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## Contemporary Triangular Trade and Comparative Advantage

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### Abstract:

The international trade relationships have known progress in terms of concepts, the most important of which is the triangular trade, starting from the slavery triangular trade form, reaching what it represents nowadays, especially in electronic industries, with a focus on the (USA-ASIAN-Japan) trade collaboration. As study objective, exploring its mechanisms helps to evaluate how such collaborative trade can impact the countries-partners economies especially, on improving each country trade balance and which Algeria might take benefits from if becoming a partner. By using a descriptive approach, the study tries to measure the strength of the relationships between countries that collaborate in form of triangular trade. The study concludes that there are strong correlations between imports and exports of the countries-partners.

**Keywords:** The international trade, triangular trade, Comparative Advantage, (USA-ASIAN-Japan) trade collaboration, trade balance.

**Jel Classification Codes :** B170, F140.

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## 1. Introduction:

Across its history, the trade has known a colossal progress in term of monetary amount and wide covered territories. This wideness has created difficulties essentially on costs and times, the issue that requires looking for new strategies responding to it.

The world has known a multidimensional globalization, the issue that put all the countries especially the developing ones under pressure towards opening their markets. In fact, the development of the international trade helps theoretically to improve the product quality and decrease its price. In addition to that, it is the only way to provide international currencies which are the mean of exchanging products between the world's countries. The recent century has marked a new era of the international trade which becomes more complicated touching several dimensions such as laws, partners (from two partners earlier to several), activities (simple trade earlier to integrated production).

### Statement of the problem:

Understanding the international trade relationships - called formerly the triangular trade- established by a set of countries in order to make profits through commercializing or producing a specific product will help to evaluate how such collaborative trade can impact their economies especially, on increasing the external cash flows and which Algeria might take benefits from.

### Purpose of the Study

The purpose of the study is to highlight the evolution process of the international triangular trade leading to open an opportunity to emerge to a modern type of it. The development of such kind of trade constitutes a field of analysis which must have a high practical utility, by revealing the factors which have helped to the development or have constrained the development of this kind of trade in each country belonging to contracted countries 'set.

Practically, the study aims to provide an attempt to measure the strength of the relationships between countries that collaborate in form of triangular trade or more .

### Study Objectives

The current research has the following objectives:

- ❖ To analyze and highlight the various products classifications in each country economy of the set:
- ❖ To define the concepts of international triangular trade:
- ❖ To give a statistical study of international triangular trade between members of a set of countries that shows its evolution and exports and imports in it:
- ❖ To discover the elements of influence on triangular trade between the members of the set.
- ❖

## Research methodology

The practical purpose of this qualitative evaluative case study was to analyze and evaluate the importance of the current relationships between countries that collaborate in form of triangular trade or more. Exploring in depth a plan or a process or a community is the aim of using the case study methodology. To that end, this research sought to measure the impact of the international trade on the Gross Domestic Product (GDP) of each country of the triangular set, considering that the GDP is the crucial parameter which determines the country economic strength .

A case study is qualitative methodology that focuses on process rather than actual outcomes or products; and the way of how experiences are analyzed by their people; and its character of being a primary instrument for data collection and analysis. The case study helps to provide understanding about a given situation and make generalization to similar ones that obey to the same context conditions and that by including extensive data collection, analyzing data, and elaborating a research report. The need for case studies finds its reason in the idea related to the attempt to understand multifaceted social phenomena since the contextual experience conditions are not under control.

The study uses graphs, charts and statistical tools generated by SPSS and Excel software programs. The correlation coefficient is specially used to determine the relationship strength between two major variables.

## 2. Global Competitiveness and Triangular Trade:

Across the history, the Competitiveness goes side by side with Triangular Trade, basing on the resources' types differentiation of each country.

