

How can Taiwan enlarge its role in the process of Asia-Pacific economic integration

Da-Nien Liu

Chung-Hua Institution for Economic Research
Regional Development Study Center

Working Paper Series Vol. 2019-07
May 2019

The views expressed in this publication are those of the author(s) and do not necessarily reflect those of the Institute.

No part of this article may be used reproduced in any manner whatsoever without written permission except in the case of brief quotations embodied in articles and reviews. For information, please write to the Institute.

Asian Growth Research Institute

How can Taiwan enlarge its role in the process of Asia-Pacific economic integration

Da-Nien Liu, Ph.D. Director

Chung-Hua Institution for Economic Research, Regional Development Study Center

Abstract

The forming of regional alliances has become a trend, and the number of FTAs has grown exponentially in recent years. Regionalism has become a trend that has not only affected functions of the WTO, but also severely impacted global trade, investment, and even industrial division of labor.

From Taiwan's point of view, the vogue for large-scale FTAs in the past few years has had a major impact on Taiwan, which is heavily dependent on foreign trade, is closely tied up with global supply chains, and it has been able to sign only a handful of FTAs.

On this basis, this paper mainly analyzes how Taiwan can assume a greater role and make breakthroughs in the trend of regional economic integration. We will first summarize global trends and latest developments in regional economic integration. The second part is to describe Taiwan's participation in regional economic integration and the difficulties that were encountered. The third explains how Taiwan should make adjustments in its industry and system to increase opportunities for breakthrough in regional integration, and also increase Taiwan's importance in the Asia-Pacific's regional economy.

Key Words: Regional Economic Integration, Free Trade Agreement (FTA), Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).

JEL code : O

I. Introduction

In contrast with the slow progress in multilateral trade negotiations of the World Trade Organization (WTO), the forming of regional alliances has become a trend, and the number of regional FTAs has grown exponentially in recent years. Regionalism has become a trend that has not only affected functions of the WTO, but also severely impacted global trade, investment, and even industrial division of labor. (Whalley, 2008; Lee & Shin, 2008; Nicolas, 2018)

From Taiwan's point of view, countries around the world have accelerated the signing of FTAs to eliminate both tariff and non-tariff barriers over the past decade or so, and this has seriously impacted Taiwan's foreign trade performance. In particular, the vogue for large-scale FTAs in the past few years has had a major impact on Taiwan, which is heavily dependent on foreign trade, is closely tied up with global supply chains, and itself has been able to sign only a handful of FTAs.

The U.S. announced its withdrawal from the TPP after U.S. President Trump assumed office, despite his emphasis on fair trade and bilateral measures. The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) formed by the other 11 countries of the TPP, however, still has great influence on Taiwan's future. The forming of large-scale FTAs in the future will also impact Taiwan. How Taiwan responds to this new trend and challenges will have an important effect on Taiwan's future development.

On this basis, this paper mainly analyzes how Taiwan can assume a greater role and make breakthroughs in the trend of regional economic integration. The paper is structured as follows: The first section is an introduction. The second section summarizes global trends and latest developments in regional economic integration. The third section describes Taiwan's participation in regional economic integration and the difficulties that were encountered. The fourth section explains how Taiwan should make adjustments in its industry and system to increase opportunities for breakthrough in regional integration, and also increase Taiwan's importance in the Asia-Pacific's regional economy. The fifth section is the conclusion of this paper.

II. Developments and trends of regional economic integration around the world

A. Overview of developments in regional economic integration around the world

The WTO began the Doha Round of negotiations in 2001. It was the most in-depth and extensive round of negotiations to ever be carried out, but significant progress has yet to be made in trade liberalization due to the higher difficulty of negotiations. The only progress made was the Trade Facilitation Agreement (TFA) and Information Technology Agreement (ITA II) completed in 2013 and 2015, respectively.

As multilateral negotiations of the WTO remained stagnant,

countries are turning from multilateral to bilateral. According to statistics of the WTO¹, a total of 464 regional FTAs have taken effect between 1950 and 2019, as shown in Table 1. Of the FTAs, 413 took effect after the WTO was established in 1995, accounting for nearly 90% of regional FTAs in effect. A total of 303 FTAs took effect after 2005, accounting for over 65% of all regional FTAs, showing that FTAs have become the emphasis of trade policies in most countries.

Table 1 Number of regional FTAs around the world

Year	Number of regional FTAs
1950-1959	2
1960-1969	2
1970-1979	11
1980-1989	10
1990-1994	26
1995-1999	38
2000-2004	72
2005-2009	128
2010-2014	104
2015-2019	71
Total	464

Source: www.wto.org

If we further observe the trend of regional integration around the world, Europe and America are two major regions of free trade that have formed. Even though Asia has not formed a single integrated region for free trade, the pace of integration is accelerating. Integration of the European Union, United States, and East Asia is summarized below:

¹ <http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx>

(A) EU

The EU announced the Europe 2020 Strategy in 2010, which emphasizes the selection of FTA partners with market potential. The EU is also actively forming alliances with Asian countries under its eastbound policy, and it has signed FTAs with South Korea, Singapore, and Vietnam. Negotiations with Japan were completed in December 2017. The remaining formalities are expected to be done successfully and EU-Japan trade agreement is about to take effect in February 2019. Participation in regional economic integration has become the theme of the EU's foreign trade policy.

