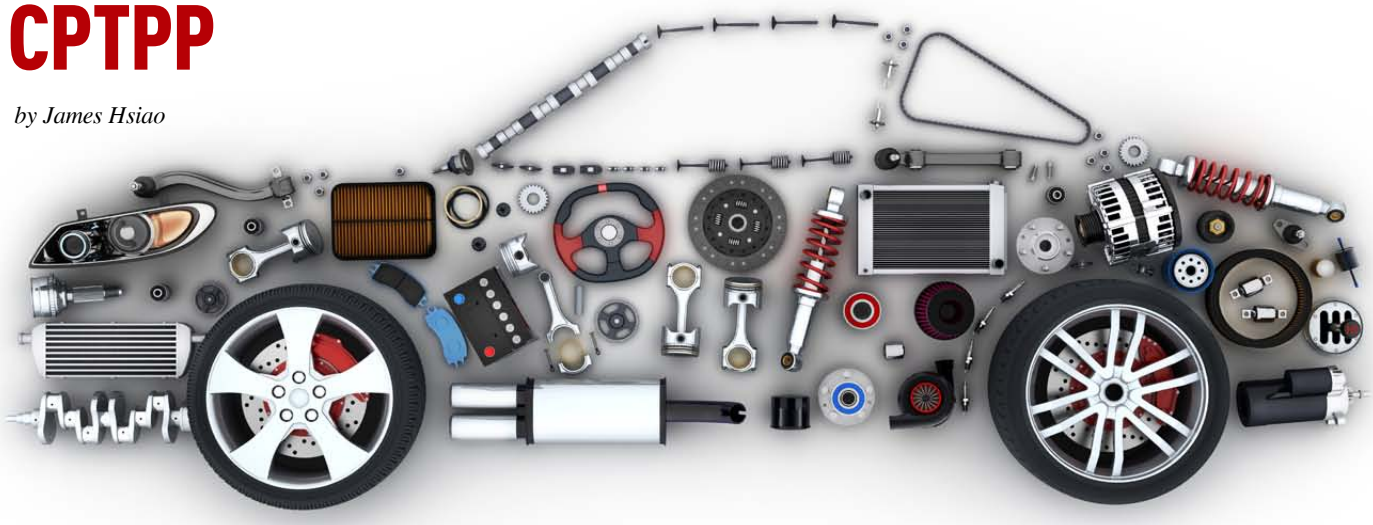
臺灣加入CPTPP汽車零組件產業的轉型與因應

Data Source:
Customs Administration of the Ministry of Finance / Industry, Science and Technology International Strategy Center of ITRI (2021/12)

Taiwan Automotive Component Industry's Transformation and Reaction in Joining CPTPP

by James Hsiao



» CPTPP, National Economy and Automotive Industry Development

1. CPTPP and National Economy

Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) originates from TPP led by the U.S. TPP was doubted for its existence after the U.S. announced withdrawal and was later led by Japan. Consensus was reached on the core issues to change the title to CPTPP. In 2020, the total GDP value of CPTPP members were USD 11 trillion, taking up 13.1% of the world's total. The members scatter around the Pacific Ocean, totaling 11 countries and 500 million people (7% of the world's population), including Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam. The countries having expressed an interest in joining CPTPP are China, UK, S. Korea, Thailand, Indonesia, Philippines and Taiwan.

After CPTPP took effect at the end of 2018, the first term of the Commission confirmed in January 2019 the ways for new members to join and welcomed nations willing to comply to high standards. Taiwan, S. Korea, Thailand, Philippines, Indonesia, UK and China have expressed their interest in joining. UK, the world's 5th largest economic entity, puts its entry into CPTPP high on the critical economic agenda after BREXIT, and submitted its application in February 2021. The fourth term of the Commission decided to launch the process for UK's entrance and set up a task force. If UK joins, it will become the first CPTPP member from Europe and will expand CPTPP's economic scale.

As UK began the process for entering CPTPP, China, which is an advocate for the signing of RCEP expressed its interest in joining CPTPP at the end of 2020. Gripped by the U.S./China trade war, technological war and the pandemic, China's initiative in considering entering CPTPP during the 14th Five-Year Plan formulation is strategic. As the world's 2nd largest economic entity, China's economic scale and market potential is massive.

