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Assessment of the contribution of the Port of Manila to the economic development of the Philippines from 1910 to 2010

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ABSTRACT

A country's seaports are active participants in the trade and commerce of a nation. Through the seaport's piers, people and goods pass through and contribute to the Philippines' economic development. Undoubtedly, the Port of Manila significantly contributes to the Philippine economy. This research attempts to discuss the history of Port of Manila from the American period to the first decade of the 21st century. It discusses the development of the port, its challenges and problems, and its role in Philippine economic history. The sources from this research are official and commercial reports and anecdotes from the people who lived during this study period.

1. Overview.

The Philippine Islands, located in outlying Southeast Asia, are blessed with hundreds of bays that can be made into ports.

Manila, the capital of the Philippines, is on Manila Bay, on the banks of the Pasig. River. The bay is 120 miles in circumference and could accommodate all the navies in the world. Manila was the best commercial center on the globe.[3]

It is surrounded by mountains, such as the mountains of Bataan and the hills of Cavite, which block dangerous monsoon winds. Its average depth is suitable for large ships.

Manila took a long time to make.[4] What is now its ground used to be se; through hundreds and hundreds of years, this foreshore began to fill up until a triangle of ground appeared. This began the site of the City of Manila, a triangle that can be imagined as it handled the Pasig Town, the rim arc of Pasay, and North Harbor.

The Pasig River, the first port of Manila, continues to provide services to some cities and municipalities. The river's historical importance traces back in the early to 1500, when traders from the neighboring country, especially from Asian lands and the Middle East, depended on the river as a mode of transportation especially in goods for services. The arrival of the Spaniards contributed to the growth and formation of the City of Manila. Pasig River and tributaries became the midpoint of the maritime transport and distribution of cargoes and goods.

The river continued to serve as a significant transport of material in the north and south of the Philippines. Sailing such as barges and boats replaced flat-bottomed casco to accommodate increased trade. The entry of the barge or lighter number of dockworkers and stevedores grew and depended on the river as a source of livelihood. As an effect, the labor force of the trade along the riverbanks was the arrival of the people from the rural area to look for work opportunities in big cities creating an additional part of the overgrown for force along the river areas.

The framework that was used in this study is historical *Annales* – the method of interpreting historical data layered in historical time: the short period, the intermediate rate of change or *conjunctures*, and long-span duration or *Histoire de la Longue Duree.*

Fernand Braudel (1902-1985) awas French philosopher and

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[3]Field, February 2, 1899
[4]Manila My Manila, Nick Joaquin

historian, a proponent of historical *Annales Theory of History.*[5]Braudel accentuated the highest importance of explaining historical events, opted for the Philosophy of action, which sees human actions as just one of at least three simultaneous historical actions which revolve around different axes that have their own time, the role of both human and natural science was needed to understand the history[6]

Through this theory, the study would discuss the role of long-term factors called *Longue de durée* in geography, including geography and location created by nature. The medium-term include colonizing powers and government, while the short term refers to personalities, laws implemented by the Philippine Government, and the agencies.

Employing this method of History, Annales would lead to the understanding and interpreting the development of events, situations, and a medium and short period. The layers of historical time used in tracing the Port of Manila's economic history were from the early American period until the 21st century.

Long Durée or *Histoire de la longue Duree* secures how geographical locations became factors for the continuity of the trading industry of the Philippines to other countries. Geography and location would depart from the medium and short term in the long run. The site of Manila at the side of a landlocked bay and the mouth of the Pasig River, which leads to the interior of Luzon, provides an ideal local port. The bay itself is at the highway maritime of trade with the Archipelago.

By the time of *conjunctures* or the shift of average rate of change, the broader movements of economies and social structures have become a cyclical movement that human actions now revolve into different parts of the world time. Part of the study includes the government projects and their effects on the community. These projects cater to the social development of man into the community. The study identified the tasks created by the government per period to observe how well they affected the community.

In a short period, the fast-moving time of history, this study discussed the government policies and officials who became part of the development of Port of Manila. It also explored the prevailing laws that are the strength for port development.

Traders and colonizing powers saw Manila Bay's potentials and helped develop the port of Manila from a small settlement to becoming one of the finest harbors in the world. The desire to trade and gain more profit led to trade development and personalities such as officials and corps factor for the short term.

However, at the same time, while the expansion of the port managed the growth of businesses, its problems and challenges must be addressed in the short, medium, and long terms.

The main research problem is to assess how the port of Manila contributes to the Philippines' income and how it becomes a victim of its own success from 1910 to 2010.

[5] In journal Annales: economies, societies and civilisations which are associated in 1946 and 1947

[6] Hornedo, n.d., Annaels: economies, societies and civilization.

2. The Choice of a Sea Port:Manila Bay and its Features.

The Philippines is an archipelago of approximately 7,641 islands[7]. Since it is a maritime country, water travel is essential as the primary transportation mode in commodities and people's movement. Manila Bay, with its landlocked, features deep anchorages and access to the riverine system of Luzon. Since precolonial times natives have traded from the bay, and the rivers fed this body of water allowed goods to be traded with Luzon's interior communities. A vital artery to the bay is the Pasig River. The Pasig River is 23 kilometers long[8] (present 27 kilometers long[9]). It rises from the north side of Laguna de Bai (Bay) and flows westward into Manila Bay?— the river's mouth was near the Pasig Town. The river used to divide the triangle into an upper and lower side of the north and south. Thus, the river was now in the middle between two halves.

The bay is also protected against violent winds by the Marivelles mountains to the north and the hills of Cavite to the south. According to Nick Joaquin, the bay is 120 miles in circumference and could accommodate all the world's navies. Manila was the best commercial center on the globe. [10]

The land formed in the river's mouth is called the delta, occupied by Manila. This is because the site of Manila was reclaimed from the sea. Perhaps the first group who inhabited the delta islands were the barangay folk who arrived in the Philippines around the 10th century.

Figure 1: Map of Manila Bay, Pasig River, and Laguna de Bay.

Source: Eutrophication of Manila Region, Philippines. Szekeida, K.H., Espiritu E., and Lagrosas N., 2014.

At the start of Spanish domination, the Spanish colonizers favored Manila and its bay over Cebu because of its location near China, and it was more defensible because of the landlocked features of Manila Bay. Also, traders from other coun-

[7] Welcome address of Dr. Peter N. Tiangco, Administrator of National Mapping and Resources Information Authority of Department of Environment and Natural Resources last January 2, 2017. Ret. January 10, 2017 http://www.namria.gov.ph/list.php?id=1032&alias=administrator-tiangco-welcomes-2017&Archive=1

[8] ibid

[9] http://www.wepa-db.net/policies/measures/background/philippines/pasigriver.htm.

[10] Field, February 2, 1899

tries like Japan, China, Siam, Anam, and other Asian countries have been doing business with Manila, and the Spaniards wished to tap the already growing commerce with the two countries. Therefore, during the Galleon Trade age from 1565 to 1815, most galleons were outfitted and loaded at the Port of Cavite, also within Manila Bay, before their voyage across the Pacific. The galleons were also unloaded there and repaired for the next journey on the return trips.

Figure 2: Trade in Pasig River during the precolonial period.

Source: Eutrophication of Manila Region, Philippines. Szekeida, K.H., Espiritu E., and Lagrosas N., 2014.

After the Galleon Trade ended in 1815, its monopoly was replaced by several businessmen who traded freely as Manila continued to be a trade city through its port on the bay. Aside from the trade with Acapulco, there was brisk trade with China. There was also an increase in domestic trade that made it necessary to expand the port of Manila. In 1881 the Spanish engineers led by Jose Garcia Moron upgraded Manila's port, creating a sheltered docking area on Manila Bay. Previously, ships docked along the Pasig River. Plans were made to expand the harbor along the bay itself. The port of Manila became the main port of entry for foreign goods and passengers. Various goods were traded, including cloth, iron, saltpeter, gunpowder, copper, nails, and other metal items. It spawned support industries such as shipbuilding and repair long the Barraca Street in Binondo. Other sectors included ship handling or providing supplies for ships and ship crew. In 1834 the port of Manila was opened to world trade.