### 2.1. Triangular trade notion evolution

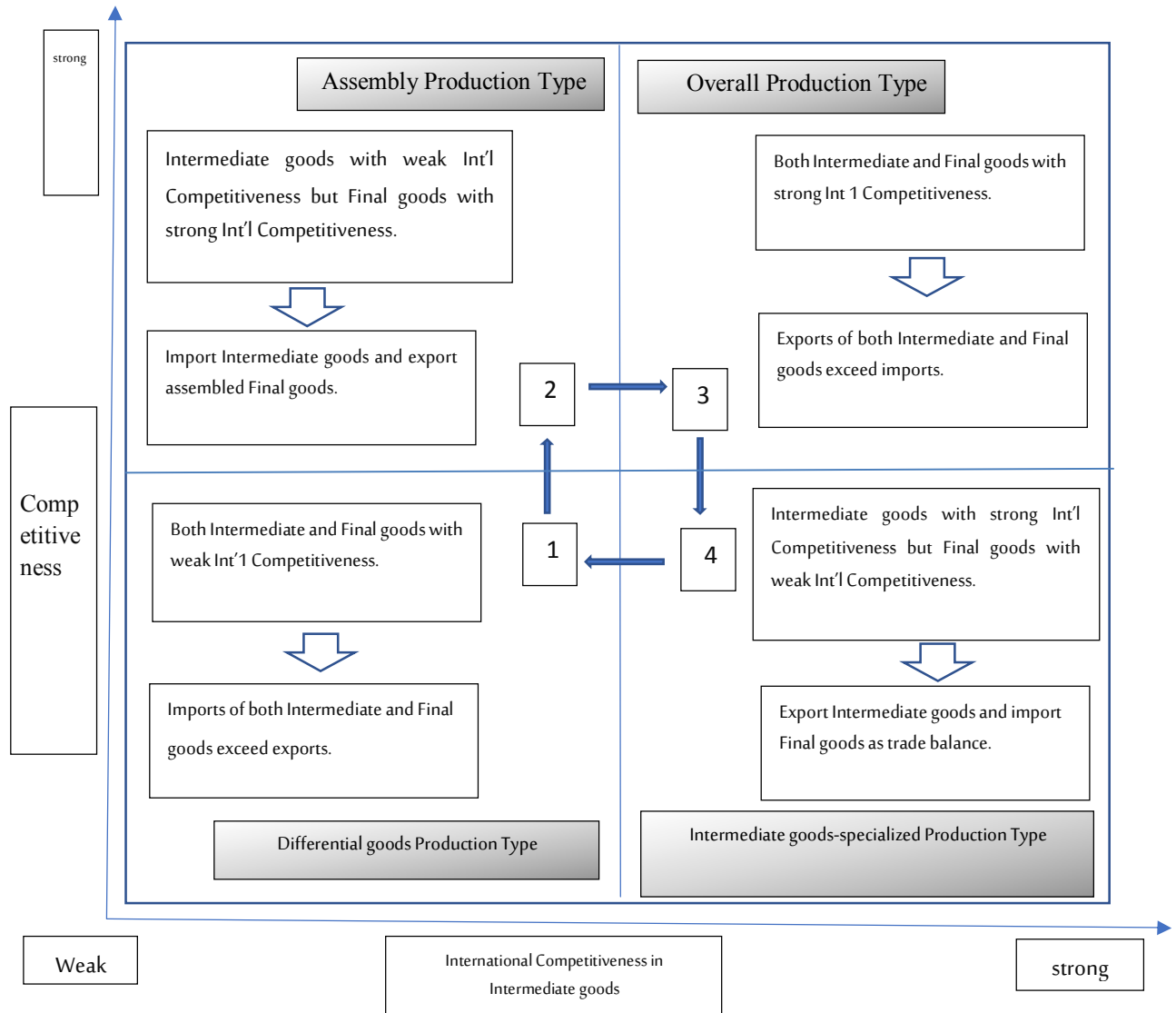
The triangular trade was well-known by the slavery trade, gathering three continents; Europe, Africa, and America. Each country maximizes its export towards abroad especially its colonies and minimizes its import to accumulate treasure (JOSIPOVIC & VUJEVA, 2021). It is self-evident that was an exploitative trade system because Mercantilism - the theoretical appellation of international trade at time of triangular trade - weakens country in long run; enriches only a few. Consequently, Absolute Advantage theory appears as a reform to the previous one, focusing on production specialization of export products for which it has absolute advantage. In order to make it widely enough, the Comparative Advantage theory see the light to explain newest trade problems.

The network production of the East Asian has a fundamental modal of those regions where wages are less related to labor-intensive processes (Ren , Zeng, & Zhang, 2020). In other words, we may say that Japan and the Newly Industrializing Economies (NIEs) - among them Taiwan- provided components with high added-value, and semi-finished products, and China and ASEAN, where wages are less signifying as these semi-finished

products. These goods were made as semi-finished products transformed to final ones using assembly process and were delivered to its market.

Stage of goods producing as a parameter of trade evolution between the previous three continents are followingly indicated (Figure 1).

**Figure 1: How to read the Chart of International Competitive Index**



**Source:** established by the authors.

This figure highlights the exchanges evolution as come behind: (a) trade in semi-finished products is simultaneously increasing between Japan and the NIEs and between China and ASEAN, (b) there is an evident increase of final products imports, particularly the consuming products, from China and ASEAN to the United State and Europe, and (c) exports of semi-finished products and final products are regularly rising from Japan and the NIEs towards the United States and Europe.

The growth of the East Asian vertical intra-industry trade network is reflected by production stage in these trends in trade goods, in which the international competitiveness and vertical intra-industry trade in East Asia analysis is used.

If the international competitiveness of intermediate and final goods of industries is evaluated, the industries will generally pursue a clockwise direction from the third quadrant as industries mature.

Figure (1) shows that each chart quadrant of international competitiveness index indicates the industries' specificities in that quadrant. The evolution trajectory of an industry can be clarified founded on the coming specificities.

First, an industry which commence in local supply benefits of lower wages and incrementally develops strength in the assembly area, then swaps to an assembly production category structure in which semi-finished products are imported and final products are exported. Next, competitiveness in semi-finished and finished products is built by the industry by increasing the level of its technology and grows to develop into a local entire production type industry, which is internationally competitive for both kinds of products. Nevertheless, once the industry has overtaken the summit of its maturity loses the assembly competitiveness because of factors such as rising of wages, what pushes it to specialize in semi-finished products, characterized by its highness of capital-intensive. Finally, the industry globally loses its comparative value starts to import a surplus of semi-finished products. This proves that the entire industry imports both of final goods and semi-finished products. The latest ones will surpass exports, yet competitiveness for particular products and fields within the industry can be possibly maintained through specialization. Typically, an industry that has been came in this level will compete in local and international market through specializing and differentiating products with high quality and function by using the registered trademark and high technology.