Despite the EU expanding its external FTA network, one of its important members - the UK passed a referendum to exit the EU in June 2016 due to conflicting opinions on whether or not to remain a member. This was a major setback to the EU's internal integration, and the parties are currently engaging in negotiations for exiting the EU. By schedule, the UK will exit the EU in March 2019. Future developments will continue to draw great attention.

(B) U.S.

The United States is the main force driving regional economic integration in America. The North American Free Trade Agreement (NAFTA) formed on the basis of the United States-Canada Free Trade Agreement in 1988 and United States-Mexico Free Trade Agreement in

1994 are all regional integration led by the United States. In the past, the U.S. mainly supported multilateralism, but also began actively participating in regional economic integration as multilateral trade negotiations of the WTO stagnated and the EU achieved further integration. The United States' FTA partners can be found on all continents, and it is clearly forming cross-region alliances; a total of 14 FTAs are currently in effect. The U.S. is also promoting the Trans-Pacific Partnership Agreement (TPP) and Transatlantic Trade and Investment Partnership (TTIP) with the EU. Even though the TPP was signed in February 2016, Donald Trump decided that the U.S. withdrew from the TPP in 2017. He also put the TTIP, which had been in effect since February 2013, on hold, making a massive change in U.S. policy for participating in regional integration. With the view that the U.S. will have better deals from bilateral agreements and old trade deals must be revised, the U.S. has replaced NAFTA with United States-Mexico-Canada Agreement (USMCA) and revised United States-Korea Free Trade Agreement (KORUS).

(C) East Asia

The ASEAN Free Trade Area (AFTA) established in 1992 is the longest-standing FTA in Asia, but regional integration has otherwise been limited. After trade liberalization by the WTO stagnated, the financial crisis of 1997 devastated Asia's economy, and other regions achieved higher level of integration, Japan, South Korea and China also began to

participate in regional integration and made considerable progress.

Japan did not sign any FTAs before 2002, but has now signed 18 FTAs since it signed the first FTA with Singapore in 2002. China and South Korea have a similar situation to Japan, in which China has FTA partners on all continents and currently has 16 FTAs in effect. South Korea began to exert great effort to signing FTAs with the world's largest economies after it signed its first FTA with Chile in 2003; currently, 16 FTAs are in effect. South Korea has a complete FTA network as it is the only country to have FTAs with China, the United States, EU, and ASEAN.

B. New trend of regional economic integration around the world

Regional economic integration promotes trade and cooperation between countries, but opening the market to other countries has created a number of issues, such as weaker industries being impacted, more severe unemployment, and widening wealth gap. As a result, more and more people are opposing globalization, and it has led to the UK's referendum in June 2016 to exit the EU, the rise of political parties advocating populism in various countries, and Donald Trump winning the U.S. Presidential Election in November. These can all be viewed as important representatives of anti-globalization, and they have greatly impacted global economic and trade development. This also brought new changes to regional economic integration. Overall, developments can be

summarized into the following key points.

(A) The United States will bilaterally promote fair trade

Donald Trump's trade policy revolves around fair trade and reducing the trade deficit. The U.S. has evaluated the 14 FTAs that are in effect and begun re-negotiating the NAFTA and United States-South Korea FTA. The U.S. is also using a variety of trade measures to prevent unfair trade practices of its trade partners, and it is using tax reform and infrastructure expansion to ensure its interests.

In particular, Donald Trump adopted a series of measures against China starting in 2018 to fulfill his commitment to reduce the massive trade deficit with China. He first adopted safeguard measures in January 2018 against large washing machines and CSPV cells according to Section 201, Trade Act of 1974. Within the next three and four years, respectively, import duties on large washing machines and CSPV cells will be raised by 15% to 50% after exceeding the quota, and the import duties will be imposed on all countries that produce the goods including China.

The U.S. immediately conducted an investigation into steel and aluminum imports according to Section 232, Trade Expansion Act of 1962, and determined that steel and aluminum imports posed a threat to national security, and hindered the development of domestic industries.

The U.S. thus imposed import duties of 25% and 10% on steel and aluminum imports from around the world. Only Argentina, Australia, Brazil and South Korea are not covered by rising import duties. In this process, Donald Trump constantly criticized China's excess capacity as the main reason for adopting these measures.

The subsequent investigation according to Section 301, Trade Act of 1974 clearly targeted China, and looked into any unreasonable technology transfer and intellectual property rights policies that may limit the development of American enterprises. The U.S. announced a list of 1,333 Chinese goods in April that it will impose an additional 25% tariff on. The screening principle was items benefited by Made in China 2025, which shows that the U.S. intends to inhibit the development of China's high-tech industries. China immediately announced an additional 25% tariff on 106 U.S. goods in retaliation. After escalating trade tensions, in the end of 2018, the U.S. had imposed additional tariff over 6,800 Chinese goods which were worth about 250 billion dollars. China also had slapped tariff over 6,000 U.S. goods with worth 110 billion dollars.

Based on the series of measures above, the U.S. is using its domestic laws and not the WTO to quickly respond to unfair trade measures of other countries, and is forcing countries to the negotiation table to meet its conditions. As Sections 201, 232 and 301 are being executed, besides causing a trade war between the U.S. and China that has changed the global economic situation, it also shows that bilateral FTAs are no longer

part of U.S. trade policy.

(B) CPTPP continues to make progress led by Japan

The outlook became uncertain for the TPP after the U.S. announced its withdrawal. During the APEC Economic Leaders' Meeting in November 2017, Japan's active efforts led to 11 countries announcing that the TPP would be renamed the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). Negotiations for the CPTPP were completed during the meeting in Tokyo from January 22nd to 23rd, 2018, and the CPTPP was signed in Chile on March 8th.

