

# Analysis of Philippine Trade Pattern and Trade Structure

Yikang Hu

*Economics and Politics*

*The University of Sheffield*

*\*Corresponding author. Email: huyikang742@gmail.com*

## ABSTRACT

With a continuous rate of economic growth, the Philippine economy is still facing a trade deficit and is said to be trapped in the "Middle-Income Trap." This issue occurs when countries struggle to cope with changes in their local market and, as a result, undermine their international competitiveness. Influential innovation and specialisation, based on the existing literature, are significant variables in enhancing economic competitiveness and avoiding the middle-income trap. Hence, by employing qualitative research methods, adopting secondary data, and reviewing the existing literature as the research instruments, this project aimed to discuss the international trade of the Philippines. The objective of this project is to examine the trade pattern of the Philippines by analysing the relevant and official data and to discuss the key model of trade specialisation of the Philippines and its application towards trade specialisation. An analysis of the Philippines' trade patterns reveals that over the past two decades it has been transforming from an agricultural producer dependent on service production to an emerging, inclusive, diversified and open market. However, this market still has a trade deficit and still needs to expand its exports to boost GDP growth. For example, abundant labor force and relatively primary product processing are their advantages.

**Keywords:** *International Economics, Trade Pattern, Trade Specialisation, Philippine*

## 1. INTRODUCTION

As a recently industrialised nation, the Philippine economy has proven to be resilient and competitive sufficiently to rank among the region's top five developed achievers. As the nation develops, it faces increasing hurdles in achieving its growth targets. This economic position must be taken into account, as the balance of trade is one of the most significant factors in determining the relative performance of a nation's economy. The relationship between exports, imports, and economic expansion in the Philippines is investigated in this project. Based on Ocampo, Gumban and Demetillo (2021), the author gathered data and information regarding trade balance statistics and economic production between 1978 and 2017 [1]. This essay will study and analyze the trade development pattern and structure of the Philippines as well as its own trade advantages and trends. It helps us understand the trade situation and development of the Philippines to make decision.

## 2. TRENDS AND CAUSES OF CHANGE IN THE PHILIPPINES

At the current rate of globalisation, the Philippines faces major obstacles in achieving sustainable and inclusive growth and a developed economy. The Philippine's first period of globalisation was historically from 1870 to 1914, and it was fuelled by the introduction and creation of the steamship, which increased international commerce flows. Since many nations around the globe are already competitive in international trade, the level of integration among nations is steadily expanding. As a result, structural upheavals and alterations in international trade patterns emerge. In comparison to other Asean member countries, the Philippines is a bit new to global value chains [1]. During the last two decades, the Philippines' economy has evolved from agricultural production relied on services production, making it an emerging market up to 2016. As in 2017, it ranked the world's 37th biggest export-oriented economy. However, the country still posits a negative trade balance, which has an effect on the nation's economy overall [2].

There is no denying that global value chains offer significant opportunities for developing countries to play a significant role in the global economy. It enables countries to obtain technology and knowledge while also raising the value of their exports [3]. The notion of country borders has been redefined and now creates a strong connection between the company's businesses, labour, and consumers worldwide, as well as allowing employees in emerging countries to participate in the global economy [4]. The global value chain refers to the process through which businesses import commodities in order to generate products for export as well as export inputs. Their trade and international partners re-export these to other countries. With a full spectrum of operations carried out across global boundaries between nations, it enables extended value chains beyond products and resources, and with the involvement of services, it also provides an opportunity for international specialisation [5].