The trade-in in Manila also provided a mutual benefit to Fujian. The Governor of Fujian collected Php 80,000 to 100,000 from the Sampan Trade, which happened in Manila. While in Manila, the traders from the sampan trade paid import duties on anchorage fees, freight charges, and license fees for staying with the Chinese Quarter, also known as Parian.

The Port of Manila's value can realize when it was offered by Felipe Agoncillo to the United States as security to supply the Philippine revolutionaries with some 20,000 stands of arms and 200,000 rounds of ammunition which was payable upon the independence of the Philippine government by the United States as security Agoncillo offered two provinces of the Philippines the income Manila Custom-house[11].

After signing the Treaty of Paris, Filipino diplomats proposed that the $20 million paid by the United States to Spain for the Philippines' cession be treated as a loan to be paid by the Philippines in exchange for recognizing Philippine independence. The Filipinos headed by Agoncillo and Galicano Apacible again offered the Port of Manila's income as security or collateral for the loan and other concessions.[12]

3. The Port of Manila: Under the American Period.

The new colonial period under the Americans saw increased economic activity. Much of which was international trade that passed through the Port of Manila. Imports from the U.S. were 8.7 % of the total imports in 1900, 20.3 % in 1909, and 64.2% in 1911; in 1915, imports came from the United States. Eventually, the Philippine economic activity was closely similar except in 1916 when the exports exceeded in the United States and the other countries[13].

The new colonial period involved economic activity, which had benefited the United States more. Imports from the U.S. were 8.7 % of the total imports in 1900, 20.3 % in 1909, and 64.2% in 1911; in 1915, imports came from the United States. Eventually, the Philippine economic activity was closely similar, except in 1916, which was the turnaround when the exports exceeded, particularly in the United States.

From 1901-1909, the port of Manila's market activity for both import and export was profoundly different from 1909 to 1916, with the total value of Php 199,713,696 with the *introduction of free trade between the Philippines and the United States*. A Php 7,275,667,000 deal between the Philippines and United States was recorded from 1899 to 1926, while 1920 reached the peak of the highest total employment, which was valued at Php 601,124,276, the same for the highest number of imports and export. Other countries such as the United Kingdom, Japan, China, French East Indies, France, Spain, Hongkong, British East Indies, Australasia, and Germany had Php 3,398,909,000[14]

The Philippines' economic development from 1909-1916 led to *improved import and export products*. The United States was the leading trading partner of the Philippines in both imports and exports. From 1909-1916 the balance of trade between the Philippines and the United States was the only P11,000[15]. France also opened its commerce to the Philippines, while French East Indies trade in the Philippines through rice and cattle with 94,000,000[16]. Hongkong and British East Indies were the markets in Asia, particularly in Eastern Asia or the east. Therefore, without the United States markets, countries such as the United Kingdom and Europe would not have a prospect in opening their trade to the Philippines. France was also emerging as the leading market for copra, while Spain led all the other countries

[11] E.A. Ocampo, Filipino First Diplomat: Felipe Agoncillo (1859-1941), p.72

[12] Ibid.

[13] Port of Manila and other Philippine yearbook, 1927, p.62

[14] Port of Manila and other Philippine Ports yearbook, 1927, p. 62

[15] Port of Manila and other Philippine ports, 1935

[16] ibid

to purchase leaf tobacco. As for the United States, it became the primary trading partner of the Philippines.[17]

A total of Php 7,275,667,000 value of trade between the Philippines and United States was recorded from 1899 to 1926, while the year 1920 reached the peak of the highest total trade, which was valued at Php 601,124,276, the same for the highest number of import and export. Other countries such as the United Kingdom, Japan, China, French East Indies, France, Spain, Hongkong, British East Indies, Australasia, and Germany had Php 3,398,909,000.[18]

The Philippines' foreign commerce and shipping had a volume and value of foreign commerce; shipping grew from P 68 million in 1899 to Php 623 million in 1929. The early trade balances favored the island; thus, the foreign trade totaled nine billion pesos, more than five billion was with the United States.

For the number of imports for the year 1929 by ports of entry, Manila had the highest amount for total trade of imports by P 253,566,407, Cebu Php 18,969,418, Iloilo Php 16,123,240, Zamboanga Php 2,188,984, Davao P1,569,434, Legaspi P 1,490-,435 and Jolo Php 412,631[19].

The Philippines' foreign commerce and shipping had a volume and value of foreign commerce where the shipping grew from P 68 million in 1899 to Php 623 million in 1929. The early trade balances favored the island, thus, making the total foreign trade in this period to nine billion pesos, where the United States gained more than five billion. Steamship services lines operated in the Philippines directly or were transferred to other-oriented ports, interisland shipping between Manila and other parts of Cebu, Iloilo, Zamboanga, Jolo, Davao, and ports provided several shipping lines.

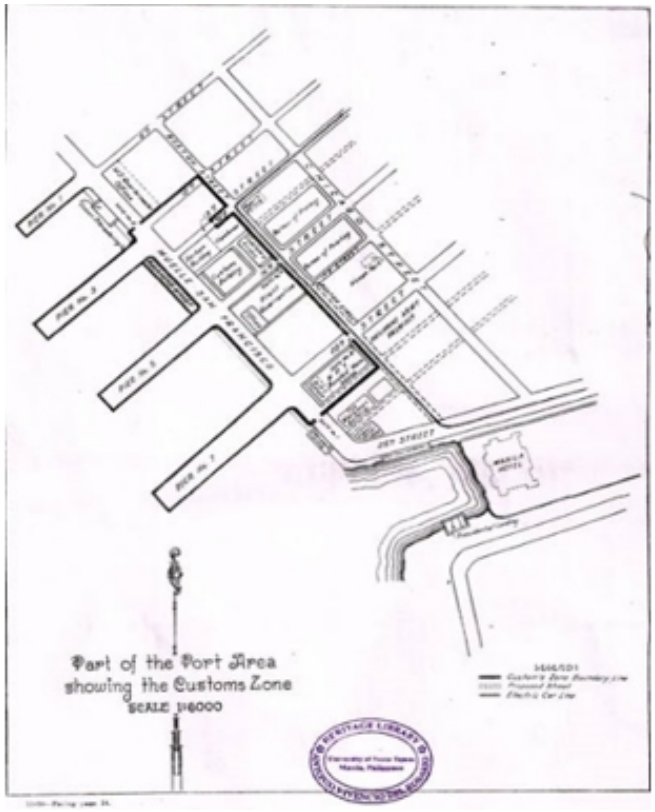
In the four decades under the American Occupation, the Philippines moved forward dramatically in the previous centuries of the colonial past. Expansion of the Port of Manila took place. New facilities were constructed, Pier 7, touted as the longest in Asia. It was built to accommodate the most modern passenger vessels afloat.

4. The Port of Manila During World War II.

When the Pacific War broke out on Dec. 8, 1941, the Port Area of Manila was the first to be bombed by the Japanese. By Jan. 2, 1942, the city of Manila was occupied by the Japanese. As trade with the United States and the Allies damaged the Philippine economy. The Japanese seized the goods found in the port warehouses. The port was used to send goods to Japan.

In September 1944, the Port of Manila was one of the first to be blasted by aerial bombs of the Americans trying to retake the Philippines. Numerous buildings and ships were destroyed in the bombings. When Manila fell to the Americans, priority was given to make the port operational as soon as possible. The main problems were the destroyed facilities such as the piers.

Figure 3: Map (Part) of the Port Area shows the Custom Zone in 1940.



Source: Port of Manila Commonwealth of the Philippines 1940 p. 24.