Out of the 11 CPTPP member countries, Japan, Australia, New Zealand, Singapore, Vietnam, Malaysia and Brunei are also members of RCEP. China has completed laying the foundation for negotiating the signing of RCEP. There is an incentive for China to join CPTPP and increase the importance of its existence in the Pacific trade system. Many CPTPP members are on China's priority to sign FTA with. China has signed FTAs with Singapore, New Zealand, Chile and Southeast Asian countries that are already in effect. Some of them including Singapore, New Zealand and Chile have completed talks on upgraded FTAs with China, and China's talks on an upgrade with Japan and S. Korea in progress. China is also considering an FTA talk with Canada, and it has completed talks with CPTPP members. China's move to join CPTPP and strive for CPTPP members' support is nothing to be underestimated. CPTPP was thrown into shade when the U.S. backed out, but gained attention when China expressed its interest in joining. The development is worth paying attention to.

The automotive industry's proportion in national GDP and in manufacturing industry's GDP reflects the automotive industry's level of contribution to the economy. In recent years the automotive industry is increasing its influence on national economies. With the benefit of automotive transformation, the automotive industry should be gradually increasing influence and its proportion in manufacturing GDP every year. The overall economic development and the strength of manufacturing also influence the accumulation of automotive sales and vehicle retention. Table 1 compares the overall economy as well as vehicle retention in 2020.

Table 1. National Economy Comparison Among CPTPP Members in 2020						
Items	Canada	Japan	Brunei	New Zealand	Australia	Singapore
GDP (USD)	4.64 trillion	5.28 trillion	106.5 billion	204.7 billion	1.63 trillion	372.1 billion
GDP Growth Rate (%)	-5.4	-5,3	1.2	2.2	-3.8	-5.8
Population (Persons)	38.44 million	126 million	440 thousand	5.04 million	25.60 million	5.7 million
Per Capita Income (USD)	45,780	41,275	37,210	35,152	42,640	61,422
2020 Automotive Sales (10,000 Vehicles)	193.7	519.5	6	14.9	106.3	4.7
Vehicle Retention (10,000 Vehicles)	3,128	9,735	23	510	1,850	71
Items	Peru	Vietnam	Malaysia	Mexico	Chile	
GDP (USD)	195.8 billion	340.8 billion	415.0 billion	1.08 trillion	282.3 billion	
GDP Growth Rate (%)	-11.2	2.9	-5.8	-15.2	-5.8	
Population (Persons)	33.06 million	97.07 million	32.98 million	126 million	18.87 million	
Per Capita Income (USD)	6,210	2,890	10,120	8,420	14.670	
2020 Automotive Sales (10,000 Vehicles)	15.6	28.1	60.4	136	34.9	
Vehicle Retention (10,000 Vehicles)	615	198	1,584	4,325	595	

2. Analyzing Tariffs of Taiwan's Automotive Components Traded with CPTPP Countries

Among the CPTPP countries, apart from Singapore and New Zealand having FTAs with Taiwan and Japan having cancelled tariffs on cars and automotive components imported from Taiwan, Taiwan's automotive components exported to CPTPP countries are imposed with a certain amount of taxes depending on component types. This could undermine the profit gain of Taiwan's export-oriented automotive components industry. **Table 2** compares the tariffs of Taiwan's automotive components exported to CPTPP countries. Excluding Vietnam (0~45%) and Malaysia (0~30%) having to pay higher tariffs, the tariffs on other countries range between 0%-15%. CPTPP countries' automotive components imported into Taiwan are imposed with 0~17.5% tariffs (depending on component types). **Table 3** compares the tariffs of CPTPP countries' automotive components exported to Taiwan.