The CPTPP is the most important highlight of regional economic integration around the world in 2018. Even though the U.S. is no longer a member, the 11 countries of the CPTPP still represent 13.5% of global GDP and can be considered a large-scale FTA. After Japan, Mexico, Singapore, Canada, New Zealand and Australia ratified the deal, CPTPP had meet the minimum threshold to take effect on 30th December 2018. Quite a few countries including Taiwan have expressed their intention to join the CPTPP in the second round, showing that the CPTPP will continue to grow and its influence cannot be ignored.

Japan is the greatest beneficiary in all of this as it not only enjoys the economic benefits brought by the CPTPP, but also became the backbone of regional economic integration by transforming the TPP, which was on the brink of collapsing after the U.S. withdrew, into the CPTPP.

Furthermore, Japan also signed an FTA with the EU in 2018 and is currently negotiating several bilateral FTAs, which is a change from its conservative position in the past.

(C) Regional economic integration will be carried out through bilateral FTAs and large-scale FTAs

Based on current development trends, regional economic integration has not been affected by the rise of anti-globalization, and countries other than the U.S. will continue to participate in integration through bilateral FTAs and large-scale FTAs. (Dan & Xiao & Ali, 2017; Rodrigo & Sebastian, 2017, Rachel, 2018) Key points are as follows:

1. RCEP

Members of the RCEP continued to actively engage in negotiations after the U.S. announced its withdrawal from the TPP. Numerous negotiations have been held and the 16 countries have discussed multiple issues, already reaching an agreement on Economic and Technical Cooperation, Small and Medium Enterprises, Customs Procedures and Trade Facilitation, Government Procurement, Institutional Provisions, Sanitary and Phytosanitary Measures, and Standards, Technical Regulations and Conformity Assessment Procedures. Even though the 16 countries clearly expressed their determination to complete RCEP negotiations in 2018, progress has been slow due to the wide gap in the position of member states during negotiations. However, 16 countries

have noted that the task to conclude RCEP is getting urgent, RCEP members hope to conclude as early as in 2019.

2. Asian countries continue to engage in FTA negotiations

In addition to large-scale FTAs, such as the CPTPP and RCEP, East Asian countries continue to dedicate active efforts to bilateral FTAs, unaffected by the change in U.S. trade policy. Japan will focus on the CPTPP and EU-Japan Economic Partnership Agreement, and will make active efforts to complete RCEP negotiations. The China-Japan-South Korea FTA also made progress in 2018. The latest meeting was held in China in December 2018. China is currently engaging in upgrade negotiations with its FTA partners, i.e. ASEAN, Pakistan, Singapore, New Zealand, and Chile, in which the upgraded FTA with ASEAN took effect in July 2016, the upgraded FTA with Chile and Singapore signed in 2017 and 2018 respectively. China is also engaging in negotiations for the China-Japan-South Korea FTA and the RCEP, and it is actively negotiating FTAs with countries along the Belt and Road Initiative to expand its economic influence.

South Korea aims to complete negotiations for the RCEP, South Korea-ASEAN FTA, and South Korea-India upgraded FTA, and will also begin negotiations for MERCOSUR, a revised FTA with Chile and an FTA with Mexico. ASEAN countries will prioritize negotiations for the RCEP. Among ASEAN countries, Vietnam has made the most significant

progress. Vietnam currently has bilateral FTAs with Japan, Chile, South Korea, and the EU.

III. Taiwan's participation in regional economic integration

In contrast with the rapid developments of other countries in signing FTAs, Taiwan's path has been extremely difficult. The following section describes Taiwan's participation in regional economic integration.

Prior to Taiwan's accession to the WTO in 2002, all of Taiwan's efforts were focused on securing WTO membership; it was felt that pursuing FTAs would only result in the delaying of Taiwan's accession to the WTO. After becoming a member of the WTO, Taiwan began to actively explore possibilities for signing FTAs with other countries; this became a major focus of Taiwan's economic diplomacy. Taiwan held preliminary talks with a large number of different countries, including Japan, the ASEAN member states, the U.S.A., and the small group of countries with which Taiwan has formal diplomatic relations.

From Taiwan's point of view, besides the economic benefits that FTAs would bring, securing the signing of FTAs would also represent a major diplomatic breakthrough for Taiwan, and would thus have dual significance. However, precisely because of the significant diplomatic benefits that securing FTAs would have Taiwan, Taiwan's efforts to negotiate FTAs with other countries ran up against a series of major obstacles. Eleven years on from Taiwan's accession to the WTO,

Taiwan's concrete achievements in terms of the securing of FTAs are limited to the signing of FTAs with five countries in Central America with which Taiwan has formal diplomatic relations: Panama, Guatemala, Nicaragua, Honduras and El Salvador.²

The reason why Taiwan's progress in securing FTAs with other countries has been so slow is of course the China factor. As a result of China's rapid economic growth, as well as China's active efforts to secure participation in regional economic integration following its accession to the WTO in 2001, countries throughout the world have been focusing on developing the opportunities that have emerged as a result of the opening up of the China market, while also coming under pressure from China to reject overtures from Taiwan. When forced to choose between Taiwan and China, foreign countries have naturally chosen China, making the securing of FTAs with China their main objective. At the same time, the process of negotiating an FTA is inevitably related to the issue of national sovereignty. Wary of how China would respond, other countries have been reluctant to proactively seek trade negotiations with Taiwan; this has had a major impact on Taiwan's efforts to negotiate FTAs.