There were also a number of sunken vessels in Manila Bay which presented a hazard to shipping. Also contributing to the hazard was that some islands in the bay, especially Corregidor and El Fraile islands, were still in the Japanese's hands. Until the end of March, the Japanese-occupied islands were created of hostile forces. As the war was still raging, the Port of Manila was prepared as a springboard for Japan's invasion. Thus, the port of Manila was the springboard of the operation against Japan. Peace, however, came with Japan's surrender on Sept. 3, 1945, and restoring the port facilities became a priority of the U.S. Government and the Philippine Commonwealth government. According to the comprehensive survey conducted by Frank Golay, the economic backdrop that occurred in the first four-decade of American rule provided a deep contrast between the precolonial and the post-independence periods.[20]

5. The Port of Manila During The Post Independence Period.

Following World War II's destruction, the port struggled to rise above the ashes of the conflict. The U.S. Army Corps of Engineers provided help in clearing the ports of debris and repairing the bomb-cratered piers.

[17] Trade Values and Balance in Philippine Island by countries from July 1, 1909 to December 31, 1916. Port of Manila and other Philippine Yearbooks 1935. p.27

[18] Port of Manila and other Philippine Ports yearbook, 1927, p. 62

[19] Profile of the Philippine Ports and Other ports of Manila in 1929.

[20] Gerardo Sicat, 1940

The United States funded rehabilitation as part of the agreement with the Rehabilitation Act of 1946. Soon the port was on the operation, and among the ones who used it were Japanese residents being deported and American personnel leaving the country.

The sunken vessels in Manila Bay and the Pasig River had to be refloated or removed. Unknown to many people, even when the Philippines was still in a state of war with Japan, Japanese divers helped refloat and remove sunken vessels. Japanese divers' use was done in secrecy and known only to top U.S. military officials, including General Douglas MacArthur.

The Philippine government improved the port area with adequate modern facilities and foreign shipping accommodation, increasing the Philippines' imports and exports. Part of the services which provided changes were in the cargo operations, especially piers and wharves.

Aside from the herculean tasks of rehabilitating itself, Manila's port's fate also rested on restoring trade ties with other countries. The resumption of trade did not just include the United States; even when the Philippines was still technically at war with Japan, Gen. MacArthur, as Supreme Commander of Allied Powers (SCAP), encouraged the resumption of trade between the Philippines and Japan. This allows both countries' economies to recover and enable Japan to become the bulwark against communism and the Philippines to enhance its postwar recovery.

Trade with Japan which passed through the Port of Manila, amounted to4.6 million pesos in 1947. It rose to 31 million pesos for the following year, and by 1949 it reached 22.6 million pesos. The Philippine imports from Japan consisted of textile, toys, cement, and other finished goods that amounted to two million pesos in 1947, two years after the total was 2.2 million pesos and 32.2 million pesos in 1949. Over these years, the Philippines had a surplus trade with Japan, mainly in 1947 and 1948.[21]

Because of the continuous trade between the two counties, onMay 18, 1950, a financial agreement was signed along with a trade agreement. The Philippines exported products such as iron, manganese chrome ores, molasses, logs, lumber, rattan, mangrove bark, copal, buffalo hides, shells, copra, hemp, and other raw materials. For Japan, it exported porcelain, glass chemicals, farm equipment, ships, fishing boats, supplies, and other finished products to the Philippines. As a result, many Japanese companies were re-established in the Philippines, such as Mitsui Bussan Kaisha and Mitsubishi Shoji Kaisha.

Upon returning the Japanese to Manila, many workers overcame some sunken vessels in Manila and Cebu's harbor. In June 1955, Japanese men lived in Manila North Harbor's compound, and a total of 135 sunken ships was recovered during this period.

[21]. Augusto de Viana 2008. Halo-Halo, Hardware and Others: The Story of the Japanese Commercial Community of Manila 1900-1945. Manila: University of Santo Tomas Publishing House.

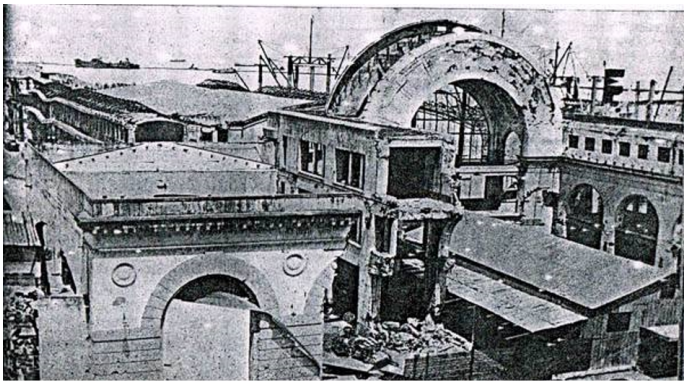
Figure 4: Sunken Japanese Ships in Manila Bay Blocking Shipping into Harbor at Manila in the Philippines on Mar. 6, 1945.

Source: The Digital Collections of the National WWII Museum.

Figure 5: Troops use engineering boats to gain a beachhead on the South Bank of Pasig River in the Philippines on Feb. 23, 1945.

Source: The Digital Collections of the National WWII Museum.

Figure 6: Pier 13, which is formerly known as pier 7.



Source: Port of Manila Philippine Yearbook 1949. p.9.

6. The Post-Liberation Period.

During the liberation period, the Armed Forces of the United States was the primary user of the Port of Manila. As a result,

there were significant changes in the port industry, especially in trade import and export in 1946. However, the port facilities' rehabilitation and improvements were under the Philippine Rehabilitation Act of 1946 and the United States Courts of Engineers or MANED[22].

Philippine ports were repaired and restored. Significantly, the Bell Trade Act ensured more U.S. funds in exchange for trade with the Philippines. As a result, the Philippines could receive beyond the insufficient sum of US$500 million earlier authorized by the U.S. Congress. If the Philippines accepted the Act, it would receive an additional US$120 million for the reconstruction of highways, ports, and harbor facilities, US$100 million worth of surplus military property, US$400 million for the compensation for the property losses and damages suffered by Filipino and non-Filipino.[23]

Based on the Philippines and the United States' agreement, programs focused on the rehabilitation and improvement of Philippine ports and harbors. It had been drawn for the geographical location of the Philippines. The rehabilitation and improvement of the Port of Manila as approved consisted of the following: for the South Harbor; reconstruction and progress in the Pier 9 consisting of the construction were the changes in the physical appearances, especially in the concrete deck, which measured 331 feet wide by 987 feet wide by 331 feet long. Changes in Pier 13 were moved into the restoration, preparing the cargo vessels in transporting goods into the market. [24]

These piers were opened not only for the foreign ships but also to reduce cargoes in Manila port— as some were destined for in the nearby provinces. More ports were needed in line with the program, primarily in the shipping industry. Aside from the local port, establishing additional ports all over the country would also help decrease the cost of prime before this. Those cargoes intended for the northern provinces were unloaded in Manila before being transferred to their destination point.

Throughout the last two years of the 1950s, piers 5, 7, 9, 11, and 13 were used for foreign commerce. Pier 9 was still under construction; the other piers provided a total berthing space of 7 121 feet. The remaining piers, such as 1 and 3, were still under the U.S Army, while Pier 15 temporarily was used for the berthing space for Philippine Naval Patrol. Pier 13, which was rehabilitated by Manila Engineer District U.S. Corps of Engineers, was considered the main project in all the ports, for it would be for commercial use. Pier 9 was considered the first pier to be rehabilitated and a permanent port facility. Pier 13 was the pier equipped with fire protection in the waterfront, and these fire hydrants were installed before the outbreak of the war, and Pier 11 and Pier 7 were used for commercial purposes. [25]

Since the early post-war period, the division of ports and harbors under the Bureau of Public Works controlled and supervised all repair and maintenance in the South Harbor Port Facilities.