Table 2. Tariffs of Taiwan's Automotive Components Exported to CPTPP Countries							
Tariffs of Taiwan's main automotive components exported to CPTPP countries (HS Code)	Target Countries (2020/2021)	Canada	Japan	Mexico	Peru	Chile	Malaysia
	Export Tariffs (Going out from Taiwan) (Depending on item types)	0~10%	0%	0~15%	0%	0~6%	0 ~30%
	87081000 Bumpers and components	6%	0%	5%	0%	0~6%	25%
	85122011 Head lights	0~6.5%	0%	0~5%	0%	6%	0%
	87088065 Suspension components	0~6%	0%	0~5%	0%	6%	30%
	87071000 Car bodies and their components	0~6%	0%	0%	0%	6%	30%
	87084080 Gear box components	0~6%	0%	0~5%	0%	6%	25%
	87087080 Wheels and their components	0 ~6%	0%	0%	0%	6%	30%
	84143080 Air-conditioning compressors	0%	0%	0~15%	0%	6%	0%
	70091000 Rearview mirrors	0%	0%	15%	0%	6%	30%
	85114091 Motors and generators	0%	0%	0%	0%	6%	0%
	85119010 Electronic ignition components	0%	0%	0%	0%	0%	0%
	Target Countries (2020/2021)	Brunei	Vietnam	Australia	New Zealand	Singapore	
	Export Tariffs (Going out from Taiwan) (Depending on item type)	0%	0~45%	0~5%	0%	0%	
	87081000 Bumpers and components	0%	15%	5%	0%	0%	
	85122011 Head lights	0%	25%	5%	0%	0%	
	87088065 Suspension components	0%	20%	5%	0%	0%	
	87071000 Car bodies and their components	0%	28%	5%	0%	0%	
	87084080 Gear box components	0%	10%	5%	0%	0%	
	87087080 Wheels and their components	0%	20%	5%	0%	0%	
	84143080 Air-conditioning compressors	0%	3%	5%	0%	0%	
	70091000 Rearview mirrors	0%	25%	5%	0%	0%	
	85114091 Motors and generators	0%	10%	5%	0%	0%	
	85119010 Electronic ignition components	0%	0%	5%	0%	0%	

Table 3. Tariffs of CPTPP Countries' Automotive Components Exported to Taiwan

Tariffs of CPTPP countries' main automotive components exported to Taiwan (HS Code)	Target Countries (2021)	Canada	Japan	Mexico	Peru	Chile
	Import Tariffs (Depending on item type)	0~15%	0~17.5%	0~17.5%	No export to Taiwan	No export to Taiwan
	8708999000 Parts and accessories of other motor vehicles	15%	7.5%	2.5~17.5%		
	708401000 Automatic transmissions	0%	0%	0%		
	8708299000 Other parts and accessories of vehicle body	2.5~15%	2.5 ~ 12.5%	2.5 ~ 15%		
	87071000 Engine cylinder capacity over 3000cc	2.5~15%	2.5 ~ 15%	2.50%		
	8707901000 Heavy truck heads including driver's seats	2.5~15%	3%	15%		
	8708402000 Other gearboxes	0%	0%	0%		
	8512201110 Headlamps and lamps for motor vehicles	5.0~12.5%	5.0 ~12.5%	5.0 ~12.5%		
	8708309900 Other brakes, servo brakes components	5.0~15%	5.0 ~ 15%	5.0 ~ 15%		
	8708501100 Heavy truck drive shafts with differentials	2.5~12.5%	2 · 5%	2 · 5%		
	8708941000 Steering wheels, steering columns and steering boxes	4.0~7.5%	7.5%	7.5%		
	Target Countries (2021)	Malaysia	Brunei	Vietnam	New Zealand	Singapore
	Import Tariffs (Depending on item type)	0~15%	No export to Taiwan	0~17.5%	0%	0%
	8708999000 Parts and accessories of other motor vehicles	2.5~15%		2.5~17.5%	0%	0%
	708401000 Automatic transmissions	0%		0%	0%	0%
	8708299000 Other parts and accessories of vehicle body	2.5~15%		2.5~15%	0%	0%
	87071000 Engine cylinder capacity over 3000cc	3%		2.5~15%	0%	0%
	8707901000 Heavy truck heads including driver's seats	15%		2.5~15%	0%	0%
	8708402000 Other gearboxes	0%		0%	0%	0%
	8512201110 Headlamps and lamps for motor vehicles	5.0~12.5%		5.0~12.5%	0%	0%
	8708309900 Other brakes, servo brakes components	5.0~15%		5.0~15%	0%	0%
	8708501100 Heavy truck drive shafts with differentials	2.5~12.5%		3%	0%	0%
	8708941000 Steering wheels, steering columns and steering boxes	4.0~7.5%		7.5%	0%	0%

