bidders	0	0	0	0	0	2	5	4	2

Source: PhilGEPS

NET BENEFITS OF ACCESSION TO THE GP-TPP

The key consideration for deciding whether to open the domestic public procurement market to foreign competition with suppliers residing in TPP parties is the net benefit to the country. The benefits of the country's own procurement reform in 2003 emanate from the rules requiring transparency, competition, and accountability in all public procurement transactions.

Deters corruption

The 2003 procurement law has deterred graft and corrupt practices, which at that time had extracted significant losses to the country. The Office of the Ombudsman estimated that the country has lost about USD 48 billion to corruption over the last 20 years (WB 2010). The Commission on Audit reported that on a year-to-year basis, the country might have lost about PHP 2 billion to corruption (Pimentel 2005).

The fact remains, however, that in relative terms the country remains roughly where it used to be when the GPRA was passed into law despite gains from competitive selection of suppliers in public procurement.

Enhanced competition and improved governance

Two major sources of inefficiency in national procurement systems are (a) a lack of effective competition in bidding markets and (b) concerns related to corruption, or lack of good governance (Anderson 2011 et al.). Accession to GPA is believed to enhance competition and improve governance. While nothing prevents WTO members from eliminating barriers to competition and eradicating corrupt practices in their procurement systems through their own initiative, participation in international agreements is said to "facilitate or make possible domestic reforms and market opening—whether in public procurement or other economic sectors—that countries would find difficult to achieve through unilateral action alone." It does so by providing an inducement that can compensate for the "political 'pain' that market opening can entail" (Choi 2003; Anderson 2011 et al.; Lo 2011).

The comparison done in Section 2 above shows that the major challenge for aligning the country's procurement rules with that of the TPP is giving up the provision for preference to local bidders. Foreign bidders are only allowed in foreign-funded projects, or when it can be shown that local supplies are inadequate or that consultants do not have the expertise that the government requires. While foreign bidders participate through joint-venture agreements as mentioned above, their participation does not proceed from any legal right conferred upon them as when the country would have acceded to a GPA such as TPP, which binds it to practice nondiscrimination. This section reviews the arguments for acceding to either the WTO-GPA or the TPP procurement chapter.[11]

As taken up in the previous section, the size of the country's procurement market is roughly 10 percent of GDP based on the ABC. We did note that there is significant underspending of projects, i.e., only a little over a third of the ABC turned out to be actually procured based on the data from PhilGEPS. Lately, the government had announced its plans to allocate from 5 to 7 percent of GDP to infrastructure spending, and that would be at least half of the expected ABC each year (NEDA 2017).

Focusing on infrastructure alone, there are significant benefits to the country with increased competition in the procurement market. Competition brings down prices of infrastructure facilities. Moreover, infrastructure projects require lump-sum investments, which very few local suppliers are capable of.

Private sector participation in infrastructure projects of the government is already being practiced through PPP agreements. However, the country sees more of the same bidders time and again, i.e., the limited number of Filipino large companies that have relatively good access to financing. Whenever capital and skill pooling is required, they forge joint-venture agreements among themselves to bid for larger PPP projects.

Thus, in this particular area, the country may benefit from increased competition. The market at present is essentially oligopolistic, and risks of collusion are not negligible.

Indicators of weak competition in procurement of road projects may include the following:

- In a sample of 266 work activities across 35 countries and the 5 regions from the Road Costs Knowledge System (ROCKS) database (WB 2006), Collier et al. (2013) found that the number of bidders vary fairly widely from 1 to 25, with 5 as the median.
- The ratio of the maximum bid to the minimum bid varies substantially across countries up to a factor of 16.6 with a median of 1.34.
- The ratio of the maximum to the minimum bid is 2.5 lower in middle-income countries compared to that in low-income countries. The competition in poorer countries is generally weaker compared to that in middle- and high-income countries.

When the median number of bidders is five, the Philippines had only one in each of the two road projects listed in the analysis (one in 2005 and another in 2006). In Table 6, the Philippines is among the countries with relatively high unit costs of road projects. In 2006, a kilometer of road cost USD 60.8 thousand, and USD 94.8 thousand in 2005.

Increased competition lowers prices of procured goods or services, generating savings that can be used to procure more public goods. How this works out is illustrated in Box 2. Given plausible values of the parameters shown in the box, the price reductions range from a low of -22.22 percent to a high of -3.85 percent with increased competition, as represented by reduction in market concentration. The average percentage price fall is -10.67 percent. With a possible reduction in concentration from 25 to 20 percent or 40 to 30 percent, the Philippines may garner savings of PHP 75 billion. This is consistent with the findings of Collier et al. (2013) through a regression analysis using the ROCKS data. The analysis found that a 10-percent increase in unit cost is associated with a 0.68-percent reduction in the length of paved roads per person.