The pier at the Manila North Harbor, reconstructed in 1957, was intended for interisland shipping. These were Piers 2, 4, 6, and 8. Unfortunately, the war interrupted this completion of the Piers, Piers 10, 12, and 14. As for Manila's liberation, some of the piers were damaged and repaired by the U.S. Army Corps of Engineers; Piers 12 and 14 were destroyed during the Japanese Occupation and repaired by the American engineers. [26]

The piers which were regularly used and operated for interisland shipping were piers 2, 4, 6, and 8. They provided a total space of 5 768 feet. Only piers 2 and 4 had rail connections which the Manila Railroad Company provided. There was an absence of a machine to lift heavy cargo, the lack of mechanical cargo so, the crane of the Philippine Naval Patrol was used with a lifting capacity of 5 tons.[27]

In 1946, the Philippine Ports Authority (PPA) was established to oversee all the Philippines' ports. The Philippines' premier authority develops, maintains, and operates public and private docks. The implementation of rates or changes in cargo handling tariffs is affected by the government's privatization program that handles the Terminal Operations in the International Container Terminal Services for Manila International Container Terminal and Asia Terminal Incorporation for South Harbor; Cargo Handling services for each port.

The Port of Manila remained the Philippines' leading port from 1946 to the 1970s in international trade and the main seaborne gateway to Manila for domestic travel. It covers an area of about 180 hectares which comprises the South and North Harbor. The North Harbor, which includes the lower portion in the Pasig River, received a coastwise vessel with cargoes and recorded at 6.3 million tons or 63% of total traffic in Manila's Port. For South Harbor, the ocean-going number of vessels totaled 3.7 million tons.

As the volume of cargoes continued to increase and with the adoption of containerized handling, the Port of Manila was expanded to create the Manila International Container Terminal (MICT) in the late 1970s. The cargo is placed in standard metal boxes such as ten-foot, 20- foot, 40- foot and later 60 and 80-foot equivalent units in metal boxes in containerized cargo. Containers enabled easy loading and unloading of cargoes compared to individuals baled cargoes that needed extra careful handling; cargo containers sheltered the contents from the elements and prevented theft and pilferage. Specialized containers carried refrigerated cargoes like meat and seafood, containers for carrying non-bulk liquids like milk and chemicals formerly done by tanks or drums, and even special containers for carrying livestock.

The MICT began partial operations in December 1978 recorded a total amount of cargo traffic of 2.8 million.[28]. It is the country's most modern container terminal. The MICT is located between the North and South Harbors in Manila and the westward of Manila. The southern end is the Pasig River's

[22] History of industry and trade of the Philippines: the Magsaysay administration, 1961

[23] ibid

[24] Bureau of. Customs, 1949. Port of Manila and other Philippine Ports Year Book Manila : Arrastre Services Division,

[25] ibid

[26] Bureau of. Customs, 1950. Port of Manila and other Philippine Ports Year Book,. Manila : Arrastre Services Division.

[27] ibid

[28] 1978 Annual Statistical Report. Manila: Philippine Ports Authority Library.

mouth, a container-dedicated terminal and one of the three terminals in Manila. Later some of the domestic cargo too became containerized. These remaining two terminals, the North Harbor, were for the domestic bulk, breakbulk, passenger, and containerized cargo, and South Harbor for international bulk, breakbulk passenger, and containerized cargo. The MICT has 1,300 sq. in length and six berths with the exact dimensions.

Of the 21 million tons at the Port District of Manila, Domestic trade was registered at 51%, while foreign trade was 49%. In the total percentage in the trade, 76% for the berth and 24% at anchorage. Cargoes handled at berth, North Harbor accounted for 40%, of which 7% of this was containerized; South Harbor accounted for 23% of which 40% containerized; private ports at Limay and Mariveles in Bataan handled the remaining 37%[29].

When Martial Law was declared on Sept. 21, 1972, Bureau of Customs' measures had been on the in-paring operations, management, and the entire Bureau's system. Besides the changes that improved the customs, it became a chronic problem after cargo became containerized in 1970. The biggest problem which the Bureau faced the following year was the port congestion. The rapid increase in containerized cargo volume arrived at the Port of Manila. There was a growth in Port of Manila's portion, such as the facilities built before the war and were designed for the general cargoes but were no longer used primarily to the present container traffic that the port had experienced.

With the port operations becoming more complex, the Philippine government issued Customs Zone Administrative Order No. 232, which modified the customs zone policies and the regulation under the Chief of Harbor Police. The Port of Manila continuously expanded related to the movement of commerce and trade in the Philippines. The Port administrations in the Philippines merged with the Bureau of Customs (BOC) in which would be for the development of ports and harbors.

Another development opened the opportunity to reorganize the Philippine Ports Authority that acknowledged port planning and development changes in the same period. As a result, the Bureau of Customs proposed a Reorganization Commission and Congress to create a separate Government agency. The Bureau of Customs will control the port operation, cargo handling, port development, and the tax and customs duties.

Another development that was the reorganization of the Philippine Ports Authority was a Japanese loan condition in 1973.[30] As a result, the Port administrations in the Philippines merged with BOC, which would be to develop ports and harbors. The creation of the Philippines Ports Authority would be a significant opportunity for the economy. It became the supervisor, administrator, and planner for all the public ports in the Philippines.

[29] ibid

[30] Banking Group,. 1973. Document of Internal Bank for Reconstruction and Development . Philippines : s.n., 1973.

7. The Economic Role of the Port of Manila.

Since the beginning of American rule, Manila's port has been a significant revenue earner for the government.

A total of P 7,275,667,000 value between the Philippines and United States was recorded from 1899 to 1926, while the year 1920 reached the peak of the highest total trade, valued at Php 601,124,276, the same for the highest number of import and export[31].

As for the foreign registered number of foreign vessels, 1924 accumulated 950 registered vessels, and the reported number of foreign tonnages is 3,839,378. Therefore, between 1899-1926, the peak number of registered vessels (foreign and domestic) had 4,320 registered tonnage, 4,662, 443 in 1926[32].

In correlation with the total value of trade in 1899-1926, the year 1918 had the highest registered number of domestic vessels with 557,763 registered tonnage; among the registered domestic tonnage, the peak was in the year 1926 with a total number of 823,065[33]

During the American period, the implementation of trade and commerce identified that trade with the United States increased the economic activity of ports and the Philippines. Aside from the United States, the Philippines became the primary trading partner of various countries. As for the total number of trades, imports were valued at Php 5, 012,449,519 and Php 5, 642, 217,720 for the exports[34]

The port centered the 1930s figures for both import and export continued to increase. As for the total annual trade per period, the highest number of trade and export totaled Php 215,26-4,603 during 1917-1933, and the total trade was a total of Php 466,314,259[35]

In the four decades under the American Occupation, the Philippines was moved forward dramatically in the previous centuries of the colonial past. By 1940, the country was into a prosperous future. Political independence and the standard of living of the typical Filipino were higher than in Southeast Asia.[36]From 1936 to 1940 a total of 1,074,639,449 total value of imports; 1,223,716,723 for exports and 2,298,353,172 total number of trade[37].

Manila's port's operating expenses towards the Japanese colonization had a total of Php 1,202,880.44, maintenance equipment of the port was much higher during 1939-1940 with a total of Php 83,853.53. However, the high number of total volumes of cargo was in November of 1939 with 120,536,235 and February of 1940 with 116,174,609[38].

[31] Port of Manila and other Philippine Ports yearbook, 1927, p. 62

[32] ibid

[33] The Port of Manila. Port of Manila and other Philippine ports yearbook, 1927

[34] Port of Manila and Other Philippine Ports Yearbook, 1935

[35] ibid

[36] Gerardo Gerardo Sicat, 1940

[37] Port of Manila and other Philippine Ports. 1950.

[38] Gerardo Sicat, Gerardo P. 2003. "The Philippine Economy During the Japanese Occupation." Discussion Paper No. 0307 University of the Philippines, School of Economics.

During financial control from 1949 to 1961, the Import and Foreign Exchange control was established to save the Philippines' possible bankruptcy due to the dollar's massive outflow under free trade with the United States. The import and foreign control resulted in a decline in American companies. Import and foreign exchange control, however, produced a good result for the Philippines businesses. As a result of control within the foreign exchange policies, imports from abroad now limited and prohibited the future policies to emerge when it came to the establishments of primary commodities such as food, wood, pharmaceutical, appliances, machine parts, engineering, and other industries for the improvement of the industrial base[39].