» Taiwan's Automotive Components Trade with Japan Tops Those with Other CPTPP Countries

Among the 11 CPTPP countries, Japan produces and sells most of the cars and automotive components, followed by Mexico and Canada. Driven by the demographic dividend in Southeast Asian countries and the growth potential of the automotive market, Malaysia and Vietnam are gradually attracting international leading automakers and component manufacturers. Taiwan has been a long-time OEM partner assembling, selling and repairing cars for Japanese automakers. Most of Taiwanese leading companies have operations in China producing and selling automotive components. Coupling the Taiwanese government's New Southbound Policy, those companies have headed for ASEAN to set up operations and made their ways into Japanese carmakers' supply chain.

Table 4. Values and Proportions of Taiwan's Main Automotive Components Export to CPTPP Countries in 2020

Items	Export Value (NTD Millions)	Exported Items	Proportion in Total Export Value(%)	Proportion of Export to CPTPP Countries in Total Export Value(%)
Canada	2,849	Body sheet metal, motor vehicle components, gearboxes, engine components, automotive lights	1.9	13.8
Japan	7,952	Motor vehicle components, rims, automotive lights, body panels	5.3	
Chile	239	Other automotive components	0.2	
Mexico	3,571	Motor vehicle components, automotive lights, automotive generators, other components	2.4	
New Zealand	322	Other automotive components	0.2	
Australia	2,995	Motor vehicle components, automotive lights, automotive generators, and other components	2	
Peru	253	Motor vehicle components, body sheet metal, automotive lights Steering joints, brake system components	0.2	
Vietnam	782	Other automotive components	0.5	
Malaysia	1,343	Motor vehicle components, body sheet metal, automotive lights, brake system components	0.9	
Brunei	18	Other automotive components	0.01	
Singapore	480	Motor vehicle components, brake system components, body sheet metal, automotive lights	0.3	

Table 4 shows the values and export proportions of Taiwan's main automotive components export to CPTPP countries in 2020. The total export value of Taiwan's automotive components was NTD 151.36 billion, and the export towards CPTPP countries was NTD 20.9 billion, taking up 13.8%. The export towards Japan was NTD 7.95 billion, taking up 5.3%, followed by Mexico (2.4%), Australia (2.0%), Canada (1.9%) and other countries (2.2).

For a long time, Taiwan has been collaborating with Japanese automakers on car production, sales and aftersale maintenance. It is an intimate relationship in car assembly and components manufacture. Some critical components such as automatic transmissions, deisel engines with a capacity of over 3,000 CC, engine management systems and brake system components are mostly imported from Japan. Japan accounts for the highest proportion in automotive components exported to Taiwan. In 2020, the value of automotive components improted from CPTPP members to Tawain reached NTD 22.42 billion, taking up 32.4% of the total import value. The value of automotive components improted from Japan to Taiwan was NTD 20.9 billion, taking up 30.2%. Mexico took up 1.7%. Otherwise, the proportions for other countries were very low. Figure 5 shows the values of automotive components imported from CPTPP countries to Taiwan and their proportions in the total import value in 2020.

Table 5. Values of Automotive Components Imported from CPTPP Countries to Taiwan and Their Proportions in Total Import Value in 2020

Items	Import Value (NTD Millions)	Imported Items	Proportion in Total Import Value(%)	Proportion of Import from CPTPP Countries in Total Import Value(%)
Canada	44	Motor vehicle components, engine components, other automotive components	0.01	32.4
Japan	20,903	Engines (exhaust output above 3,000CC), automatic transmissions, engine management systems	30.2	
Chile	0		0	
Mexico	1,173	Motor vehicle components, other components	1.7	
New Zealand	6	Other automotive components	0	
Australia	17	Other components	0	
Peru	1	Car body metal plates, other components	0	
Vietnam	161	Other automotive components	0.2	
Malaysia	177	Motor vehicle components, brake system components	0.3	
Brunei	0		0	
Canada	69	Motor vehicle components, brake system components	0.01	