### 3. THE LATEST TRADE PATTERNS OF THE PHILIPPINES

#### 3.1. Increase in export and import trade

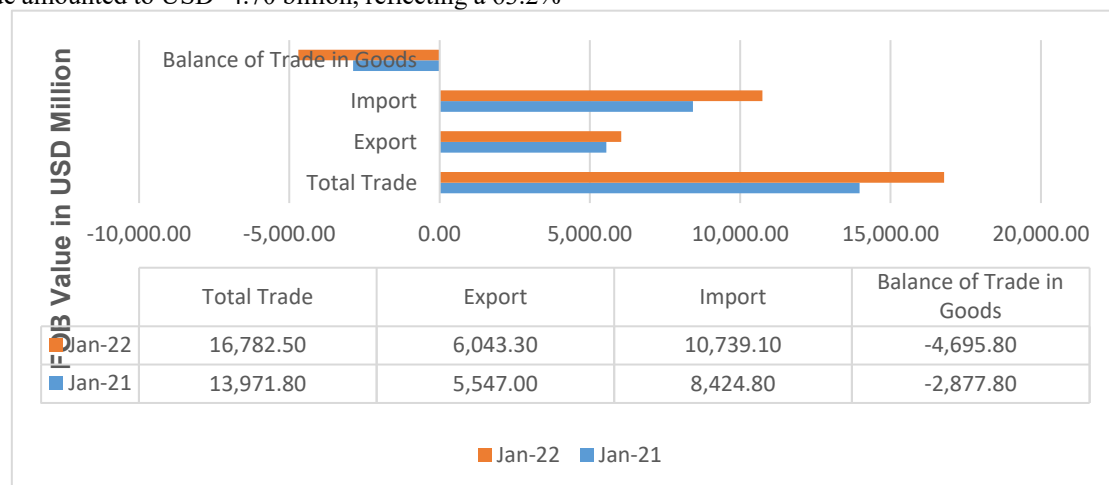
As of March 11th 2022, the Philippine Statistics Authority released the latest information and statistics regarding the export and import performance. Based on table 2.1, the nation's total external trade in products reached USD 16.78 billion in January 2022, signifying a 20.1% yearly rising trend [6]. The overall external trade has increased for the twelfth month in a row, marking a 12-month streak of significant annual growth. The yearly rise was rapid in the preceding month, at 25.9%. Total external trade, on the other hand, fell by 9.0% specifically in January 2021 [6]. In January 2022, imported goods made up 64.0% of overall foreign trade, while exported goods made up the remainder [6].

**Table 1.** Statistics of Philippines Export and Import Performance in January 2021, December 2021 and January 2022 [6]

Indicator	January 2021 <sup>r</sup>		December 2021 <sup>r</sup>		January 2022 <sup>p</sup>	
	FOB Value (in million USD)	Year-on-Year Growth (%)	FOB Value (in million USD)	Year-on-Year Growth (%)	FOB Value (in million USD)	Year-on-Year Growth (%)
Total Trade	13,971.79	-9.0	17,830.64	25.9	16,782.48	20.1
Balance of Trade	-2,877.83	-23.4	-5,273.21	115.3	-4,695.80	63.2
Exports	5,546.98	-4.4	6,278.72	7.3	6,043.34	8.9
Imports	8,424.81	-11.8	11,551.92	39.1	10,739.14	27.5

According to table 1 and figure 1, The variation between the value of export and import is the balance of trade in goods. In January 2022, the balance of trade amounted to USD -4.70 billion, reflecting a 63.2%

yearly rise in the trade deficit. The preceding month's trade deficit surged up 115.3% on an annual basis, whereas it was -23.4% in January 2021 [6].



**Figure 1** Philippines Trade Performance between Jan-2021 and Jan-2022 [6]

### 3.2. Export Commodities main exporting countries

The nation's export sales, which totalled USD 6.04 billion in January 2022, climbed at an annual pace of

8.9%, up from 7.3% in the preceding month. Since March 2021, there was the eleventh consecutive month of a significant annualized rate in export value. In January 2021, total export sales fell by 4.4 percent year on year.. (See figures 1, 2 and table 1 for details).

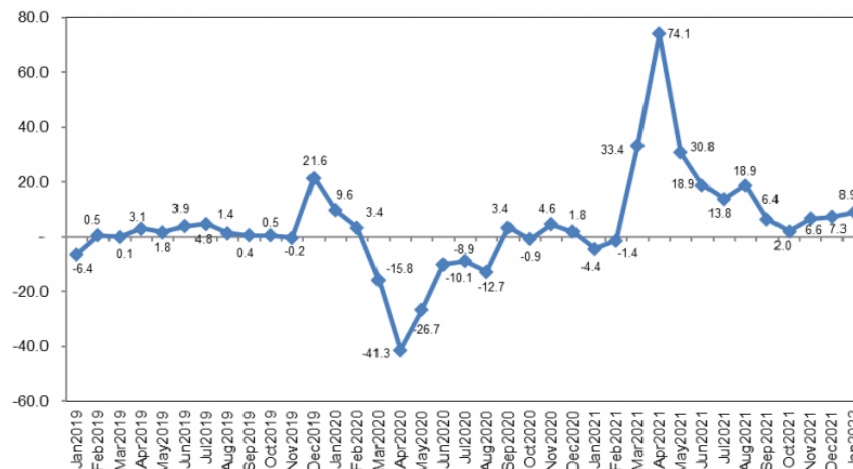


Figure 2 Rate of Growth of Export between January 2019 and January 2022 (%) [6]