This hypothesis supposes that industries circularly advance around the chart of international competitiveness index, yet at the same time, they really make progress to be highly qualified through the process as they ameliorate their technology.

## 2.2 Triangular trade structure

According to the analysis stated previously of the international competitiveness country-partner, it was noticed that Japan and the NIEs have many industries with a whole production type or semifinal products-specialized production type structure, on the other side, China and ASEAN are in control of many industries with characteristics of assembly production type (Hara & Nakanishi, 2004).

Production inputs such as Parts, components, produced in Japan and the NIEs are imported by China and ASEAN, whose assemble it, and export the assembled products to the ultimate markets of the United State and Europe. it's the circle known as a "Triangular Trade Structure" with separate sites of each stage starting by production, assembly, and consumption. relying on the above analysis, it may be supposed that (a) China and ASEAN is highly getting labor-intensive processes, (b) Japan and the NIEs provide capital and technology-intensive, high added-value semifinal products, (c) the assembly process for final products is basically high

labor-intensive compared to the production stage for semifinal products, and (d) production costs in China and ASEAN are significantly lower than production costs in Japan and the NIEs, including its transaction cost.

Therefrom, the previous pattern shows China and ASEAN as sites dedicated to the assembly of semi-final products. In reality, it is because of technology transfer that has progressed quickly due to direct investment from Japan and the NIEs, procurement of the semi-final products required for assembly production in China and ASEAN are more and more depending on production within the region, rather than on imports. During the period (2000 - 2003) the Japanese companies located in China and ASEAN had an important local procurement rate which significantly rose into an interval of [40.1%, 51.3%]. (Japanese Ministry of Economy, Trade and Industry, 2005). An imports diminution of semi-final products from Japan and the NIEs would be the logical interpretation of the local procurement increasing within China and ASEAN, the thing that puts the Triangular Trade Structure in a precarious situation. However, the Triangular Trade Structure is strengthened in almost all of the industries. Despite the fact that local production of semi-final products is growing, semi-final products exports from Japan and the NIEs are concentrated on China and ASEAN, and exports toward the United States and Europe are rising relatively. In other words, this Triangular Trade Structure constitutes ties network between the highly-specialized, opened East Asian economies aiming to increase their economic growth.

By taking a look on the Taiwanese angle as a part of The Triangular Trading Bloc, and since the 1970s, we note that Taiwan has gained attention of becoming the most successful partner in attracting FDIs (Foreign Direct Investment). Despite the Taiwanese government has encouraged FDI in order to attract foreign investors around the whole world, the US and Japanese investors have heavily responded these measures. Even if China has invested a significant amount of capital to Taiwan over the 1970s, it constitutes a feeble level compared to the US and that reflects no interest of an "international business strategy". Taiwan sooner becomes part and field of competition between US and Japanese MNCs (Multinational Corporations) because of the entrance-in-economy of US and the Japanese FDI which strongly participate in the triangular trading bloc building.

The US and Japan had a fundamental role played in field of international Taiwanese exchanges which can be noted in Taiwan's trade balance sheet. After taking a look at 1970s' statistics (table in appendices), we can easily observe that Taiwanese exportation toward US compared to its whole exportations to the world increased from 12% to 38%. Decade after, the American importations from Taiwan rose from 42% to 50% of the whole Taiwanese exportations, particularly in the period (1984 -1986). During the period 1952-1970 the Taiwanese importations knew a revolution especially from Japan. Approximately a half of Taiwanese importations are provided by Japan in 1973, and a third of them in 1980. Those importations essentially consist of Japanese hi-tech imports which marked by a high dependence, leading to aggravation of the Taiwanese trade deficit with Japan. That import dependence could be attributed to the following factors. The first factor was related to the

Japanese strict control on their technology diffusion, instead of producing locally, the trade passed conventions between Taiwan and Japan obligated the Taiwanese subcontractors to import lots of semi-final products from Japan. The Second one is that the Taiwanese productivity maintained a low level and the local industrial progress had not the capability to go with the requirements of exporting different high-tech products. For reaching a high quality for different kinds of goods solicited from all over the world, the resorting to Japanese high-tech components constituted a rational decision for Taiwanese manufacturers. Therefore, Taiwan constantly recorded a significant trade deficit with Japan. In spite of the fact that the imported Japanese components improve Taiwanese exportations of high-tech goods, the domestic manufacturers hardly learned how to boost their technological level by cooperating technically with Japanese investors. By dint of the contract constraints, the high advanced technics, and quality or price factors, Taiwan had not opportunities to obtain substitutes from other states or to produce locally. The prohibition of domestic components production makes the task of Taiwanese technological level improvement so difficult.