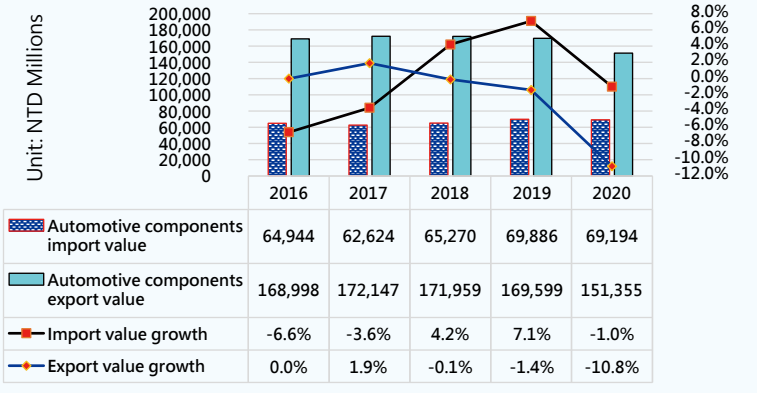
» Analyzing Taiwan's Automotive Components Trade with CPTPP Counties

1. Taiwan's Automotive Components Trade

Besides being supplied to domestic automakers to repair vehicles, Taiwan's automotive components are mostly exported. These components are mainly for the aftermarket such as headlamps, bumpers, rearview mirrors, rims and their components, interior and exterior plastic/rubber parts, and body sheet metals, mostly supplied to North American and EU countries. The domestic suppliers are active in developing the emerging markets including AESAN, Africa, the Middle East and Latin America, and they are striving to tap into the supply chain of Chinese automaker brands.

Due to the pandemic, in 2020 the total export value of Taiwan's automotive components declined 10.8% to NTD 151.36 billion. The top exported automotive component products in 2020 were motor vehicles and their components, car bodies and their components, motor vehicle lighting equipment and its components, car lights and their components, rims and their components. In 2020, Taiwan imported NTD 69.2 billion worth of automotive components, down 1.0%. The top imported automotive component products in 2020 were motor vehicles and their components, automatic transmissions and their components, large diesel engines and their components, motor vehicle bodies and their components, brake servo systems and their components. Figure 1 shows the import and export values of Taiwan's automotive components.

Fig. 1. Taiwan's Automotive Components Import & Export Values



	2016	2017	2018	2019	2020
Automotive components import value	64,944	62,624	65,270	69,886	69,194
Automotive components export value	168,998	172,147	171,959	169,599	151,355
Import value growth	-6.6%	-3.6%	4.2%	7.1%	-1.0%
Export value growth	0.0%	1.9%	-0.1%	-1.4%	-10.8%

The top 5 export destinations for Taiwan's automotive components in 2020 were the U.S. (52.2%), Japan (5.3%), China (3.9%), Germany (3.0%), and UK (2.8%). These 5 countries on the top account for 67.2% of the whole export value. Figure 2 shows the main export destinations for Taiwan's automotive components in 2020. The top exported automotive components were motor vehicles and their

components (30.0%), car bodies and their components (15.8%), motor vehicle lighting equipment and their components (10.1%), car lights and their components (9.1%), rims and their components (5.4%). These components accounted for 70.4% of the total export.

The top 5 import origins for Taiwan's automotive components in 2020 were Japan (30.2%), China (25.6%), Thailand (9.0%), Germany (6.5%), and Sweden (5.1%). These 5 countries on the top accounted for 76.4% of the whole import value, and the imported items were for domestic vehicle repair. **Figure 3** shows the main import origins for Taiwan's automotive components in 2020. The top imported automotive components were motor vehicles and their components (16.7%), automatic transmissions and their components (11.2%), motor vehicle bodies and their components (7.7%), large diesel engines and their components (6.7%), heavy truck heads and their components (3.8%). These components accounted for 46.2% of the total import.

The top CPTPP member countries for Taiwan's automotive components export in 2020 were Japan (NTD 7.95 billion), Mexico (NTD 3.57 billion), Australia (NTD 3 billion), Canada (NTD 2.85 billion), Malaysia (NTD 13.4 billion). The main exported components included automotive electrical components, rims, car head lights and their components, gearboxes and transmission components. Among the CPTPP members, Japan imported NTD 20.9 billion, Mexico imported NTD 1.17 billion and Malaysia imported NTD 180 million worth of automotive components from Taiwan. The main imported components were automatic transmissions, components for engines with a capacity above 3,000CC, engine management systems, and brake system components. **Figure 4** compares automotive components import and export with CPTPP members.