[11] It should be pointed out that the TPP is a single undertaking agreement. Even if we show here that there are compelling reasons for acceding to the TPP's government procurement chapter, this result shall still be weighed in with those in the other provisions of the TPP. Unlike TPP, the WTO-GPA is a plurilateral agreement, and besides, the Philippines is already a member of the WTO.

Table 6. Unit costs of road projects in several countries (in USD thousand)

Country	Cost per km	Number	Year	Country	Cost per km	Number	Year
Paraguay	31.2	1	2005	Botswana	68	1	2006
India	35.9	2	2006	Nigeria	73	1	2007
Bulgaria	40.7	1	2006	Argentina	76.2	3	2006
Ecuador	41.6	1	2005	Georgia	82.6	1	2006
India	45.6	1	2005	Brazil	82.9	2	2005
Burkina Faso	48	1	2007	Georgia	84.9	1	2005
Brazil	55.2	3	2006	Viet Nam	85.4	1	2005
Brazil	58.2	1	2007	Macedonia	85.7	1	2007
Thailand	59.5	1	2005	Rwanda	90.6	1	2006
Philippines	60.8	1	2006	Philippines	94.8	1	2005
Bosnia and Herzegovina	61.9	2	2006	Chile	98.9	1	2006
Nepal	63.1	1	2006				

km = kilometer
Source: Collier et al. 2013

The 2015 GDP in nominal value was PHP 15.192 trillion. The expected infrastructure spending would then be about PHP 760 billion, i.e., 5 percent of GDP. The amount saved, just by rounding up the price fall at 10 percent, is PHP 76 billion. A farm-to-market road or any other last-mile access road by the standards of the DPWH costs PHP 20 million per kilometer. The savings then can pay for 3,800 kilometers. A furnished classroom in a one- or two-story school building costs about PHP 1 million (PPP Center 2015). About 76,000 such classrooms may be constructed with the same amount of savings.

The coefficients from the same regression analysis indicate that a 10-percent increase in road cost would tend to reduce by 40 percent the quality of trade and transport-related infrastructure index component of the logistics performance index. At times when the lack of competitiveness in the economy becomes a major factor in the country's failure to attract investments, the consequent backlog of infrastructure facilities all over the country can be pointed out as directly responsible for the slow structural transformation of the economy toward the higher labor productivity sectors in industry and manufacturing.

The lack of competition in turn can make road infrastructure procurement vulnerable to corruption. The cost of collusion and cartels in the road sector is large and ranges from 8 to 60 percent of the total road cost (WB 2011). In a survey of 3,000 business executives worldwide, the sector of public works contracts and construction has the highest propensity to bribe officials and other firms (Transparency International 2011). In a project implemented in Africa, bribes to secure bids range from 15 to 20 percent of the bid price (WB 2011). To accommodate the bribes, contractors resort to the use of substandard materials in road projects, thus resulting in higher maintenance costs due to poor road conditions and traffic flow congestion. Allegations of collusion and corruption have been found in 25 percent of World Bank-assisted road projects.

A 1-point increase in corruption on a 10-point scale is associated with an increase in costs by about 6–7 percent. The Worldwide Governance Indicator (WGI) measure suggests that moving a

Box 2. Measuring the possible benefit from increased competition

In an industry characterized by competition of only a few sellers, the price of the product is calculated as a markup of the cost of producing its last unit, or the marginal cost. How would the price change if the number of competitors increases? Assuming that the marginal cost is invariant to the number of competitors, then the proportionate change in the price, *p*, is responding to only the average share of each competitor in the market, S_i, and the price elasticity of demand, ε, $\Delta p/p=(\varepsilon+S_i)/(\varepsilon+S_i')-1$.

Competition reduces the average share of each competitor in the industry, i.e., $S_i'<S_i$. Given plausible values of the parameters shown in the following table, one gets a range of percentage changes of the price from a low of -22.22 percent to a high of -3.85 percent. The average percentage change is -10.67 percent.

e	S_i	S_i'	$\%\Delta p/p$
-1	0.25	0.2	-6.25
-0.75	0.25	0.2	-9.09
-1.5	0.25	0.2	-3.85
-1	0.4	0.3	-14.29
-0.75	0.4	0.3	-22.22
-1.5	0.4	0.3	-8.33
Average			-10.67

Source: Authors' calculations

country's level of corruption from the 75th percentile to the 25th percentile would result in 6.3 percent lower infrastructure unit costs. Unit infrastructure costs in countries with a level of corruption above the median as measured by the WGI have on average 12 percent higher costs (Collier et al. 2013).