Five of the top ten primary commodities categories on the basis of export value increased year over year, topped by coconut oil (110.1 percent). Other produced items (53.4 percent) and refined copper derived

from cathodes and sections of cathodes came in second and third, respectively (46.0 percent). (See Table 2 for more detailed information.)

Table 2. Annual Growth Rate of Philippine Exports for Top 10 Major Commodity Categories Latest by 2022<sup>p</sup> [6]

Major Commodity Group	Annual Growth Rate (%)
<b>Gainers</b>	
1) Coconut Oil <sup>1/</sup>	110.1 ▲
2) Other Manufactured Goods	53.4 ▲
3) Cathodes & Sections Of Cathodes, Of Refined Copper	46.0 ▲
4) Electronic Products	8.2 ▲
5) Electronic Equipment and Parts	6.8 ▲
<b>Losers</b>	
6) Ignition Wiring Set and Other Wiring Sets Used in Vehicles, Aircrafts and Ships <sup>2/</sup>	-21.8 ▼
7) Machinery and Transport Equipment	-16.9 ▼
8) Bananas (Fresh)	-16.3 ▼
9) Metal Components <sup>3/</sup>	-6.0 ▼
10) Chemicals	-5.6 ▼

Based on Figure 3, electronic goods remained the nation's leading commodity export in January 2022, with a total income of USD 3.51 billion. During most of the period, this sum contributed for 58.0% of total

exports. Other industrial items came in second at USD 450.30 million (7.5%), followed by refined copper cathodes and sections at USD 231.74 million (3.8%).

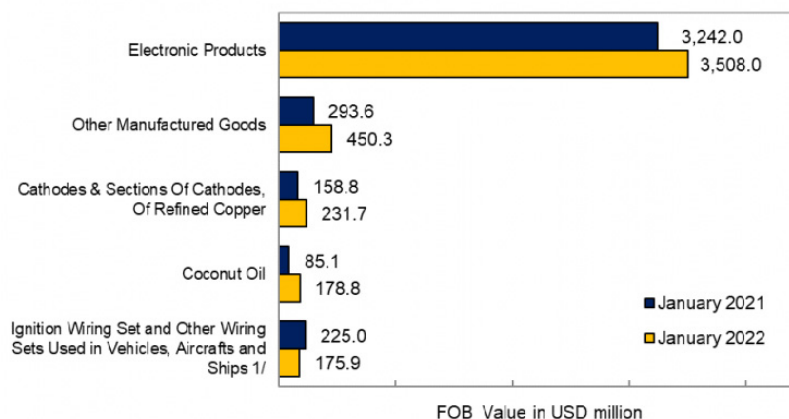
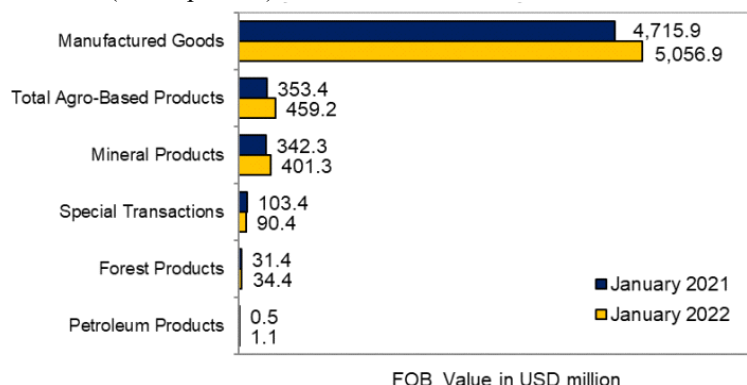