Unlike Japanese MNCs which banned the technology transfer to their Asian branches, the American MNCs boosted the technological level of the Asian branches in parallel of the US, aiming to diminish the providing reliance on Japanese-made components. After reaching a competitive technological level in the Asian states, the US MNCs have bought the components from their Asian production partners. In the 1970s, the US MNCs obtained their basic components from other Asian states by enabling them to control the necessary production technology (Borras, 1997). Taiwan constituted a clear case, without spending major costs, the American investment strengthened Taiwanese ability to provide manufactured products. Due to the delivery reliability and flexible production, Taiwanese small and medium-size companies were particularly selected by the American buyers. In addition to placing orders for consumer goods, the American buyers made sure of the necessary technology transfer to satisfy quality standards of production. Moreover, the US affiliates in electronic sectors located in Taiwan played the role of component providers to the mothers' companies in the US, whereas Japanese companies avoided to export the final goods to country after assembling the products in Taiwan. The very tied inter-enterprises relationship between the US and their Taiwanese partners participated to make the US regain its leading position in the international production of electronic and high-tech products. Gathering other affiliates to buy raw materials or to sell semi-final products covering the region of Asia-Pacific, these MNCs integrated Taiwan as part of their production network. nevertheless, considering the inferiority of the US imports of components from its affiliates, compared to the final products exports to the US by the US affiliates in Asia, America recorded a colossal trade deficit with the Asian countries, among them Taiwan.

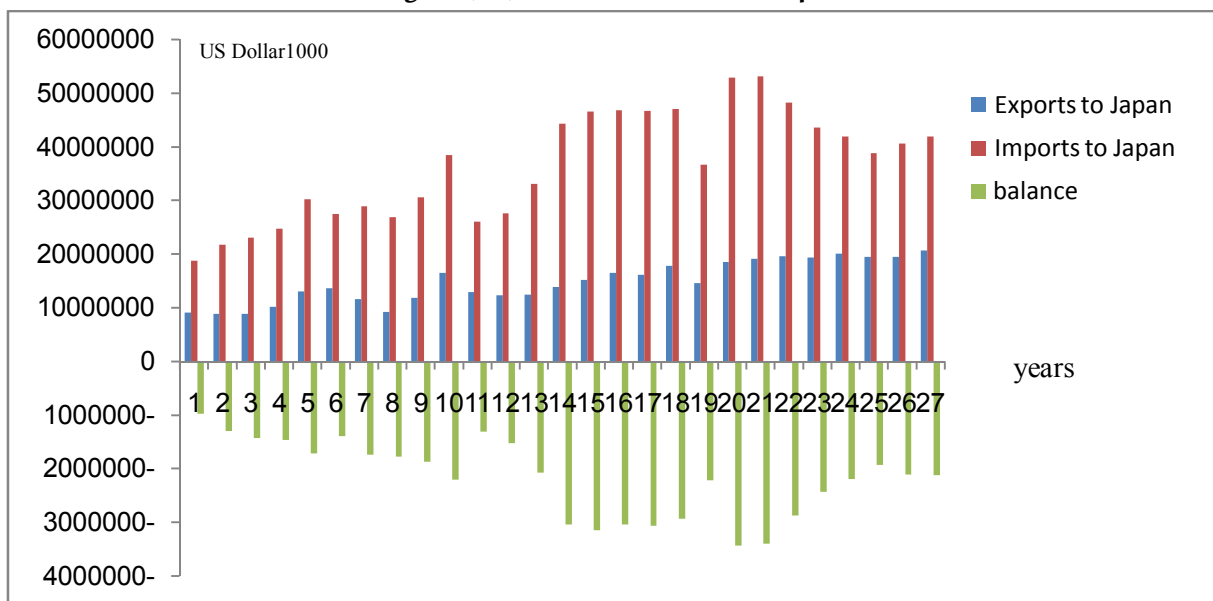
In brief, the three-party (Japan, Taiwan, US) trade relationship has strongly benefited from the multiple investment policies conducted by the previous nationalities. Whereas the US MNCs bought components in

Taiwan, the Japanese MNCs chose to import components from Japan and ensuring the assembly function by domestic factories. The American market represented the best destination of final goods produced by both Japanese MNCs and American ones located in Taiwan. As a result of that, a trade imbalance occurred for the benefit of Japan. With a trade situation characterized by increased exports toward the US and in parallel augmented imports from Japan, Taiwan took an important gain recorded positively on its trade balance with the US and another one recorded negatively with Japan. Consequently, there was a triangular structure between the US, Japan and Taiwan. Nevertheless, as soon as Taiwanese companies could not maintain costs control as a result of appreciation of dollar in 1980s, they found themselves obliged to look for new sites with lowest production costs like China in order to invest there.

In order to study how triangular trade impacts the national economy, we have chosen the case of Taiwan in its dealing with its trading partners.

By using the data presented in the following histogram relative to the Taiwanese Imports from Japan and Taiwanese exports to the USA, covering the period (1977-1990), we try to measure the relation between the two variables.