Gains from market access opportunities

The total value of market opportunities under the GPA has been valued at around USD 1.6 trillion in 2008. This represents more than 2.5 percent of the world GDP for the same year (Anderson et al. 2011). The part that is likely to be covered by the GPA accession is between USD 121 and 311 billion, and the accession of China alone will yield market access gains in the range of USD 113 and 289 billion (Anderson et al. 2011). It becomes apparent then that an obvious incentive for countries to join the GPA would be to gain assured access to the procurement markets of other GPA parties, subject to the terms set out in the parties' schedules. Moreover, the expected market penetration rate by individual acceding parties would be substantial. In a 2011 study by the European Commission, direct cross-border procurement accounts for 1.6 percent of awards or roughly 3.5 percent of the total value of contract awards published in its centralized procurement website in the period from 2006 to 2009. This figure rises to 16.9 percent when indirect cross-border procurement is taken into account, and overall to 29.9 percent, taking into account the additional effect of imports by local agents and distributors. This suggests that the possibilities for actual export sales resulting from GPA accession are indeed very significant (Anderson et al. 2011). Moreover, the value of agreement in terms of market access gains is not merely in terms of cross-border sales by foreign-based companies, but also, more significantly, in terms of sales of foreign-affiliated firms located within the territories of GPA parties.

Furthermore, the EU study also found that (a) there was a high level of participation in the EU procurement market by foreign suppliers; (b) foreign firms were quite active in domestic procurement markets, and participated predominantly (but not solely) through indirect cross-border procurement activities; and (3) bid success rates were broadly comparable and did not vary excessively between domestic and foreign suppliers.

Other benefits

Anderson et al. (2011) also note that apart from gains from trade and enhanced competition, accession to the GPA can yield extraeconomic, albeit considerable benefits. First, by introducing binding requirements relating to transparency, and procurement processes that apply to subcentral, in addition to central, government entities, GPA accession may facilitate internal policy coordination and harmonization within countries. Second, GPA membership may be seen as an international "stamp of approval" that might encourage inbound foreign direct investment in entities desirous of participating in construction and other public procurements. Third, accession to the agreement provides an opportunity to participate in and influence its future evolution.

Impact on local industries and workers

Anderson et al. (2011) note how a nondiscriminatory procurement regime is not tantamount to loss of employment to local contracts. Moreover, they argue that even where a contract is nominally "won" by a foreign supplier, there may well be important benefits for the local economy. Such benefits may be of two types: first, in many cases, foreign contractors will find it convenient to enter into subcontracts with local firms to fulfill certain aspects of the contract, particularly labor-intensive aspects. Subcontracting, in fact, is already happening presently through joint-venture mechanisms. The engagement of domestic, rather than foreign, labor especially in the Philippines with a relatively large population is necessary in making the bid of the joint-venture entity more competitive. While it is possible that foreign key personnel would have to be brought in, this does not rule out the use of competent Philippine professionals to make bids more competitive.

Second, the participation of foreign firms in the market (whether with or without the involvement of local subcontractors) can result in a transfer of technology to the host country that will ultimately strengthen the competitiveness of locally based firms (Anderson et al. 2011).

CONCLUDING REMARKS

There is a fairly high level of alignment between the GPRA and the TPP procurement chapter with respect to business procedures. This is understandable since both measures have the intent of ensuring open, transparent, and competitive bidding in the selection of suppliers. The gaps identified in the Philippine procurement rules with respect to the TPP agreement generally involve the obligations of contracting parties in TPP. The most important disparity is the preference by the country's procurement laws for local products and bidders. With the passage of RA 10667 or the Philippine Competition Act of 2015, local preference in public procurement may have to be revisited to advance competition in the procurement market. Thus, the key consideration to be made by the Philippines would be to determine whether joining the TPP and acceding to a party's obligations in GP-TPP would accrue net positive benefits to the country as a whole. While taking note of the need to implement measures to compensate for adjustment costs by local firms currently enjoying preference, admittedly not discussed in this paper, the data and analysis in the previous section support this paper's argument that opening up the procurement market to foreign suppliers belonging to TPP countries to increase competition in the local procurement market would confer net benefits to the Philippine government and Filipinos in general.

REFERENCES

Anderson, R.D., A.C. Müller, K. Osei-Lah, and P. Pelletier. 2011. Assessing the value of future accessions to the WTO Agreement on Government Procurement (GPA): Some new data sources, provisional estimates, and an evaluative framework for individual WTO members considering accession. Geneva, Switzerland: World Trade Organization.