Figure 3 Philippine Exports for Top 5 Commodity Categories in Jan-2021<sup>i</sup> and Jan-22<sup>p</sup> [6]

According to figure 4 as cited from Philippine Statistics Authority, exports of manufactured items held the largest share of overall exports in January 2022, reaching USD 5.06 billion (83.7 percent). Total

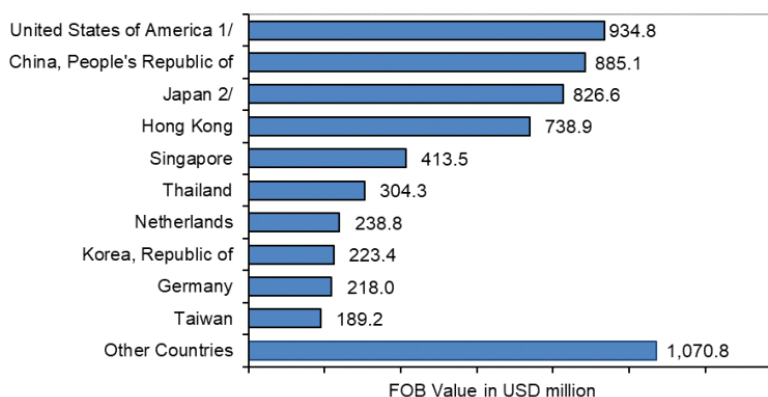
agriculture goods came in second with USD 459.21 million (7.6 percent); while mineral goods came in third with USD 401.27 million (6.6 percent) [6].



**Figure 4** Philippine Exports for Top 6 of Major Goods in Jan-21<sup>r</sup> and Jan-22<sup>p</sup> [6]

Based on figure 5, exports of goods and services of the USA always had the greatest export value, hitting USD 934.77 million, or 15.5 % of all sales for the month. The rest of the four following biggest export trade counterparties were completed with their export earnings and % shares of total exports as follows: China,

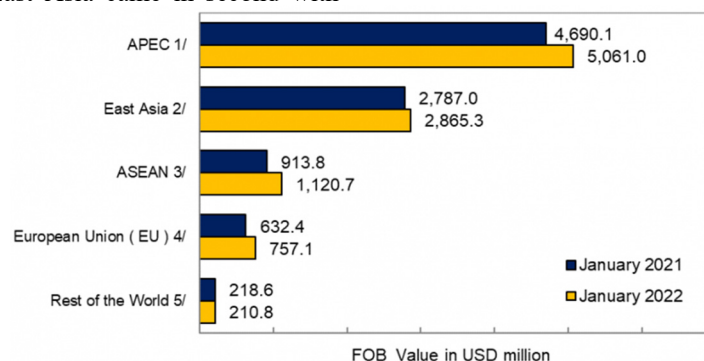
amounted USD 885.06 million or 14.6% of the export trade; Japan, amounted USD 826.59 million or 13.7% of the export trade; Hong Kong, amounted USD 738.94 million or 12.2% of the export trade; and Singapore, amounted USD 413.54 million or 6.8% of the export trade [6].



**Figure 5** Major Partner Countries for Philippine Exports in Jan-22<sup>p</sup> [6]

In January 2022, by intergovernmental agreement, the Asia-Pacific Economic Cooperation (APEC) participating countries gained the greatest amount of the country's merchandise trade, accounting for USD 5.06 billion (83.7 percent). East Asia came in second with

USD 2.87 billion (47.4 percent), followed by the Association of Southeast Asian Nations (ASEAN) with the worth of USD 1.12 billion (18.5 percent). (referring Figure 6).



**Figure 6** Partner Countries for Major Philippine Exports by Economic Bloc in Jan-21<sup>r</sup> and Jan-22<sup>p</sup> [6]

According to Figure 7, Eastern Asia contributed the largest export value of USD 2.87 billion in January 2022, according to geographical area. Southeast Asia came in

second with a USD 1.12 billion export value, followed by Northern America with a USD 969.25 million export value [6].