The port of Manila was still the primary port for foreign trade. Manila shared 22%, while the other ports were 78%. For the import trade still, Manila had the highest percentage of 86.7% from the combined total of the other ports of 13.3%[40]

The Philippine imports in 1967 were more into machinery rather than electric and cereal and cereal preparation imports. These two products were purchased by Php 414.8 million as a result of a 44.80% increase from Php 583.9 million to Php 845.5 million in machinery other than electric purchases and a total of 77.36% increase from Php 198 million to Php 351.2 million in cereal procurements. The Philippine imports growth rate in 1967 was only 21.83% and increased only a total percentage of 12.97% in 1968. The country's accumulated merchandise was valued at P924.7 million. The value of Philippine exports to the world rose in 1968, and the ten leading countries that became the destination for the Philippine exports in 1968 were the United States, Japan, Netherlands, Federal Republic of Germany, the Republic of Korea, the Republic of China, Peru, Singapore, Switzerland, and Sweden[41].

The Bureau of Customs collection during the fiscal year 1967-68 had a total of P843 million pesos. As for the end of June that year, the collection increased to P946 million. The management improvement by the Bureau attributed to the increase in the said collections. For the fiscal year in 1968-69, the Bureau established a total of P843 million net general fund[42]

The foreign trade from 1971 to 2010, the total value of trade 1,554,282.98 million U.S. dollars; the value of exports is 718,923.75 million U.S. dollars; imports are 835,358.53 million U.S. dollars[43]

In the year 2010, the number of cargoes especially in foreign cargos increased compared to the previous year because of the technology- based system that enhanced the services of trade industry in port of Manila. Thus, the number of passengers also increased in 2010 than the previous years because of the cheaper price that the air travel, though number of maritime disasters happened in the port of Manila.

The total cargo throughout 2010 was 16.5 million metric tons (MMT) which signified that number of goods which passed through the country's port. Foreign cargo also went up by 18.64 MMT and domestic cargo decrease into 2.97 percent or 2.14 MMT[44].

The services which the port of Manila in 2010 had a total of 346.000 vessels for 2010 and the increase in the domestic and foreign ships grew by 10.03 percent and 10.43 percent which is an excellent indication that the improvement in the global and domestic economy.

The further on-going projected to be completed in 2010; 40 Locally funded Projects amounted to P1.74 billion pesos was invested by the Philippine Ports Authority. Furthermore, a total of P3.42 billion for 74 Locally- funded projects in PDO Manila/Northern Luzon; 31 in PDO Southern Luzon; 14 in PDO Visayas; 9 in PDO Northern Mindanao; and 10 in PDO Southern Mindanao. As the end of the year, a total of 34 projects with an amount of Php 1.68 billion. From the previous year, the PDO Southern Luzon captured a total number of shares of Php 1.20 billion, followed by PDO Visayas- Php 1.17 billion; PDO Manila/Northern Luzon-Php 446.10 million; PDO-Northern Mindanao and PDO Southern Mindanao- 5.68%[45].

In line with the port projects, PPA allotted a total of Php 546.64 million for the 2010 Dredging program. A total of 1.84 million cubic meters of silts from 9 ports nationwide privatized with a private contractor; F.F. Cruz and Company. Areas which is covered by 2010 Dredging are the following: North Harbor Entrance Channel; South Harbor Fairway Channel leading to Piers 9 and 13; South Harbor Fairway Channel leading to Piers 3 and 5; South Harbor Anchorage; Batangas Base port Phase II, Brooke's Point; Puerto Princesa; Cajidocan Romblon; Matnog Sorsogon; Iloilo River (Phase 1), Base port, Iloilo; MICT (carry-over, completed in 2010) and Dumaguete (carry-over, completed in 2010[46])

Port maintenance and services in the existing port in PPA also allocated a total of Php 1 billion for its repair and maintenance program for 2010. A total of Php 795.58 million allotted for repair projects; Php 189.66 million for the maintenance projects in the port; Php 3.50 million for Head Office engineering projects; Php 10.00 million GAD-related projects and lastly, P1.26 million for the unprogrammed projects. PDO South Luzon received the highest budget for repair and maintenance with a total of P383.11 million followed by PDO Visayas which had a budget of Php 207.34 million while PDO Manila/Northern Luzon had P129.03 million and lastly, PDO Southern Mindanao had Php 88.32 million.

The continuous development of port also increased the revenue of the PPA for 2010 a total of P8,295.62 million, higher than the previous total revenue. ICTSI was still the highest contributor for the Philippine Ports Authority revenue amounting to Php 2,760.14 million; Php 1,671.02 million for wharfage fees; and vessel charges at P1,190.93 million, Asian Terminal Inc. Fees which has a total of Php 923.57 million, Arras-

[39] Port of Manila Philippine Yearbook, 1950

[40] ibid

[41] Narciso Ramos. 1966. Philippine Foreign Relations in the First Eight Months of the Marcos Administration. The Fookien Times Yearbook. Manila : The Fookien Times Co, Inc. , 1966.

[42] Republic of the Philippines National Economic and Development Authority. 1967

[43] https://psa.gov.ph/products-and-services/publications/philippine-statistical-yearbook

[44] Philippine Ports Authority, 2010 Annual Report

[45] Philippine Ports Authority, 2010 Annual Report

[46] ibid

tre/Stevedoring income has a total of Php 678.07 million, other sources of income of Php 423.50 million, pilotage and storage fees at Php 320.49 million and VTMS and Terminal Fees at Php 226.30 millio[47]

The growth of port performances, especially in revenue generation for the year 2010 spearheaded by Manila/Northern Luzon, followed by Southern Luzon and Southern Mindanao. The PPA also included in the total port revenue from wharfage, dockages, port dues, usage fees, storage, pilotage, terminal fees, rental, share in arrastre/stevedoring, management fees, and other ancillary services.

Table 1: Overall improvement of the 5 PPA ports between 2009 and 2010 which reflected the economic activity during this year.

Port by PDO CY 2010, in Million Pesos			
PDO	**2010**	**2009**	**DEVIATION**
Manila/Southern Luzon	5,455.28	4,711.11	15.80%
Southern Luzon	904.00	769.66	17.56%
Visayas	499.75	437.29	14.28%
Northern Mindanao	534.08	466.61	14.46%
Southern Mindanao	724.17	597.31	21.24%
TOTAL	**8,117.28**	**6,981.98**	**16.26%**

Source: Philippine Ports Authority 2010. P. 2.

Table 2: Port Revenue by Source, 2010 in Million Pesos.

COMPARATIVE PORT REVENUE 2010 vs. 2009				
Account	**2010**	**% of Total income**	**2009**	**Increase/ (Decrease)**
Port Dues	383.87	4.73%	347.51	10.46%
Dockages	521.29	6.42%	443.3s4	17.58%
Usage Fees	273.47	3.37%	239.81	14.04%
Lay-up Fees	12.30	0.15%	1.91	543.98%
Wharfage Dues	1,671.02	20.05%	1,394.00	19.87%
Storage	289.42	3.56%	200.05	44.25%
Arrastre/Stevedoring	678.07	8.35%	461.21	47.02%
Other Income	423.50	5.21%	352.19	20.25%
Pilotage	31.07	0.38%	23.34	33.12%
ICTSI Fees	2,760.14	33.98%	2,526.89	9.23%
ATI Fees	923.57	11.37%	769.76	19.98%
VTMS Fees	16.23	0.20%	15.13	7.27%
Terminal Fees	139.94	1.72%	211.17	-34.02%
TOTAL	**8,123.29**	**100.00%**	**6,986.77**	**16.27%**

Source: Author.

The accumulated total expenses of the PPA for 2010 reached its total amount of Php 6,327.22 million which was higher than the previous year based on port expenditures. The increase in the Operating Expenses of the port brought by an increase in Repairs and Maintenance, Personal Services from the implementation of the Salary Standardization and Dredging cost in ports. Because of the port revenue and port development from the different PMO, PPA Net Income to P1,968 billion which is lower than the previous income.