Figure (02): Taiwan's trade with Japan



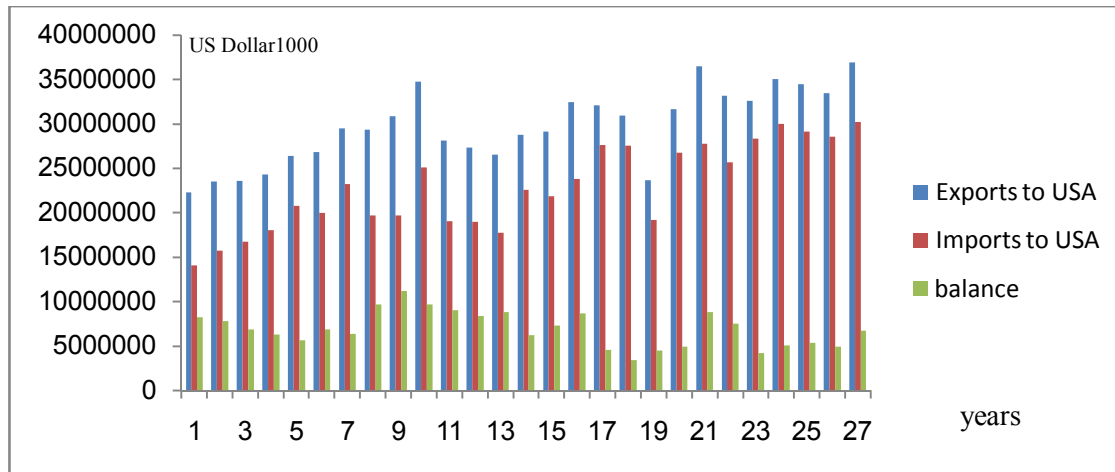
Source: established on the basis of the Taiwan statistical Data Book-Report. (National Development Council, 2018)

**The mean of the Taiwanese Imports from Japan is equal to 7962287429USD with:**

- ❖ Standard deviation equals to 4682024960USD.
- ❖ Asymmetric coefficient equals to 0,933896127. (> 0) then the distribution is spread to the right of the mean.
- ❖ Variation coefficient equals to 58,8025112. (> 15%) then the mean is less representative versus to all observations, and that is due the smallest amount of the beginning of the period.



Figure (03): Taiwan's trade with USA



Source: established on the basis of the National Development council, (2018), Taiwan statistical Data Book, Republic of China (Taiwan).

The correlation coefficient between the Taiwanese Imports from Japan and Taiwanese exports to the USA is significantly strong, reached (0,91) which explains how much linked are the Taiwanese exports to the USA to the Taiwanese imports from Japan.

The mean of Taiwanese exports to the USA is equal to 13635992500USD with:

- ❖ Standard deviation equals to 7584131349 USD.
- ❖ Asymmetric coefficient equals to 0,208678856. ( $> 0$ ) then the distribution is spread to the right of the mean.
- ❖ Variation coefficient equals to 55,618477 ( $> 15\%$ ) then the mean is less representative versus to all observations, and that is due the smallest amount of the beginning of the period.

### New Labor Division's Establishment

Since 1993, there was Taiwanese investment relocation toward China. The instant impact succeeding Taiwanese investment relocation to China was new labor division's establishment (Liu, 2007).

Taiwanese investment model in China sums up in importing semi-final and capital products from Taiwan and exporting final products toward western world, mostly the US. This type of trade has got particularly evident after the mid-1990s. by means of the particular investment model, international trade gathering Taiwan and China progressively got strengthen (Rosen & Wang, 2011). Most of the TIE's (Taiwan-Invested Enterprise) factories inputs materials in China were bought from either Taiwan (39.37%) or from the other TIEs in China (23.91%). Approximately 26% of factories inputs materials was from other foreign companies in China and almost 11% of it was from other states (Chiang & Gerbier, 2008). Factories inputs materials from Taiwan-based companies either in Taiwan or in China was particularly important in the plastic, electronic and electric branches. In the plastic branches, around 50% of the factories inputs materials were from Taiwan and 20% was from the other TIEs in China. In the electronic and electric branches, about 46% of the factories inputs materials was from Taiwan and 20.73% was from the TIEs in China. In the metal branches, the TIEs imported the raw materials and semifinal products often from Taiwan (35.03%) or other foreign companies in China (33.74%). In the chemical

branches, the dependence on the factories inputs materials from Taiwan wasn't significant. Less than 4% was from Taiwan while approximately 90% of the factories inputs materials came from other states.

The relocation of entire Taiwanese domestic producing network toward China characterized the investment relationship Taiwan toward China. As the both Taiwan providers and clients went together investing in China, an increasing number of TIEs bought the semifinal products straight from China.

Usually, importations were realized whichever from Taiwan, other countries, the TIEs in China infrequently acquired the production needs from Chinese companies. In other words, most of the TIEs, in the plastic, electronic and especially electric branches, relocated their factories to China but the production relations with foreign and other Taiwanese companies kept unchanged. Numerous TIEs in China have implemented factories while headquarters, the development and research departments, product design department, marketing, finance and accounting continued to operate in Taiwan. According to Table1 about 68% of the foreign orders were treated by the company- mother in Taiwan and approximately 50% of the foreign sales were exported by the affiliates in China. This is the specific Taiwanese system of production: dealing with the foreign orders was the role of the company- mother located in Taiwan, and the affiliates in China are charged of the manufacturing activities and exports.