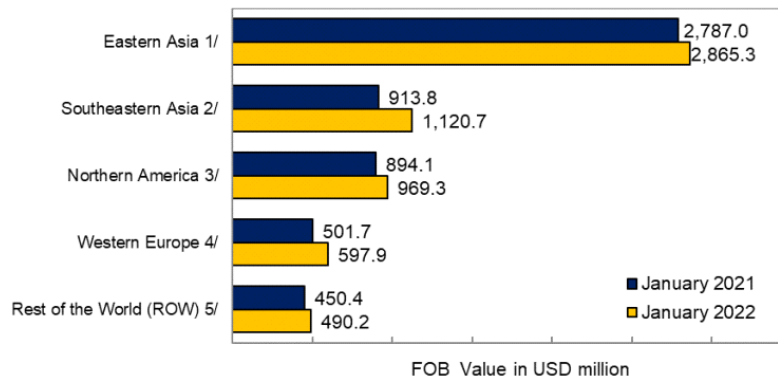


Figure 7 Philippine Export Patterns by Geographical Location in Jan-21<sup>r</sup> and Jan-22<sup>p</sup> [6]

### 3.3. Import Commodities main importing countries

The total value of imported products in January 2022 was USD 10.74 billion, climbing 27.5 percent year on

year. The overall imports significantly grew for the twelfth month in a row, marking a 12-month streak of positive yearly growth. The annualised rise was stronger in December 2021, at 39.1%, while imports value declined by 11.8 percent in January 2021. (refer Table 1, Figure 1 and Figure 8)

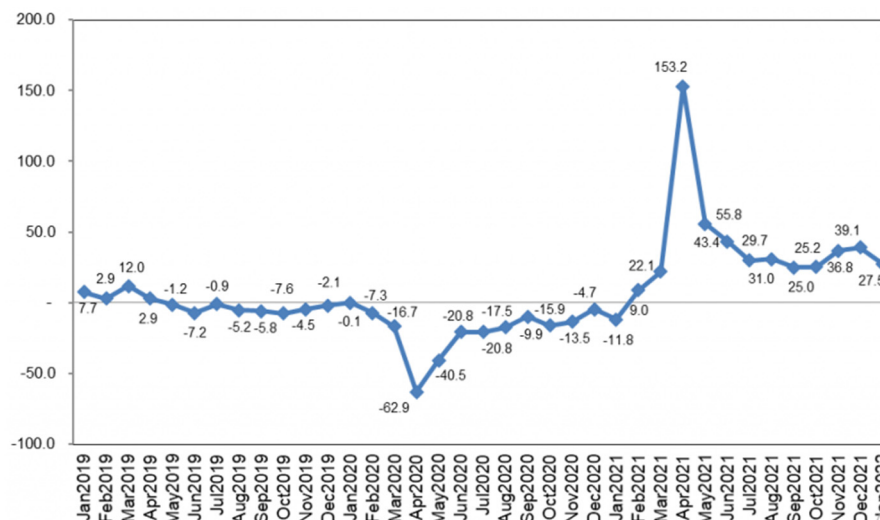


Figure 8 Rate of Growth of Import between January 2019 and January 2022 (%) [6]

According to Figure 9, in January 2022, the annual growth rate in imported goods was attributed to increases in 9 of the top 10 main commodity sectors, with pharmaceutical and biomedical products leading the way

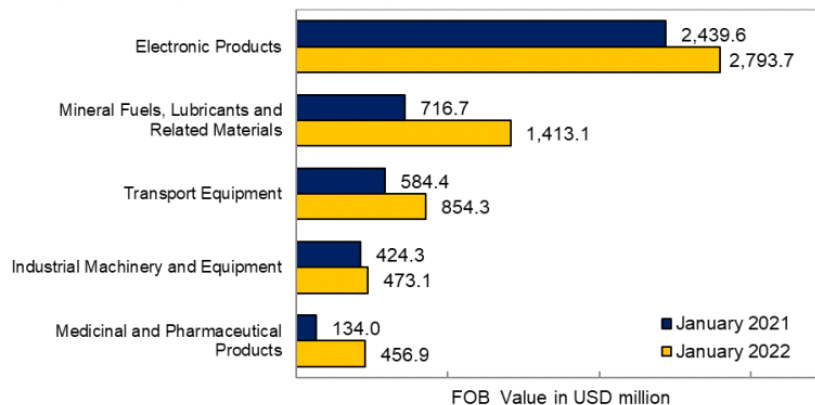
with a 240.9 percent annual increase. Natural fuels, lubricants, and relevant materials, which increased by 97.2 percent annually, were followed by automobile parts, which increased by 46.2 percent.