In 2010, PPA officials attended 12 meetings/conferences in Thailand, Malaysia, Philippines East Asia Growing Association (BIMP-EAGA) participated in other policies related to port facility standards/ benchmarking, anti-terrorism, and Anti-human trafficking, environmental protection, port security, and safety. In 2010, the PPA also conducted conferences in Thailand, Malaysia, Vietnam, Cambodia, Singapore, Japan, and London that deals with global maritime trends and developments[48].

[47] Philippine Ports Authority, 2010 Annual Report

[48] Philippine Ports Authority, 2010 Annual Report

The total performance of PPA for 2010 increased than the previous year, Cargo throughout had a total of 166.40 million metric tons which was higher than the previous year. The increase in the cargoes for that year reflected in the container traffic in which the PPA had a total of 4.50 million TEUs, for the passengers, also an increase of 52.70 million than the previous year. There was also an increase in Gross Income by Php 8.295 billion while expenses with a total amount of Php 6.33 billion and lastly, net income by Php 1.491 billion[49].

Table 3: Cargo Throughput in Metric Tons by Port District/Port Management Office at Berth/Anchorage.

PDO/PMO	**GRAND TOTAL**	**2010**		**GRAND TOTAL**	**2009**	
		DOMESTIC	**FOREIGN**		**DOMESTIC**	**FOREIGN**
PDO MNL/NORTHERN LUZON	**70,316,061**	**24,861,197**	**45,454,864**	**61,687,825**	**26,667,432**	**35,020,393**
Manila-N. Harbor	16,146,329	11,929,164	4,217,165	17,406,085	14,183,402	3,222,683
Manila-S. Harbor	12,958,525	5,374,364	7,584,161	10,734,949	5,385,457	5,349,492
MICT	18,266,554	913,378	17,353,176	15,639,479	822,314	14,817,165

Source: Author.

Table 4: Passenger Traffic by Port District/Port Management Office at Berth/Anchorage.

PDO/PMO	GRAND TOTAL	2010		GRAND TOTAL	2009	
		DOMESTIC	FOREIGN		DOMESTIC	FOREIGN
PDO MNL/NORTHERN LUZON	1,863,037	913,921	949,116	1,938,251	1,003,890	934,361
Manila-N. Harbor	821,983	375,750	446,233	821,565	420,222	401,343
Manila-S. Harbor	1,004,780	522,028	482,752	1,116,662	583,644	533,018
MICT	0	0	0	0	0	0

Source: Author.

Table 5: Number of Ship calls by Port District/Port Management Office at Berth/Anchorage.

PDO/PMO	GRAND TOTAL	2010		GRAND TOTAL	2009	
		DOMESTIC	FOREIGN		DOMESTIC	FOREIGN
PDO MNL/NORTHERN LUZON	23,093	17,645	5,448	22,341	17,368	4,973
Manila-N. Harbor	4,967	4,436	531	5,043	4,602	441
Manila-S. Harbor	7,810	5,709	2,101	7,650	5,822	1,828
MICT	1,942	103	1,839	2,042	105	1,937

Source: Author.

Table 6: Number of Containers Handled in TEUs by Port District/Port Management Office at Berth/Anchorage.

PDO/PMO	GRAND TOTAL	2010		GRAND TOTAL	2009	
		DOMESTIC	FOREIGN		DOMESTIC	FOREIGN
PDO MNL/NORTHERN LUZON	3,158,023	747,649	2,410,374	2,877,638	810,118	2,067,520
Manila-N. Harbor	553,548	553,348	0	638,263	638,263	0
Manila-S. Harbor	988,268	101,764	886,504	838,950	86,608	752,342
MICT	1,612,886	89,542	1,523,344	1,397,549	82,932	1,314,662

Source: Author.

[49] Philippine Ports Authority, 2010 Annual Report

8. Port Tariffs Charges on Vessels.

The Philippine Ports Authority also engaged in the following trade that included charges, especially on its vessels. The vessels which engaged in foreign trade include those engaged in barter trade that berth at any point of the port would charge dockage at berth per gross registered tonnage (GRT), a total of US$0.081.

Vessels that now engage in the foreign trade include dockage at berth at any point of the port of call would be charged at gross registered tonnage per calendar day and has a maximum computation of 50,000 gross register tonnage. It would be used in the following government port worth US$0.039/GRT and at Private Por Gross Registered Tonnage (GRT), which officially was registered at PPA with US$0.20/GRT.

Vessels occupied with a remote exchange that did not include compartment at either an administration or privileged port, regardless of whether worked only or financially, were likewise charged dockage at the anchorage of one-portion of the relating dockage at billet at an administration port, subject to a similar most extreme 50,000 GRT as follows a US$20.[50]

From 2007 to 2009, vessels that occupied with a household exchange that tie up at any administration port would be charged a domestic dockage fee (usage fees).

Table 7: Domestic Dockage Fee.

	Jan. 1, 2007	**Jan. 1, 2008**	**Jan. 1, 2009**
6 to 100 GRT per calendar day or fraction thereof	Php 61.00	Php 72.00	Php 82.00
Over 100 GRT per GRT per calendar day or fraction thereof	Php 0.60	Php 0.70	Php 0.80

Source: Author.

The registered bay and trade vessels shall also be charged one-half of the required Domestic Dockage Fee at a given government port at the following charges on a given day. [51]

Table 8: Bay and river trade vessels.

	Jan. 1, 2007	**Jan. 1, 2008**	**Jan. 1, 2009**
Not less than	Php 61.00	Php 72.00	Php 82.00
Not more than	Php 308.00	Php 360.00	Php 413.00

Source: Author.

Idle vessels occupying side berth associated government port despite a shifting order from the Port Manager or approved representative to administer operate to an incoming operative vessel. It was assessed at a charge of three-hundredth of the applicable dockage fee for foreign vessels and five-hundredths of the applicable domestic dockage fee (usage fee) for domestic vessels, provided that the house owners created the payment of such assessed fees, agents, or representatives before actual departure from the berth.

[50] http://www.ppa.com.ph/?q=content/charges-vessel
[51] http://www.ppa.com.ph/?q=content/charges-vessel

9. Charges on cargoes.

Charges on cargoes, especially in non-containerized foreign cargoes imported and exported or transhipped through-owned, were charged a wharfage fee for the port facilities' use based on the total metric revenue tonnage.

Table 9: Use of port facilities based on the total metric or revenue tonnage net.

Imported		
a.	Cargoes in Sack/Bags/Bulk/Uncrated Live Animals/Steel Products Logs and Lumber/Heavy Lift Per Metric Ton	P36.65
b.	Others Per Revenue Ton	P30.55
If Exported		
a.	Cargoes in Sack/Bags/Bulk/Uncrated Live Animals/Steel Products Logs and Lumber/Heavy Lift Per Metric Ton	P18.35
b.	Others Per Revenue Ton	P15.25
Foreign Transshipment A single charge per metric or revenue ton payable by the shipping agent		
a.	Cargoes in Sacks/Bags/Bulk/Steel Products, Logs and Lumber/Heavy Lift Per Metric ton	US$0.833
b.	Others Per Revenue Ton	US$0.694
PROVIDED that the minimum charge shall be P10.00		

Source: Author.

Moreover, the non-containerized cargo would be charged wharfage as they entered and left a government-owned wharf on the total number of revenues.

Table 10: Non-containerized domestic cargoes.

If Imported	
20 - ft	Php 519.35
35 - ft	Php 656.85
40 - ft	Php 779.05
45 - ft	Php 916.50
If Exported	
20 - ft	Php 259.70
35 - ft	Php 329.95
40 - ft	Php 391.05
45 - ft	Php 458.25
Foreign Transshipment	
Per TEU	US$ 1.00

Domestic Wharfage Fee	**Jan. 01, 2007**	**Jan. 01, 2008**	**Jan. 01, 2009**
Non-containerized Cargoes in Sacks/Bags/Bulk/ Uncrated Live Animals / Steel Products/Logs and Lumber/ Heavy Lift Per Metric Ton	Php 6.00	Php 7.00	Php 9.00
Others Per Revenue Ton	Php 5.00	Php 6.00	Php 7.00
Minimum Charge	Php 10.00	Php 12.00	Php 15.00
10' Box or shorter	Php 43.00	Php 52.00	Php 63.00
20' Box	Php 86.00	Php 105.00	Php 126.00
35' Box	Php 107.00	Php 131.00	Php 157.00
40' Box	Php 129.00	Php 157.00	Php 189.00
45' Box	Php 151.00	Php 184.00	Php 221.00

Source: Author.