The TIEs' dependency on the buying from Taiwan allowed it to be one of the most indispensable importing sources for China. Meantime, in Chinese whole export volume, the TIEs also have a central role. By taking a sight on the Chinese trade Ministry 2004 report about the Top 100 Exporting Companies in China, we note that 53% come from foreign enterprises. Among the 53% foreign companies, 21 are Taiwan, 11 are American, 10 are Korean, 7 are Japanese, 3 are Dutch, and 1 is Finnish. In particular, Foxconn, the affiliate of Hon-Hai Technology Group based in Taiwan, has taken the first place as exporting company in China, with the export value of US\$ 8.3 milliards in 2004. The second biggest exporting firm is Quanta Computer. It is also a Taiwanese firm relocated in China with the exportations amount of US\$ 5.3 milliards in the same year. Among 29 foreign companies in China having an export amount exceed US\$ 1 milliards in 2004, 14 are Taiwanese companies but their majority is registered in a third place like Western Samoa, British Virgin Islands, Cayman Islands and so on. These big exports-oriented TIEs but registered in third states showed too lowest the numbers recorded into official reports related Taiwanese investment in China. Concerning the export destination of TIEs in China, it is difficult to access (Dong-Whan, 2021). Nonetheless, considering that the TIEs controlled a big part of Chinese exportations and the US represented the principal market for Chinese final products, it is well known that the US constitutes the first market for the TIEs in China.

By integrating China as the fourth corner of the previous bloc, a new Four-Pillar Trade Bloc is Established In the light of the rapid enlargement of Taiwanese investment in China and the creation of a manufacturing

network between the two economies, the trade between Taiwan and China has got progressively more intensified. Because of Taiwanese government's constraints, majority of Taiwanese trade with China was realized through Hong Kong before 2001. Despite the restrictions, the trade amount between the two states did not significantly undergo reductions. Starting the 1990s, Taiwanese dependency level related to its exportations toward the Chinese markets has surpassed the warning level defined by the Taiwanese economy ministry. Taiwanese Importations from China have gradually augmented as well. Generally, in accordance with Chinese Affairs Council evaluated, Taiwanese exportations toward China rose from around US\$ 4 milliards in 1991 to US\$ 52 milliards in 2005, what's equal to 12 times. During the same period, Taiwanese importations from China, even if not as important as its exportations to China in absolute values, have widely risen as well. In 1991, the importations from China were US\$ 765.4 million but passed to approximately US\$ 20 milliards in 2005 (Mainland Affairs Council of Taiwan , 2005).

By neglecting the transit trade through Hong Kong, Taiwanese exportations toward China compared to its overall exportations has significantly passed from 0% in 1993 to 21.6% in 2005. Concerning the importations, the ratio compared to Taiwanese total importations has also passed from 0.5% in 1990 to 11% in 2005 (Mainland Affairs Council of Taiwan , 2005). The huge augmentation in Taiwanese trade with China imposed changes in Taiwanese trade relations with other states. The importance of Hong Kong as an important export market for Taiwan decreased. Taiwanese exportations toward Hong Kong considered for 23% of its total exportations in 1995 but it lessened to 16% in 2005. Importations from Hong Kong constituted a big part of Taiwanese total importations, but it tended to a decline.

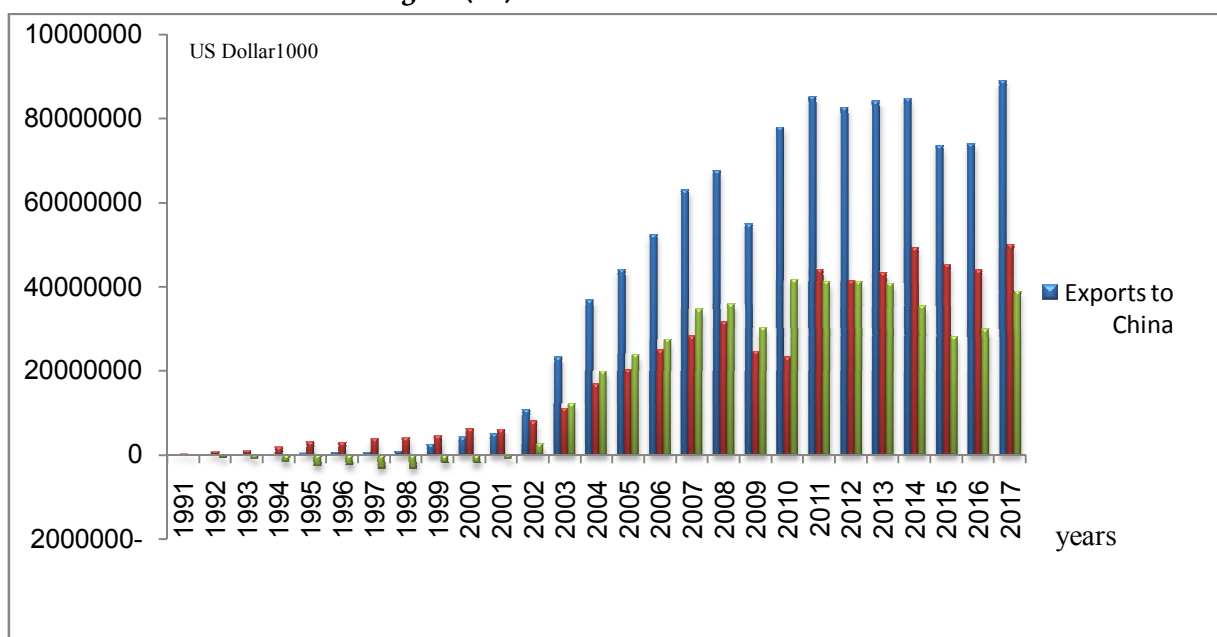
The so tied trade relations between Taiwan and China have not just reduced the significant role of Hong Kong as an essential transit place but also shaken Taiwanese trade dependency on the US. Each of Taiwanese exportations and importations toward and from the US lessened after 1990. Starting 2003, China has previously substituted the US as the first Taiwan trading partner. In 2005, the US market simply absorbed 15% of Taiwanese overall exportations while Taiwanese importations from the US also lessened to 11.6% of total importations. Exportations toward Japan fell from 12.4% in 1990 to 7.6% of Taiwanese overall exportations in 2005 even though Japan has never been an important export market for Taiwan. However, importations from Japan have kept its significant level. During the period 1990 to 2005, about 24% to 30% of Taiwanese overall importations continued to arrive from Japan. The principal cause for Taiwanese constant importations dependency on Japan is the technological gap between them. Japanese producers limited the technological transfer toward Taiwan to a level that they considered no longer competitive for their local production or did not equalize their cost benefit effectiveness ratios. Meanwhile, Taiwanese producers remained as learner status from Japan but they could not be innovative (Wang V. W.-C., 1995). in spite of the fact that Taiwan has technologically graded high in the