Major Commodity Group	Annual Growth Rate (%)
<b>Gainners</b>	
1) Medicinal and Pharmaceutical Products	240.9 ▲
2) Mineral Fuels, Lubricants and Related Materials	97.2 ▲
3) Transport Equipment	46.2 ▲
4) Cereals and Cereal Preparations	38.7 ▲
5) Other Food and Live Animals	27.6 ▲
6) Electronic Products	14.5 ▲
7) Industrial Machinery and Equipment	11.5 ▲
8) Miscellaneous Manufactured Articles	7.4 ▲
9) Telecommunication Equipment and Electrical Machinery <sup>1/</sup>	5.9 ▲
<b>Losers</b>	
10) Iron and Steel	-4.7 ▼

Figure 9 Annual Growth Rate of Philippine Imports for Top 10 Major Commodity Categories Latest by 2022<sup>p</sup> [6]

Based on Figure 10, electronic items accounted for the majority of foreign goods in January 2022, with an import value of USD 2.79 billion, or 26.0% of all importation. Natural fuels, lubricants, and relevant items,

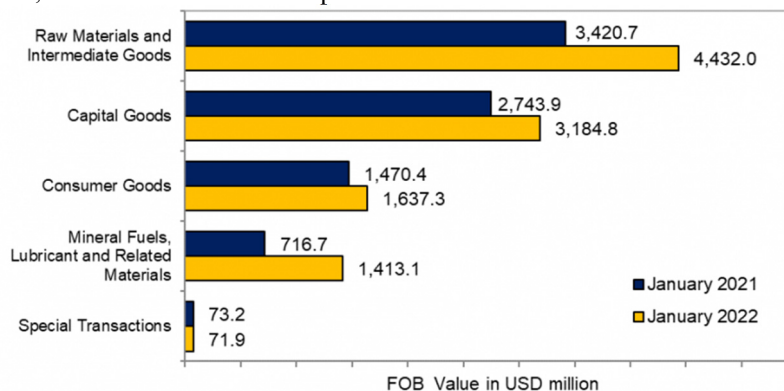
valued at USD 1.41 billion (13.2%), were followed by transport equipment, estimated at USD 854.27 million (8.0%).



**Figure 10** Philippine Imports for Top 5 Commodity Categories in Jan-2021<sup>r</sup> and Jan-22<sup>p</sup> [6]

Referring to figure 11, acquisitions of intermediate items and natural resources accounted for the greatest percentage of overall imports in January 2022, totalling USD 4.43 billion (41.3%), followed by capital goods, which accounted for USD 3.18 billion (29.7%). Notably, mineral fuels, lubricants, and related materials imports

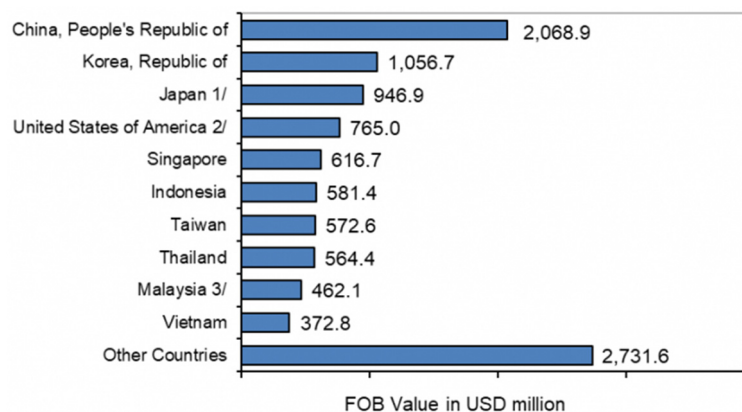
surged to USD 1.41 billion in January 2022, representing a 97.2% steady rise over the same period in the previous year. The growth of the import value of liquid fuels used to power motor vehicles contributed to the yearly gain in this commodity category.