Domestic cargoes that are containerized or not discharged at anchor without any government registration, especially in private ports, would charge half of the usual Domestic Wharfage fee.

The foreign and domestic cargoes that were containerized were loaded with more than one shipper/consignee (LCL), the wharfage that was non-containerized cargo would apply. The wharfage for all the foreign and domestic cargoes which were containerized that were not loaded for a discharge without using any government would be officially registered for the single port

would have an equal pay a one-half government-owned port. [52]

10. Storage Fees.

The storage fees would be charged on the cargoes which remained indifferent government-owned port which was beyond the free storage period defined for all the number of cargoes as follows:

Table 11: PROVIDED that if the cargo is not loaded as scheduled, the resulting fee shall be paid for by whoever is at fault.

For Imported Cargoes	Five (5) calendar days after the day that the last item of cargo is discharged from the carrying vessel
For Export Cargoes	Four (4) calendar days from the day that the cargo is received at the port
For Foreign Transshipment	A total of fifteen (15) calendar days from the day of arrival to the day of departure
For Domestic Cargoes Entering any port	Two (2) calendar days after the date of cargo entry into the port
For Domestic Cargoes Discharged at any port	Two (2) calendar days after the day that the last item of cargo is unloaded from the carrying vessel
For Domestic Cargoes that are "Shutout" (not loaded on their scheduled vessel)	Two (2) calendar days after the vessel's departure

Source: Author.

Port Storage for non-containerized cargoes was determined based on the number of calendar days the cargo stays in the port after the free storage period and the amount on the total revenue of the cargo's tonnage according to the following schedule.

Table 12: Amount of the total revenues of the tonnage of the cargoes.

Imported Cargoes	Php 7.50
Cargoes for Export	Php 3.75
Foreign Transshipment	The U.S. $0.171
Domestic Cargoes	Php 5.65

Source: Author.

Table 13: Storage charges as of wharfage.

Imported Box	NEW STORAGE CHARGES AFTER FREE STORAGE PERIOD (FSP) OF THE (5) DAYS IN PHP (₱)					
	6th - 10th day	11th - 15th day	6th - 20th day	21st -25th day	26th - 30th day	31st day and beyond
20-footer	481.30	529.43	577.56	625.69	673.82	721.95
35-footer	842.20	926.42	1,010.64	1,094.86	1,179.08	1,263.30
40-footer	962.60	1,058.86	1,155.12	1,251.38	1,347.64	1,443.90
45-footer	1,082.90	1,191.19	1,299.48	1,407.77	1,516.06	1,624.35

Exported Box	NEW STORAGE CHARGES AFTER THE FSP OF FOUR (4) DAYS IN PHP (₱)						
	5th - 6th day	7th - 11th day	12th -16th day	17th -21st day	22nd -26th day	27th -31st day	32nd day and beyond
20-footer	60.15	120.30	132.33	144.36	156.39	168.42	180.45
35-footer	105.30	210.60	231.66	252.12	273.78	294.84	315.90
40-footer	120.30	240.60	264.66	288.72	312.78	336.84	360.90
45-footer	134.40	268.80	295.68	322.56	394.44	376.32	403.20

Transshipped Box	NEW STORAGE CHARGES AFTER (FSP) OF FIFTEEN (15) DAYS IN USD ($)					
	16th - 20th day	21st - 25th day	36th - 30th day	31st - 35th day	36th - 40th day	41st day and beyond
20-footer	10.94	12.03	13.13	14.22	15.32	16.41
35-footer	19.14	21.05	22.97	24.88	26.80	28.71
40-footer	21.88	24.07	26.26	28.44	30.63	32.82
45-footer	24.44	26.88	29.33	31.77	34.22	36.66

Domestic Box	
10 - ft	₱ 63.45
20 - ft	₱ 180.50
35 - ft	₱ 314.90
40 - ft	₱ 360.95

Source: Author.

[52] http://www.ppa.com.ph/?q=content/charges-cargoes

11. Problems and Challenges of the Port of Manila.

11.1. Port Congestion.

First among the things that bring about problems is port congestion. Port congestion was caused by overcapacity in the Port of Manila. The rapid increase in containerized cargo volume took its toll on facilities designed in the 1940s.

Since the year 2000s, the port has shown a significant increase in cargo traffic. This led to "slower movement, and longer delays" in cargo movement within the port, has affected both shippers and consignees due to delays of the in-container withdrawal/return, cascading into vessel berthing delays, both in loading or discharging containers.

This brings about Php 2.5 billion worth of economic losses in 2014 alone. In addition, the delays harmed the economy, and many business people were forced to relocate elsewhere.

The government provided several solutions to this problem such as opening other ports in Batangas and Subic; waiving some fees for international shipping lines for a period of two to three months, transport empty containers using barges to the Subic Port, providing a separate 24/7 single lanes for truckers, and temporary lifting of truck ban in certain areas, specifically in Manila. However, these are just temporary solutions, for the ports were already congested even before the implementation and lifting of the said ban.

Cargoes bound for Manila but landed in Subic, and Batangas were transferred via feeder vessels and land transportation, specifically container trucks[53].

The North and South ports built during the 1940s were dilapidated and were not enough to handle trade volume coming in Manila's Port[54]. Therefore, the long-overdue upgrading of ports and supporting infrastructures around Manila's port should be the government's priority.

Other causes of the port congestion would be truck shortages, warehouse closures, lack of space for empty containers. Empty containers could not be stored at the port itself, and containerized cargo that has been cleared had to be shipped out through the Manila area's narrow roads.[55]

There is also the problem of where to store the empty containers. The containers are now stored outside the port, but shippers had to look for other places to store their empty containers with real estate costs rising. Adding to the problem was the "truck ban" imposed by the local authorities in Manila, where trucks carrying cargo containers cannot use the city streets at specific parts of the day. This causes a delay in the shipment of cargo and increased shipping costs. In addition, congestion increases, especially during the Christmas season. [56]

Presently the Port of Manila ranked no. 34 in the amount of cargo handled at 4, 427,000 tons in 2016 compared to 4,135,000

[53] http://www.seatrade-maritime.com/news/asia/business-group-warns-manila-port-congestion-will-recur.ht

[54] 2010. Annual Report 2010. Manila: Philippine Ports Authority

[55] https://www.joc.com/port-news/international-ports/volume-holidays-delay-cargo-manila_20190125.html [Accessed November 2, 2019]

[56] Ibid.

in 2015 or an increase of 7.1%[57] The operation of the MICT has been privatized, and it is run by International Container Terminal Services, Inc. (ICTSI).

The increase in cargo volume led to the point that the Port of Manila has exceeded its cargo capacity. Even before reaching overcapacity, the Port of Manila has been slow in processing the release of cargoes. This has been solved by simplifying paperwork. However, the present facilities could not only cope up with the increasing volume.

11.2. Smuggling and Security Issues.

Another is the problem of smuggling. The Bureau of Customs is one of the leading agencies responsible for controlling and monitoring the export and import of dual-purpose articles in the Philippines. Cargoes are no documents involved, and no import entries are called "outright smuggling." Technical smuggling is the under evaluation and under-declaration of the volume shipped misclassification and cargo diversion. Government data do not encode the total disparity of US$13.57 B worth of goods that were sold to the Philippines; therefore, these are most likely smuggled. The total of goods that were sold to the Philippines unreported was a total of Php 678.50 B (U.S. $1 = Php. 50)[58]. [59]

To combat the illegal entry of prohibited goods and enhance smooth port operations and vessels' safe arrival. The Philippine Ports Authorities and the Bureau of Customs adopted several measures. First, the PPA started the Vessel Traffic Management or VTMS installed in Manila North Harbor, Corregidor Island in Bataan, and Batangas and are now in full swing. This is under supervision and operation by Vessel Traffic Services Division or VTSD of PDO Manila/ Northern Luzon and Port Services Division or PSD of PMO Batangas. The VTMS would regularly track the vessels, especially in emergencies, piracy and typhoons, and other calamities.[60]

The adoption of technology smoothened transactions of customs matters. Before transit permits of goods entering the Port of Manila had to be processed in three days. With computerized technology, the process now takes three minutes. Technology also allowed monitoring of vessels entering Philippine waters.