Choi, I. 2003. The long and winding road to the government procurement agreement: Korea's accession experience. In *Options for global trade reform: A view from the Asia-Pacific*, edited by W. Martin and M. Pangestu. Cambridge, United Kingdom: Cambridge University Press.

Collier, P., M. Kirchberger, and M. Söderbom. 2013. The cost of road infrastructure in developing countries. Oxford, United Kingdom: Centre for the Study of African Economies. http://www.soderbom.net/13_05_02_Unit%20cost%20paper.pdf (accessed on June 12, 2014).

Djankov, S., A. Islam, and F. Saliola. 2016. How large is public procurement in developing countries? Washington, D.C.: Peterson Institute for International Economics.

Kim, D. 2010. A study on the government procurement provisions on Korean free trade agreements centering on the case of Korea-US FTA. Paper presented at the 4th International Procurement Conference, August 26–28, Seoul, South Korea. http://ippa.org/images/PROCEEDINGS/IPPC4/09InternationalTradeandProcurement/Paper9-6.pdf (accessed on June 12, 2014).

Lo, C. 2011. The benefits for developing countries of accession to the Agreement on Government Procurement: The case of Chinese Taipei. In *The WTO regime on government procurement: Challenge and reform*, edited by S. Arrowsmith and R.D. Anderson. New York, NY: Cambridge University Press.

National Economic and Development Authority (NEDA). 2017. *Philippine Development Plan 2017–2022*. Pasig City, Philippines: NEDA.

Organisation for Economic Co-operation and Development (OECD). 2002. The size of government procurement markets. Paris, France: OECD. http://www.oecd.org/newsroom/ (accessed on May 23, 2014).

———. 2013. Government at a glance 2013: Procurement data. OECD meeting of leading practitioners on public procurement. Paris, France: OECD. http://www.oecd.org/gov/ethics/Government%20at%20a%20Glance%202013_Procurement%20Data%20GOV_PGC_ETH_2013_2.pdf (accessed on January 11, 2017).

Philippine Government Electronic Procurement System (PhilGEPS). Open data. Pasig City, Philippines: PhilGEPS. http://www.philgeps.gov.ph (accessed on January 11, 2017).

Pimentel, M.K.V. 2005. *Procurement Watch, Inc.: The role of civil society in public procurement reforms in the Philippines*. Highland Beach, FL: PrAcademic Press.

Public-Private Partnership Center (PPP Center). 2015. PPP for school infrastructure project (PSIP)–Phase 1. Quezon City, Philippines: PPP Center. https://ppp.gov.ph/?ppp_projects=ppp-for-school-infrastructure-project-psip-phase-i (accessed on January 31, 2018).

Republic Act 6713. 1989. An act establishing a code of conduct and ethical standards for public officials and employees, to uphold the time-honored principle of public office being a public trust, granting incentives and rewards for exemplary service, enumerating prohibited acts and transactions and providing penalties for violations thereof and for other purposes. Manila, Philippines: Congress of the Philippines. http://www.ombudsman.gov.ph/docs/republicacts/Republic_Act_No_6713.pdf (accessed on December 16, 2017).

Republic Act 7718. 1994. An act amending certain sections of Republic Act 6957, entitled "An act authorizing the financing, construction, operation, and maintenance of infrastructure projects by the private sector, and for other purposes". Manila, Philippines: Congress of the Philippines. http://www.officialgazette.gov.ph/1994/05/05/republic-act-no-7718/ (accessed on December 16, 2017).

Republic Act 9184. 2003. An act providing for the modernization, standardization, and regulation of the procurement activities of the government and for other purposes. Government Procurement Reform Act. Manila, Philippines: Congress of the Philippines.

Trans-Pacific Partnership Agreement. 2015. Chapter 15: Government procurement. Washington, D.C.: Office of the United States Trade Representative. https://ustr.gov/sites/default/files/TPP-Final-Text-Government-Procurement.pdf (accessed on June 12, 2015).

Transparency International. 2011. APEC procurement transparency standards in the Philippines: A work in progress. Washington, D.C.: Transparency International-USA.

World Bank (WB). 2006. Road costs knowledge system (ROCKS) version 2.3 user's guide. Washington, D.C.: The World Bank.

———. 2010. Combating corruption in the Philippines. Washington, D.C.: The World Bank.

———. 2011. Curbing fraud, corruption, and collusion in the roads sector. Washington, D.C.: The World Bank.

World Trade Organization (WTO). 2017. Parties, observers and accessions. Geneva, Switzerland: WTO. http://www.wto.org/english/tratop_e/gproc_e /memobs_e.htm (accessed on August 25, 2017).

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