**Figure 11** Philippine Imports for Top 5 of Major Goods in Jan-21<sup>r</sup> and Jan-22<sup>p</sup> [6]

Figure 12 indicates that, in January 2022, China was the nation's major provider of foreign goods, properly accounting for USD 2.07 billion or 19.3% importation. The remaining four primary import nations involved, along with their respective import values and % shares of

overall imports, were Korea, with the worth of USD 1.06 billion (9.8%); Japan, accounted for USD 946.92 million (8.8%); USA, amounted USD 765.02 million (7.1%); and Singapore with the worth of USD 616.74 million (5.7%) [6].

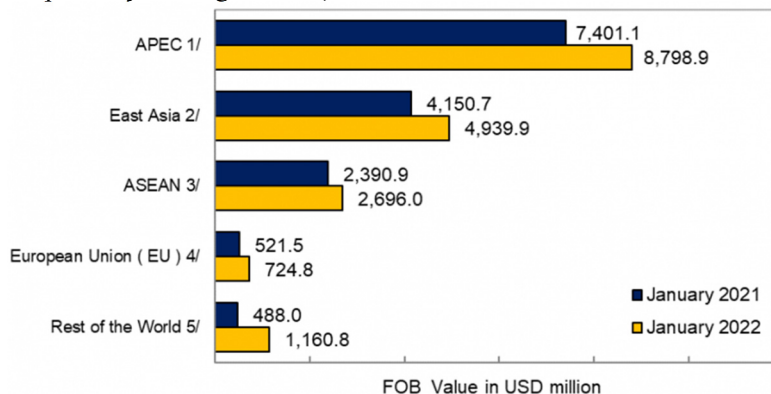


**Figure 12** Major Partner Countries for Philippine Imports in Jan-22<sup>p</sup> [6]



According to Figure 13, it clearly states that with a contribution of USD 8.80 billion in January 2022, APEC participating nations were always the largest providers of the country's foreign imports by trading union (81.9

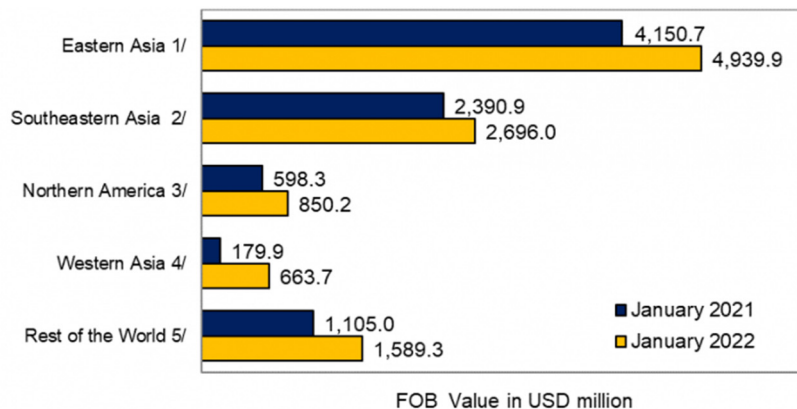
percent). East Asia came in second with USD 4.94 billion (46.0 percent) while ASEAN placed third with USD 2.70 billion (25.1 percent) [6].



**Figure 13** Partner Countries for Major Philippine Imports by Economic Bloc in Jan-21<sup>r</sup> and Jan-22<sup>p</sup> [6]

Figure 14 indicates that Eastern Asia accounted for USD 4.94 billion of the nation's imports in January 2022, as per geographical location. South-eastern Asia came in

second with a value of USD 2.70 billion in imports. Next was Northern America with a value of USD 850.23 million [6].



**Figure 14** Philippine Import Patterns by Geographical Location in Jan-21<sup>r</sup> and Jan-22<sup>p</sup> [6]

### 3.4. Changes in Trade Patterns and Related Issues

To summarise, the Philippines' overall foreign trade in products increased by 20.1% to US\$16.78 billion in January over a year earlier. According to the statistics department, overall external trade increased for the 12th month in a row in January, whereas imported products made up 64% of overall external trade in January, while exported goods made up the balance of 36%. Hence, the products' balance of trade was reportedly negative US\$4.7 billion, representing a 63.2 percent yearly rise in the trade deficit latest by January 2022.