11.3. Terrorism.

Furthermore, Manila's port's other challenges include security problems such as terror attacks on transport facilities. For example, the Superferry 14 bombing that claimed 116 lives on Feb. 27, 2004, is identified as the worst terrorist attack at sea. The passenger ship, which weighed 10 192 tons, sailed out of Manila at 11 pm. The ferry was bound for Cagayan de Oro, with stopovers at Bacolod and Iloilo City. They said the ferry was carrying a total of 899 passengers and crew. The bomb consisted of eight pounds of TNT/ Dynamite planted in a T.V. set by an Abu Sayyaf terrorist that caused a powerful explosion, triggering a fire that destroyed the Superferry 14 in Manila Bay, an hour after departing Manila. Four bodies were recovered during the search operations; in the following week, 12 more bodies were found, and the search continued until Mar. 7, 2004, and 63 bodies were found. [61]

11.4. Maritime Disasters.

Although maritime disasters did not necessarily happen at the port of Manila, the port was affected. Some of the worst maritime disasters recorded in the Philippine maritime industry were ship collisions in the 1980s. Aside from ship collisions, storm conditions caused maritime vessels to sink, causing an unprecedented loss of sea life. From 2001 to 2010, a number of Maritime Accidents are recorded from the Department of Transportation and Communication and Philippine Coastguard. Most of the incidents are not caused by ship collisions but due to elements of nature or weather disturbances. The year 2001 and 2002 considered as the least number of accidents which was monitored compared to 2010, which has a total of 488 monitored accident[62] Before 1987, passenger traffic at the port of Manila was well over a million, but following disasters like Doña Paz in 1987, Doña Marilyn in 1988 and the Princess of the Stars in 2008, passenger volume from Manila North Harbor between 2010 and 2012 never exceeded a million passengers.[63] Passengers at the Manila South Harbor hit a million mark in 2010 but declined to a measly 161,500 in 2012.[64] In 2018 passengers at the North Harbor numbered 1,053,000 while the South Harbor numbered 586,187. These figures pale to the domestic travel at the Manila International Airport, which stood at 22,142,186 for domestic passengers in 2018[65] The effect of maritime disasters resulted in the exodus of passenger traffic from the seaports to the airports. This is besides that air travel has become more affordable.

Conclusions.

The pattern of development in the port of Manila was identified from the biographical location of the port that lies in the bodies of Pasig River which leads to trade opportunity both locally and internationally which highlight the Philippine products from raw to processed. The tool of exchanging goods also increases the port productivity from its establishment until the contemporary period; economic productivity of each port and the Philippines as well

[57] Review of Maritime Transport https://unctad.org/en/PublicationChapters/rmt2017ch4_en.pdf [Accessed November 2, 2019]

[58] Anatomy of Smuggling, Federation of Philippine Industries

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Manila's choice that made it a principal port of the Philippines was defined by favorable natural factors. The geographical features of Manila Bay and its proximity to centers of trade like China, Japan, and the Moluccas were crucial factors why a port was established at the mouth of the Pasig River, which was in itself an avenue for trade. The precolonial Filipinos, the Spaniards, and the Americans recognized that, and the trading port and the city of Manila are inseparable. The Port of Manila became the Philippines' window to the outside world, and it was where people from various parts of the Philippines, especially from the Visayas and Mindanao, came through to trade and settle. As trade grew, so did the port and the city. When Manila was opened to world trade in 1834, the decree enabled it to refer to Manila's port. Investments were poured in to improve the port to handle more significant amounts of cargo and passengers. This became very true during the American period where goods came to Manila to be processed, and Philippine-made goods were exported. The value of Manila's port was recognized when it was proposed to be used as security or collateral to buy arms for the war for independence or to pay for the country's freedom from the Americans.

During the American period, economic activity involving the port of Manila reached unprecedented levels. The port was expanded and modernized. It was also seen as a strategic facility. When war erupted between Japan and the United States, both countries attacked it. After its liberation from the Japanese, the Americans quickly saw its possible role as a stepping point for the invasion of Japan, and it was rehabilitated so that the Philippines can engage in local and foreign commerce.

Throughout the years, the Port of Manila saw its expansion, and it was affected by developments of the time, such as containerization of cargo and the shift of passengers from sea travel to air travel. As a result, it had to adjust to changes brought to the times. However, as trade, whether domestic or international, is still essential, the Port of Manila is still relevant, and it provides income to the national economy and revenue to the government.

The rise and fall of port of Manila is bought about by the natural forces which is the longer durée the long-term human factors such as the government and administrations and finally the decision and policy of the government of officials which is the short term. The commensurate after the growth of the country as an engine of economic growth. Millions of pesos were generated by the use of ports and the value of goods and services as well as the passengers and is affected by the human and natural factors.

As trade continued to expand, the Port of Manila encountered various challenges. The port of Manila has become a victim of its success as it is suffering from overcapacity. There is a need to streamline the processing of cargoes. These could be done through reforms in the processing of documents. Other problems include port congestion, which threatens the national economy's growth and makes the Philippines unattractive to business. The port congestion was since the port's existing infrastructures, and Manila's city was planned in the 1940s, which needs to be improved. Containers of cargoes need to be moved fast, and empty ones had to be stored. However, with rising land costs, it was hard to find alternative storage sites for idle containers. There was also the problem of inadequate transportation. To keep the port in operation, it needs to expand and deepen the waters as bigger ships come into existence.

As to overcapacity and port congestion, as it was too expensive or impossible to enlarge the port, the Philippine government resorted to opening alternate ports like Subic and Batangas. These alternate ports are threatening to dethrone the port of Manila as the Philippines' premier port. The last port already exceeded Manila in terms of the value of imports.

In the modern period, the Port of Manila is an asset to the Philippine economy; millions of pesos come in and out that signifies a vast earning for the government, the crown jewel of the Philippines which is a key for economic growth.

The opening of the other ports in the Philippines contributes to the development of the Philippine economy especially to the import and exports of the commodity. The port expansion, however, leads to additional services and equipment but also increases port productivity.

The increase in productivity also leads to changes in the port industry such as location, piers, machinery that used and policies as well. The expansion of port area leads to some ships/piers that caters to dock at the area; the number of piers which load and unload their goods, passengers who used ships instead of air travel, Ro-Ro buses also become the mode of passenger and goods transportation from island to island. Improvements into port machinery become the concern of the port industries especially to the number of products that need to be shipped from island to island, the demand of the passengers both locally and internationally and lastly the competition from the ports in the Philippines and the world.

The port of Manila's geographical location provides a great wealth into Philippine economy. The location of Manila bay which is close to other neighboring Asian countries, the Pasig River continue even the end of the galleon trade until the American came and expanded the port. It also directly involves in establishments, shipping, mining, food and supplies. In present, it contributes billion of pesos and connected to other business but it is also a victim of its own success because it space that subject to expand and problems such as smuggling and maritime disasters.

Other developments also influence the importance of the port of Manila. Maritime disasters prompted authorities to institute safeguards to prevent massive loss of lives. In addition, security had to be enhanced to protect the port from criminals and terrorists. Like all ports, Manila's port is susceptible to criminal activity especially smuggling, to cheat the government of its rightful revenue to sneak in prohibited items like drugs and illegal arms.

Recently the relatively low cost of air travel has lured away passengers in the domestic market. Already international travel is done by air and hardly any passenger travel internationally by sea. Nevertheless, sending cargoes by sea still the viable option. Shortly and beyond, the port of Manila will remain a contributor to the Philippine economy.

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