Given the difficulty that China's interference caused to Taiwan's efforts to negotiate FTAs, in order to achieve a breakthrough in this regard, Taiwan naturally reoriented the focus of its efforts towards those countries with which Taiwan has formal diplomatic relations, where

² <http://www.trade.gov.tw/Pages/List.aspx?nodeID=764>

China's ability to interfere would, of course, be reduced. The countries with which Taiwan has formal diplomatic relations are mostly located in Central or South America, Africa, or the island countries of the Pacific Ocean. In terms of the size of their economies and the maturity of the relevant systems and structures, the countries located in Central or South America offered the best potential for negotiating FTAs, and it is this region where Taiwan has had the most success in signing FTAs.

It was only after the thawing in "cross-strait" relations between Taiwan and China in 2008, and the commencement of negotiations for the signing of the *Economic Cooperation Framework Agreement* (ECFA) with China in 2009, that the obstacles to Taiwan's negotiating of FTAs with other countries grew less pronounced. (Cyrus C.Y., 2009 ; Chen T.J., 2010)

In 2013, Taiwan *secured* some major breakthroughs in its efforts to secure greater participation in regional economic integration. On July 10, 2013, the *Agreement between New Zealand and the Separate Customs Territory of Taiwan, Penghu, Kinmen, and Matsu on Economic Cooperation* (ANZTEC) was signed, followed on November 7, 2013 by the signing of the *Agreement between Singapore and the Separate Customs Territory of Taiwan, Penghu, Kinmen, and Matsu on Economic Partnership* (ASTEP). The signing of these FTAs with New Zealand and Singapore represented a major step forward in terms of Taiwan's ability to successfully negotiate FTAs with countries other than those with which

it has formal diplomatic relations. However, given the rapid pace of regional economic integration, Taiwan still has a long way to go to catch up.

In fact proactive participation in regional economic integration has been a key element in the foreign trade policy of almost all countries. Examination of the FTAs that have been negotiated in the past few years shows that there has been a trend towards large-scale FTAs that are to some extent in competition with one another; at the same time, the range of issues addressed by FTAs has grown broader, and their economic impact has grown more pronounced. In addition, it has become more common for existing regional groupings to establish their own regional FTAs. Overall, FTAs have become an extension of countries' economic and diplomatic clout. From Taiwan's perspective, as a country heavily dependent on international markets, the negative impact of these trends has been enormous.

Of course Taiwan's government is aware of this situation and has been actively expanding its FTA network. The Cross-Strait Service Trade Agreement with China in 2014, however, raised concerns about being too dependent on China, and led to the Sunflower Movement, which forced all subsequent negotiations of the ECFA to be terminated. Party alternation in 2016 led to tense cross-Strait relations and put Taiwan in an even tougher position with respect to FTAs.

IV. Taiwan's role and response strategy

A. Trends of Taiwan's exports

With regard to how Taiwan can play an important role in regional economic integration when facing changes in the global situation, changes in Taiwan's position in the Asia-Pacific will first be described.

The manufacturing industry has always been the core of Taiwan's economic development due to the long-standing export-oriented trade policy. Facing the pressure of rising labor costs in Taiwan, labor intensive companies that could only compete with lower prices were forced to move their production bases overseas. As labor intensive industries moved to China and Southeast Asian countries, capital intensive industries continued to develop in Taiwan, and the manufacturing industry has remained the core of Taiwan's development. As a result of downstream manufacturing industries relocating overseas and the industry moving towards mid- and up-stream, Taiwan's external trade connections and supply chain in Asia has changed. (Liu & Shin, 2012)

Table 2 shows Taiwan's exports between 1996 and 2017 have become more concentrated towards the intermediate and capital goods with a rising percentage. Nearly 80% of Taiwan's exports between 2011 and 2017 were intermediate and capital goods.

Table 3 shows Taiwan's exports to developed countries, such as the EU, United States, and Japan, is decreasing, while exports to emerging

countries, such as China, ASEAN, and India, is significantly increasing. Nearly 60% of Taiwan's exports between 2011 and 2017 were to China and ASEAN countries. This shows the growingly close direct trade relations between Taiwan and Asian countries.

Table 2 The Change in the Structure of Taiwan's Export Products

	Raw Materials	Intermediates and Capital Goods	Consumer Goods
Average share of exports in 1996 - 2000	1.71%	74.51%	23.78%
Average share of exports in 2001 - 2005	1.28%	78.07%	20.64%
Average share of exports in 2006 - 2010	1.10%	78.95%	19.95%
Average share of exports in 2011 - 2017	1.25%	79.13%	19.62%

Source: Collated from Taiwan Customs data.

Table 3 The Change in Taiwan's Export Markets

	Country	Average share of total exports			
		1996 – 2000 (%)	2001 – 2005 (%)	2006 – 2010 (%)	2011 – 2017 (%)
1	China (including Hong Kong)	23.90	35.03	40.48	40.02
2	ASEAN	12.43	12.78	14.86	18.35
3	U.S.A.	24.51	17.64	12.47	11.43
4	E.U.	15.31	12.94	10.69	8.64
5	Japan	10.17	8.42	6.83	6.44
6	S. Korea	2.10	2.97	3.46	4.24
7	Australia	1.44	1.20	1.24	1.15
8	India	0.46	0.60	1.08	1.13
9	Canada	1.31	1.00	0.74	0.78
10	Mexico	0.64	0.60	0.58	0.65
	Total	100	100	100	100

Source: Collated from Taiwan Customs data.