As the economy progressively reopens, it is projected that previous patterns in Philippine trade might continue, with imports seeing robust double-digit rises due to the recovery of most main sectors. Other than that, the modest growth in exports is due to the surging demands for semiconductors and other electronic items. Notably, it is expected to likely fall short of keeping up with the growth rate in inbound shipments. Increased crude oil

prices are expected to increase the cost of energy imports, resulting in a widened trade gap in the coming months, implying that the peso currency will continue to depreciate. The inflation will further hike up due to the weaker currency with the surging cost of imported crude oil during the post-war, giving tension to the nation's economy, which gradually recovered from the recession-induced pandemic of COVID-19.

## 4. KEY RELEVANT MODELS OF TRADE SPECIALISATION

Previous research shows that continuous innovation and trade specialisation are key determinants to staying in stronger global competitiveness and contribute to narrowing the trade gap for boosting a nation's economy. For a lengthy moment, most newly developing ideas in international trade theory have been fascinated by the connection between comparative advantages and IIT models [7]. Traditional trade models like Ricardo's comparative advantage paradigm and Heckscher-Ohlin methods, according to Flam and Helpman (1987), may

theoretically define vertical IIT models. According to Haberler (1930) [8], a nation is considered to have a comparative advantage in producing certain commodities. Generally, if the RCA index value is greater than one, a comparative advantage is said to be visible. If the RCA index is less than one, the country seems to be at a competitive disadvantage in that trade specialisation.

According to Jayadi (2017), by the applying the “Flying Geese” model (Akamatsu, 1930), Philippines has specialised in human labour-intensive industries through higher education, R&D programs and foreign direct investment [8]. The Philippines have specialised in human labour-intensive industries through higher education, R&D programs, and foreign direct investment. Jayadi (2017) proposed that the Philippines faces a stagnant issue in its export specialization by analyzing data using “Revealed Symmetric Comparative Advantage (RSCA),” which was first introduced by Dalum, Laursen, and Villumsen (1998).

## 5. ELABORATIONS ON TRENDS IN TRADE PATTERNS BY APPLYING MODELS

Back in 1997, only four of the top ten export items of the Philippines came from the primary industry, i.e., thermionic, cold, and photo-cathode, currency. Other than that, “handbag”, “briefcase”, “gold”, “travel goods”, “parts of accessories”, “outer garments”, “textiles”, and “electronic items for distributing electricity” are six more items from the manufacturing industry [9]. In 2014, top-ten products were inversed with those of 1997. There are six categories of the primary industry, i.e., “vegetables, textile fibre, wood manufacturers, fixed vegetable oils, concentrates, base metal ores, and fuelwood”. Of the top 10 items released in January 2022, six major export trades back to the secondary sector, which are “manufactured goods, cathodes, and parts of cathodes derived from refined copper, electronic products, electronic devices, and coconut oil” came next [10].

By applying the Hecksher-Ohlin model, it clearly explains the causes of the growth of the trade patterns and the changes in specialisation in the Philippines from 1997 to 2022. The Heckscher-Ohlin theory of global trade (Hecksher and Ohlin, 1919) states that a country should only export commodities that it can manufacture productively in surplus and only acquire imported goods that it lacks and cannot create effectively at a relatively low cost. The model postulates that resource imbalances govern international trade, and that countries should take advantage of these resource imbalances to maximise their revenues, develop their capital reserves, and then use it to strengthen their economies [11]. Hence, the Philippines made changes to their trade specialisation by weighing available resources and critical conditions that occur worldwide to fit into the international competition.

## 6. CONCLUSION

Notably, the Philippines, like other developing countries, nevertheless has a trade deficit. Popular opinion among relevant publications is encouraging strong product specialisation in order to attain competitive advantages in global trade. According to the study results, investments in workforce enrichment, innovative products process improvements, the development of higher education, and research and technology development, respectively, speed up the development of the country's export sector, whereas foreign direct investments are found to have a negative impact on exports. As exports are a part of the GDP calculation, growth in exports boosts GDP, which aids in the country's recovery from the recession-induced pandemic and post-Russian-Ukraine war.

This paper was further constrained and limited by the lack of sufficient data collection and more research instruments for measuring the application of key model on trade specialisation. It is recommended that by employing mixed-research method and including more variables and its effective measurement indicators, it may further improve the findings. Hence, future researcher is also suggested to study the development and growth of products exportation, education, high-tech labour, and R&D in technology equipment and devices as it may promote a gradual increase in a nation's comparative advantage in trading according to the latest information.

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