region, due to the Taiwanese producing flexibility that satisfy the trading requirements of foreign MNCs, Japan’s control on innovation and transfer of technology obliged Taiwan to increase its technology intensive importations from Japan. Basing on the previous analysis, the study proofs that the triangular trade relationship between Taiwan, Japan and the US is developed to a four-pillars trade relationship between Taiwan, Japan, the US and China. despite the fact that China is nowadays Taiwan’s first trading partner, an important share of exportations from Taiwan toward China are integrated into products which are finally required by US companies or US consumers. Therefore, Taiwanese exportations toward the US are so important but via China as a manufacturing place (Marukawa, 2021) . The importations from Japan are highly sensible to any changes in Japan’s industry which shows the almost total Taiwanese dependency on Japanese imports. Whereas, Taiwan relies on semi-final products exportations to China for its trade surplus, it still requires Japanese high-tech and capital-intensive importations and the final products manufactured by the TIEs in China are oriented to the American market. In other words, the entire manufacturing network in the region keeps unchanged. China has only adopted the similar exportation-led economic growth as Japan and NICs experienced and integrated itself into the regional manufacturing network. Nevertheless, the widened manufacturing network goes with the aggravation of US trade deficit problem (Wang Z. , 1995).

In order to study how triangular trade impacts the national economy, we have chosen the case of Taiwan in its dealing with its trading partners.

By using the data presented in the following histogram relative to the Taiwanese Imports from Japan and Taiwanese exports to the China, covering the period (1991-2017), we try to measure the relation between the two variables.

**Figure (04): Taiwan’s trade with China**



Source: established by the authors basing on the Taiwan statistical Data Book, Republic of China (Taiwan), (2018).

The correlation coefficient between the Taiwanese Imports from Japan and Taiwanese exports to the USA is significantly strong, reached (0,85) which explains how much linked are the Taiwanese exports to the China to the Taiwanese imports from Japan.

**The mean of the Taiwanese Imports from Japan is equal to 36601338930USD with:**

- ❖ Standard deviation equals to 10106923350 USD.
- ❖ Asymmetric coefficient equals to -0,056620322. (<0) then the distribution is spread to the left of the mean.
- ❖ Variation coefficient equals to 27,6135345 (> 15%) then the mean is less representative versus
- ❖ The mean of Taiwanese exports to China is equal to 37692945560USD with:
- ❖ Standard deviation equals to 35680071050 USD.
- ❖ Asymmetric coefficient equals to 0,17447773. (> 0) then the distribution is spread to the right of the mean.
- ❖ Variation coefficient equals to 94,6598111 (> 15%) then the mean is less representative versus to all observations, and that is due the smallest amount of the beginning of the period.

This trade model is adequate with Chinese international comparative advantage: ample labor force, rarity of capital and per capita natural resources (especially agricultural land and forest resources), while the United States has an ample agricultural land and technology-capital capacity.

Firstly, aiming to develop its economy and improve productivity, particularly serving its infrastructure, China have need to import huge number of technology/capital-intensive items covering agricultural industrial products (Erokhin, Diao, & Du, 2020), equipment like electronic instruments, power generating, communication, transportation and construction. since the labor-intensive export-oriented industries of China creating increasingly foreign exchange, Chinese importations' capacity for similar articles expected upward constantly. These requirements turn colossal infrastructure needs into effective demand and like that extend the export market for American companies that produce goods related to infrastructure enlargement are highly competitive. Secondly, quotidian requirements of American low-income families rely on most of the labor-intensive products that usually are imported from Asia. Since China can provide such products with lower prices, the consumer price will decrease, which lead to improve the Socioeconomic level of the American consumer.