Observing the trade between Taiwan and regions it mainly exports to, Figure 1 shows that increasing ratio of intermediate and capital goods exported by Taiwan to China and ASEAN, especially China. Meanwhile, exports of intermediate and capital goods to the EU, Japan, and the United States continued to decline. Taiwan mainly exported consumer

products to the United States, ASEAN, and the EU, followed by China and Japan.

This shows that Taiwan has adjusted its industry structure along with changes in the production environment, and is now even more focused on the production of mid- to up-stream products. Taiwanese companies view Asian countries as a base for processing and exports, and their investments have driven trade and brought industries in Taiwan and Asian economies to work closer together. The division of labor between industries in China and ASEAN countries, in particular, has shown an upward trend.

Taiwan's consumer products are still mainly exported to the United States and EU, but exports of intermediate goods and capital goods have declined and direct trade relations have weakened as well. Indirect exports to Europe and America have increased through processing and production chains in China and ASEAN countries.

In summary, this trade pattern is directly related to Taiwan's overseas investments. Taiwan's overseas investments are mainly made in China and Southeast Asia, which Taiwan basically views as its overseas processing bases. Taiwan exports intermediate goods and capital goods to China and ASEAN for processing into consumer goods, and finally exports the consumer goods to countries in Europe and America, forming triangular trade. Even though Taiwan has worked hard to expand the global market for consumer goods, the triangular trade described above

remains Taiwan's main trade pattern.

When the end consumer product market is in a slump, e.g. the U.S. subprime mortgage crisis and the European debt crisis, exports from processing bases in China and Southeast Asia to Europe and America will decline, and Taiwan's exports to China and ASEAN will also significantly decline due to this trade pattern. Effects of this chain reaction are grow stronger further upstream, and countries upstream of the production chain are impacted more, which is known as the bullwhip effect, causing Taiwan to be greatly impacted.

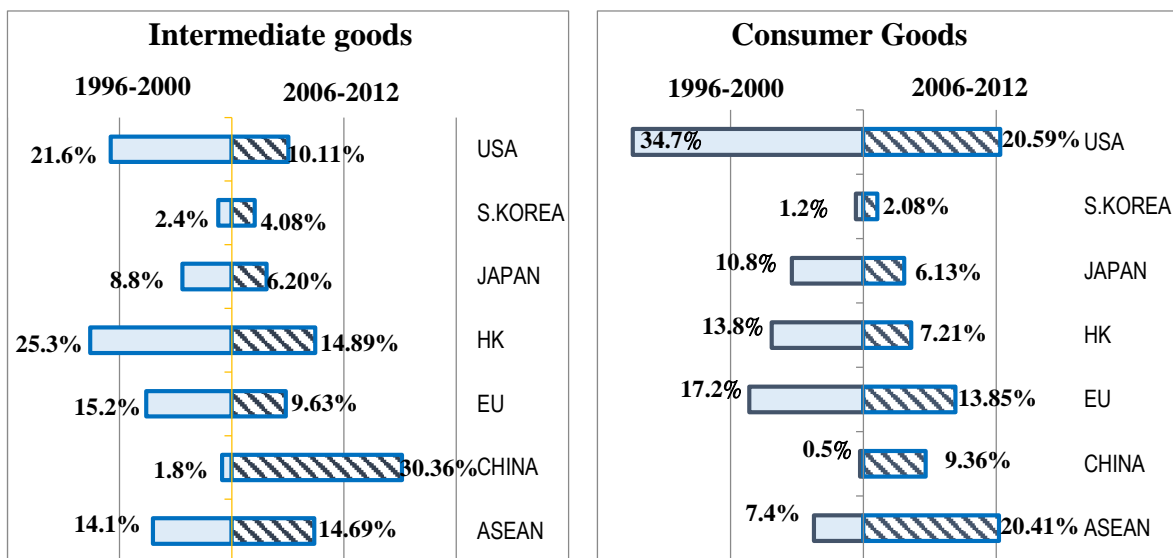


Figure 1: Changes in product categories exported by Taiwan

The IT and electronics industry represent a large portion of Taiwan's industry structure and are more susceptible to international fluctuations. Table 4 shows the nominal value of Taiwan's four main industries in 2000-2016, in which the IT and electronics industry has grown the fastest with a rising share reaching 31.3% in 2016. Taiwan's industry structure

has clearly shifted towards the IT and electronics industry under the guidance of Taiwan's industry policy. As a result, Taiwan's exports are too concentrated in IT and electronics products. Electronics and ICT products have always accounted for at least 30% of Taiwan's total exports. Due to the higher income elasticity of ICT and electronics products, consumers can easily defer consumption. Hence, any fluctuations in the global economy will considerably impact Taiwan's economy, and it also affects Taiwan's ability to make adjustments.

Table 4 Changes in Nominal Industrial Production in Taiwan, 2000 - 2016

Units: NT\$ billions; %

Industry	Nominal Industrial Production in 2000	Share of Total (2000)	Nominal Industrial Production in 2011	Share of Total (2011)	Nominal Industrial Production in 2016	Share of Total (2016)	Growth Rate (2000 – 2016)
Overall Industrial Production	11,087.38	100.00%	18,147.08	100.00%	19,624.50	100.00%	3.63%
B Mining and quarrying	36.65	0.33%	18,147.08	100.00%	25.61	0.13%	-2.22%
C Manufacturing	9,556.88	86.20%	146.14	0.81%	17,335.38	88.34%	3.79%
Metallurgy and machinery manufacturing industry	2,695.92	24.32%	17,173.15	94.63%	4,766.85	24.29%	3.63%
IT and electronics industry	2,910.29	26.25%	4,410.73	24.31%	6,143.71	31.31%	4.78%
Chemical industry	2,267.49	20.45%	5,948.85	32.78%	4,180.48	21.30%	3.90%
Food and textile industry	1,683.18	15.18%	4,865.41	26.81%	2,244.34	11.44%	1.81%
D Electric power and gas supply	376.26	3.39%	1,948.16	10.74%	684.69	3.49%	3.81%
E Water supply and pollution prevention	89.47	0.81%	629.80	3.47%	229.24	1.17%	6.06%
F Construction	1,028.12	9.27%			1,349.58	6.88%	1.71%

Source: Collated from data compiled by the Directorate General of Budget, Accounting and Statistics (DGBAS), Executive Yuan

B. Taiwan's Challenges

(A) Economic aspect

Taiwan has been impacted even more by the large-scale FTAs that continue to grow even larger around the world due to this trade pattern.

The division of labor and completeness of industrial chain in each region covered by FTAs will affect Taiwan's position in the industrial chain in Asia. The CPTPP is further described below.

First, Table 5 shows that members of the CPTPP already have a complete FTA network, and the CPTPP will further integrate the 11 countries after it becomes effective. Of the 11 countries in the CPTPP, Taiwan only has an FTA with New Zealand and Singapore. Besides the impact to tariffs, the CPTPP continues the strict country of origin regulations of the TPP to strengthen division of labor between industries and supply chain connections within the region. Since Taiwan mainly exports intermediate goods, this may weaken Taiwan's original role in the CPTPP's supply chain, or even cause the production chain to break, which is a challenge Taiwan must face.

Table 5 FTAs between members of the CPTPP

	Japan	Canada	Australia	Mexico	Malaysia	Singapore	Vietnam	Chile	Peru	New Zealand	Brunei
Japan			△	△	△	△	△	△	△		△
Canada				△				△	△		
Australia	△				△	△	△	△	△	△	△
Mexico	△	△						△	△		
Malaysia	△		△			△	△	△		△	△
Singapore	△		△		△		△	△	△	△	△
Vietnam	△		△		△	△		△		△	△
Chile	△	△	△	△	△	△	△		△	△	△
Peru	△	△	△	△		△		△			
New Zealand			△		△	△	△	△			△
Brunei	△		△		△	△	△	△		△	

Note: △Indicates a bilateral FTA was signed

■ Indicates new connection from joining the CPTPP

Source: Prepared by this study

Looking in more detail at the challenges that regional economic

integration can be expected to pose for Taiwan in the future, the key factor here is the CPTPP, which is currently the most significant regional trade arrangement in the Asia Pacific region. The CPTPP already has 11 member nations, and has been advocating a strengthening of the intra-regional supply chain. This means that, in the future, the CPTPP will implement strict rules of origin (RoO) provisions, which will consolidate the linkage of supply chain in the region and promote the development of the intra-regional division of labor, but which may have a negative impact on Taiwan. (Michaela, 2012; Thang & Yuqing, 2017)

Taking Taiwan's textile industry as an example, currently Taiwan exports large quantities of yarn and fabric to Vietnam, where it is processed into garments for export to the CPTPP region. Under the current "yarn forward" approach adopted for the CPTPP's rules of origin in relation to garment manufacturing, Vietnam will be required to use yarn produced in another CPTPP members in order to benefit from preferential tariff treatment when exporting garments to the CPTPP This will led to the existing Taiwan • Vietnam • CPTPP supply chain being disrupted, with Taiwan suffering the most serious adverse impact. Given the strictness of the CPTPP' s rules of origin requirements, a similar situation is likely to emerge in other industries.

(B) Political aspect

For Taiwan, securing membership of the CPTPP means not only complying with the requirements of the CPTPP Agreement in regard to

economic issues; because of Taiwan's unique diplomatic status, it will also require Taiwan to take the China factor into account.

Membership of the TPP is open to all APEC member economies; however, in principle, the process of applying for membership of the TPP cannot be completed until the applicant economy has completed negotiations with all existing CPTPP members regarding the terms and conditions of accession.

Taiwan currently does not have formal diplomatic relations with any of the 11 existing CPTPP member states; by contrast, not only do the 11 CPTPP member states all have formal diplomatic relations with China, they also have important investment and trading links with China. If relations between Taiwan and China remain tense in the future, it can be anticipated that attempts by Taiwan to secure membership of the TPP will be subject to interference by China. Although China is not currently a member of the CPTPP itself, the dramatic growth of the Chinese economy means that the amount of influence China is able to exert within the international community is growing steadily larger, and will affect Taiwan's ability to secure accession to the CPTPP. It may well be that, while refraining from making a formal, public statement of opposition to Taiwan's membership of the CPTPP, China will privately ask existing CPTPP members to adopt a cautious attitude towards the negotiation of CPTPP membership for Taiwan, to drag out the process of bilateral negotiation as long as possible, or even to issue a direct refusal to accept

Taiwan's membership of the CPTPP.