### 3. Results and discussion

Both of United States and Japan described as biggest import and export countries, with an exporting and importing combination completely different each other, either in bilateral trade or in trade with the whole world. In bilateral trade, approximately all exportations from Japan toward the United States are manufactured products, with a focus on machinery and transportation equipment, which is the biggest trade industry in Japan. Exports from the United States to Japan, on the other hand, are greatly more diversified.

This trade model gives an occasion for East Asian Chinese economy to play the role of a moderator force to lessen the trade and economic friction between Japan and the United States. The same role has played Mexico as a moderator between USA and China in time of their trade war (Maya, 2021), which indirectly impose sanctions on the Four-Pillar-Trade-Bloc integrated economies such as the Taiwanese economy (Chen, 2020). The basic idea is that with the combining of low-cost labor from the China-mainland and the capital, managerial skills, and marketing expertise from Taiwan and Hong Kong, China will change to be a principal provider of labor-intensive consumer products oriented to Japan and the United States. As long as China's exportations and the capability for gaining foreign exchange augment in this process, the demand for building new infrastructure in China will rise. This will widen its market for technology/capital-intensive manufactured durables (essentially machinery and equipment) for Japan and the United States, which will reinforce the ranks of US and Japan in their quality of principal providers for China's industrialization program. A more lessening prices for consumer products and rise in income from exporting manufactured durables will augment the purchasing power of US and Japanese consumers, further widening their local market. Nevertheless, this triangle of trade relations has some Inconvenient. As the trade realization argued previously is essentially linked to inter-industry trade, as trade widens among the three economies it will impose an adjustment in production structure. Resources in the import's nation must be transferred from one branch to another rather than within segments of the same branch. This makes more spending money to cover short-term adjustment costs, particularly for Japan.

Triangular trade relationships between U.S-Japan-China require conditions of proper running. Firstly, acquiring enough amounts of capital and upgraded technologies combined with the maximum utilizing of their cheap labor force enables China to manufacture consumer products which will be oriented to the Japanese and American markets. Secondly, acquiring technology/capital-intensive products from Japan and the United States by using a portion of Chinese exportations revenue, realize the aim to modernize its program. The previous two conditions could be successfully applied by realizing an optimum integration of the three principal components of "greater China" namely mainland, Hong Kong and Taiwan. Foreign direct investment provides some elements boosting the Chinese export-oriented policy such as the "know-how", "state-of-the-art" manufacturing facilities, market channels, and product designs, the thing that optimizes the price /quality ratio and then satisfying the international markets standards.

Taking advantage of opportunity of the Chinese reform, about 70% of China's foreign direct investment effectively got in from Hong Kong and Taiwan. Furthermore, economic literature highlights the idea of the positive relation between the relative rapprochement of national development stage and transfer volume of new technology (Zhou & Latorre, 2014). Considering the intermediate development stage of both Taiwan and Hong

Kong compared to those of China and Japan, that of the United States too, the technological transfer process will be logically quickened by the Hong Kong- Taiwan-China integration.

An increasing amount of semi-final products are imported from Taiwan and Hong Kong toward the China-mainland for manufacturing or processing/assembling operations, and then re-exported to the American and Japanese markets, the thing that stimulates the technological transfer and the intra-industry trade between Taiwan, Hong Kong, and industrial nations. The increasing Taiwanese and Honk Kong's importations of technology and capital-intensive products from the United States and Japan help to resources reallocation and modernizing industrial structures of the cited two Chinese lands. Extending the international market share of China is the result of the development of intra-industry trade which undergoes the condition of the integration of the economies of the greater China (Yokokawa, 2020).

Concurrently, as the integrated Chinese economy suffer from a significant trade deficit with Japan, it resembles the same economic interests and the aims as the United States related to incite Japan to further open its local market. It's a way to meeting the previous conditions and thus reducing the tensions between Japan and the United States. By new powerful partner entering, the cooperation gains more dynamism. The two developed countries are beneficial from importing labor-intensive consumer products from China, which allows them to have lower prices than their local ones, but also develop effective demand for their technology/capital-intensive goods in what is considered as the biggest market in the world.

#### **4. Conclusion:**

By holding technology/capital-intensive industries constituting a competitive advantage, Japan and the United States are considered as the first ranked in those types of industries. in turn, they are the final destination of labor-intensive consumer goods from East Asian Chinese economies. For instance, Taiwan, Hong Kong and especially China enjoys strong complementarity with those two developed economies.

An occasion for East Asian Chinese economy is offered to ensure a job of bones cartilage role by trade friction absorption between Japan and the United States. for that purpose, economic dynamics synchronization must be guaranteed by the countries-partners of the mentioned triangular trade.

Similarly with the China Japan trade deficit, the US economy faces barriers to export to Japan. By inviting a third partner absorbing gradually this deficit, the economic collaboration gets boosted forward. Importing Chinese final labor-intensive goods helps both the USA and Japan to take benefits in form of prices decrease in their local markets. in return, they guarantee new market especially the huge Chinese one for their technology/capital-intensive products.

The triangular trade represents a necessary way for each country even for the underdeveloped one (Algeria really could be an example) because it provides the opportunity to mobilizing all specific resources for some countries,

in a way where they simultaneously boost their economic growths, and thus realizing a Welfare and good Living Conditions of their peoples.

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