Even if Taiwan does succeed in securing participation in the second round of CPTPP accession talks, based on Taiwan's past experience when attempting to secure membership of international organizations, it can be anticipated that China will insist on the adoption of the same model used in regard to Taiwan's and China's accession to the WTO, whereby³ China asked that Taiwan not be allowed to join the WTO before China; similarly, China would ask the CPTPP to agree that Taiwan would not be given membership of the CPTPP before China. Although China's stance towards the CPTPP has become less oppositional, with China expressing a more positive attitude towards the CPTPP while at the same time promoting other FTAs (such as the RCEP) as a counterweight to the CPTPP. Nevertheless, China's economic and trading systems are still very far from being in conformity with the CPTPP's requirements. Coupled with the fact that China would not join the CPTPP that is tailor made for the United States, it is highly unlikely that China will join the CPTPP. If China were to adopt the WTO model, Taiwan's accession to the CPTPP will be delayed considerably.

³ GATT (document C/M/259): "Many contracting parties, therefore, had agreed with the view of the People's Republic of China (PRC) that Chinese Taipei, as a separate customs territory, should not accede to the GATT before the PRC itself."

C. Taiwan's Response

(A) Industry

1. Brand Promotion

Taiwan will only face a growingly severe export environment as the CPTPP and more FTAs begin to take effect. Since Taiwan mainly exports intermediate goods, strict place of origin requirements in future FTAs to strengthen the bond between industries in the FTA region will cause Taiwan's exports to be further excluded.

The added value of Taiwan's exports is not high due to Taiwan's focus on manufacturing. OEM products account for a significant percentage of exports, resulting in the high percentage of intermediate goods exported. Taiwan lacks global brands and has relatively weak ability to integrate downstream of the value chain. This has resulted in the relatively low percentage of end consumer products exported by Taiwan. This is why Taiwan is more easily directly affected by the global economy. In the future, Taiwan must face the issue of accelerating brand building through marketing.

Branding is a difficult road. The 2016 Interbrand survey showed that the total value of the world's top 100 brands reached US\$18 trillion. None of the brands were from Taiwan. Even though the majority of the top 100 brands belong to Western countries, Japan already has 6 brands, South Korea has 3 brands, and China has 2 brands. The value of Taiwan's

largest brand is only about 40% of the value of the world's 100th brand. Taiwan must catch up.

2. Industry Diversity

Besides changing the model for connecting to the world, Taiwan must also expand the aspects in which it makes connections. An important reason why Taiwan's economy was severely impacted by the global financial crisis in recent years is the concentration on ICT products and lack of diversity. Taiwan should actively develop new products and new industries based on development trends of the global market. Therefore, Taiwan must redefine its role in global industries. Countries in Europe and America have been bringing back their industries and implementing re-industrialization and Industry 4.0 in recent years. The red supply chain China is actively building has created great pressure on Taiwan's production. The rise of a new digital economy has changed the structure of industries, and mobile communications has created new business models. Taiwan has not been able to effectively become part of this change and seize market opportunities of a new generation of products. Hence, Taiwan should actively engage in innovation to develop new generation industries.

(B) System

In addition to the effects of market opening, Taiwan must also carry out system reform. Taiwan will need to implement an inventory-taking of

domestic laws and systems and identify where they are in conflict with the requirements of major FTAs. It will need to formulate clear plans with regard to adjustment procedures and timetables, to ensure that all necessary revisions of relevant laws and regulations are completed. This will show that Taiwan is a mature economy and can meet the requirements of any FTA with high standards. Taiwan also needs to have a thorough understanding of the issues that are of concern to major countries. Areas on which Taiwan will need to focus include promoting reform of the agricultural sector and state-owned enterprises, enhancing the transparency of administrative procedures, and formulating relevant guidance measures as early as possible to be able to respond to the negative impact of market opening on Taiwan's less-competitive industries. This proactive approach will demonstrate Taiwan's commitment to securing membership and help Taiwan secure the support of other countries.

In the case of the CPTPP, besides the emphasis on traditional market opening in the agricultural, industrial and service sectors, the CPTPP also stresses the need to reduce non-tariff barriers. The non-tariff barriers with which the CPTPP is concerned are not limited to "on the border" measures; they also include member states' "behind the border" systems and regulatory frameworks. (Rodrigo & Pierre, 2017) Areas such as e-commerce, competition law, environmental protection, finance, telecommunications, intellectual property rights, government purchasing, investment, legal harmonization, transparency, natural person status,

labor rights, etc. all fall with the scope covered by the CPTPP. These are areas where Taiwan will need to make adjustments in the future.

In the future, Taiwan can cut in through the following aspects:

- (1) Taiwan's position in the global industrial supply chain can help maintain the completeness of the supply chain in the Asia-Pacific.

Taiwan is an important part of the international supply chain. According to the Global Competitiveness Report 2013-2014 issued by the WEF, Taiwan's industrial suppliers ranked 9th in quality and 3rd in quantity among the 148 countries that were rated. Taiwan ranked 1st in the world in the completeness and depth of industrial cluster development. Taiwan's globalization experience and foundation for supply chain integration will help countries integrate resources, create economic and trade opportunities, increase the production efficiency of supply chains, and optimize resource allocation. This will benefit the completeness and stability of international supply chains, and drive economic and trade development in the Asia-Pacific.

Taiwan is an important supplier of ICT products for the world, and plays a key role in the global supply chain for numerous products, such as: notebooks, tablet PCs, motherboards, CDs, DSL terminals, LCD monitors, foundry, and wireless network products. By participating in regional economic integration, Taiwan can create more cooperation and development opportunities for member states in the field of electronics and ICT.

(2) Taiwan's strength in investments and trade can drive industrial development and economic growth in the Asia-Pacific.

Taiwan has a tight network of investments in the Asia-Pacific, and plays a key role in industrial technology transfer within the region. On one hand, Taiwan is independently developing or obtaining technologies from advanced countries. On the other hand, Taiwan is transferring technologies to emerging countries through its investments. Taiwan can enlarge its role in providing capital and technology transfer by participating in regional economic integration. The partnership between Taiwan and member states in investment and trade can create even more opportunities for industrial and economic development and benefit both sides.

Aside from the macro perspective described above, Taiwan can cut in through the following aspects for major countries in the Asia-Pacific.

For Japan, Taiwan serves as a hub in the production network of developing countries in East Asia for many industries, such as steel, machinery, and electronics and ICT. Industries of Japan, Taiwan and Southeast Asian Countries are engaged in vertical division of labor and trade. Once Taiwan is excluded from regional economic integration, it will affect Japan's overall economic interests.

Small and medium enterprises (SMEs) in Taiwan and Japan complement each other very well. If Taiwan is able to participate in regional economic integration, it will benefit investments between SMEs

in Taiwan and Japan. The complementary advantages both sides have in technology and market development abilities will give SMEs in Taiwan and Japan the opportunity to jointly develop markets.

For East Asia, Taiwan plays an important role in the production network in Southeast Asia for steel, plastics, electronics, and electrical equipment. Once Taiwan is excluded from economic integration, it will impact the industrial development in Southeast Asian countries. Participating in integration will help Taiwan increase its investments in Southeast Asia, and will create even more technology spillovers and employment opportunities.

V. Conclusion

Taiwan has maintained high economic growth in the past, and was called an economic miracle for being one of the fastest growing economies in the world. In recent years, however, Taiwan's economic growth has clearly hit a bottleneck and is even starting to go downhill. In the eight years from 2000 to 2018, Taiwan's economic growth rate was lower than the global growth rate, and was even negative for the first time in two of the years. Stagnant economic growth also resulted in slow GDP per capita growth in Taiwan; Taiwan's GDP per capita almost doubled in the 10 years from 1990 to 2000. In the 18 years from 2000 to 2018, however, Taiwan's GDP per capita only grew about 60%.

Many reasons can explain Taiwan's stagnant economy, but slow

progress of participating in regional economic integration is indisputably one of the more important reasons that has affected Taiwan's trade and industrial development. The significant growth in number of FTAs around the world in recent years has significantly affected Taiwan. The development of FTAs from bilateral to multilateral and covering a broader scope has impacted Taiwan even more.

In the future, Taiwan must accelerate its industrial transformation, promote diverse industries, and build brands. Internally, Taiwan must strengthen communication for consensus building. Externally, Taiwan must utilize its economic strength to persuade others that Taiwan participating in regional economic integration is beneficial to the region and will create a win-win situation.

Of course, Taiwan must understand that any breakthrough in FTAs will only be possible with stable cross-strait relations. This is the reality in the international society. Taiwan must face this reality even if it is not desirable, and cannot continue to avoid and reject the issue. If harmonious cross-strait relations cannot be maintained in the future, Taiwan's path to FTAs will only become harder.

References

- Chen, Tain-jy ed. (2010), “The Necessity of ECFA: Challenges of Regional Economic Integration in East Asia to Taiwan”, Taipei: Prospect Foundation.
- Chu, Cyrus C. Y. ed. (2009), “ECFA: Creating a Win-win Situation Across the Taiwan Strait”, Taipei: Prospect Foundation.
- Dan Ciuriak, Jingliang Xiao, Ali Dadkhah (2017), “Quantifying the Comprehensive and Progressive Agreement for Trans-Pacific Partnership”, *East Asian Economic Review* 21 (4), pp. 343-384.
- Lee, J., I. Park and K. Shin (2008), “Proliferating Regional Trade Arrangements: Why and Whither ? ”, *The World Economy*, 31(12), pp. 1525-1557.
- Liu, Da-nien and Shih, Hui-Tzu (2012), “New Economic Development Opportunities for Taiwan in the Post-ECFA Era”, *Asie.Visions* 51, Ifri Center for Asian Studies.
- Michaela D. Platzer (2012), “U.S. Textile Manufacturing and the Trans-Pacific Partnership Negotiation”, *Congress Research Service (CRS)*, R42772.
- Nicolás Albertoni (2018), “The New Dynamics of the International Trading System”, *Global Policy* 9 (1), pp. 156-158.
- Rachel F. Fefer (2018), “U.S. Trade in Services: Trends and Policy Issues”, *Congressional Research Service*, R43291.
- Rodrigo Polanco Lazo, Pierre Sauve (2017), “The Treatment of Regulatory Convergence in Preferential Trade Agreements”, *World Trade Review*, pp. 1-33.
- Thang N Doan, Yuqing Xing (2017), “Trade Efficiency, Free Trade Agreements and Rules of Origin”, *Journal of Asian Economics*, pp. 33-41.
- Whalley John (2008), “Recent Regional Agreements: Why So Many, Why So Much Variance in Form, Why Coming So Fast, and Where Are They Headed? ”, *The World Economy*, pp. 517-532.