Fig. 2. Main Export Destinations for Taiwan's Automotive Components and Their Proportions in 2020

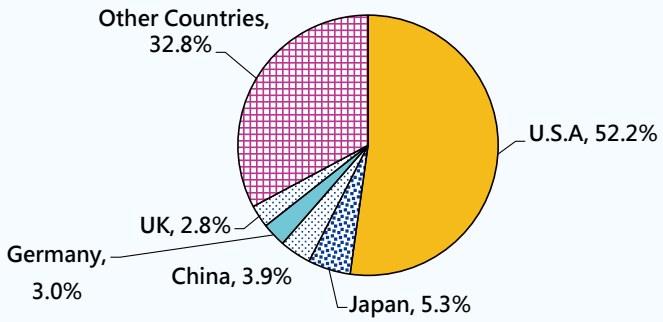


Fig. 3. Main Import Origins for Taiwan's Automotive Components and Their Proportions in 2020

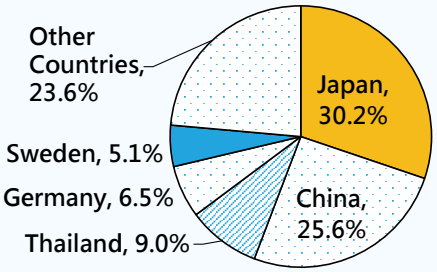
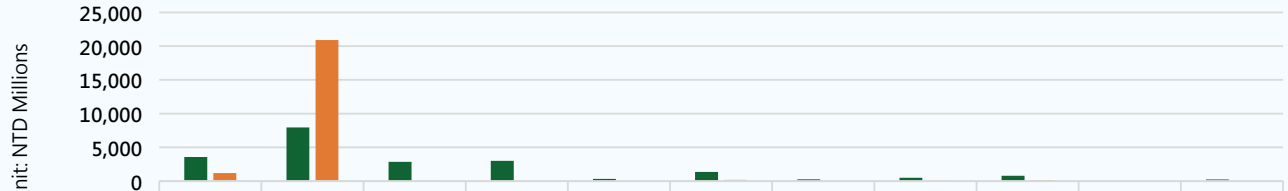


Fig. 4. Taiwan's Automotive Components Import and Export with CPTPP Members

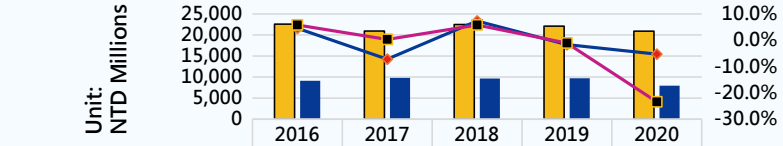


	Mexico	Japan	Canada	Australia	New Zealand	Malaysia	Peru	Singapore	Vietnam	Brunei	Chile
Export Value	3,571	7,952	2,849	2,995	322	1,343	253	480	782	18	239
Import Value	1,173	20,903	44	17	6	177	1	69	161	0	0

2. Taiwan's Automotive Components Import and Export with Japan

In 2020, Taiwan imported NTD 20.9 billion worth of automotive components from Japan. The top imported components were motor vehicle components, automatic transmissions and their components, large diesel engine and their components, motor vehicle bodies and their components, brake servo systems and their components. In 2020, Taiwan exported NTD 7.95 billion worth of automotive components to Japan. The top exported components were other automotive components, engine components, rims and their components, car (head/tail) lights and their components. **Figure 5** shows Taiwan's automotive components import and export with Japan.

Fig. 5. Taiwan's Automotive Components Import and Export with Japan



	2016	2017	2018	2019	2020
Import Value	22,563	20,928	22,459	22,071	20,903
Export Value	9,116	9,800	9,654	9,714	7,952
Export Value Growth	1.3%	7.5%	-1.5%	0.6%	-18.1%
Import Value Growth	4.5%	-7.2%	7.3%	-1.7%	-5.3%

» How Joining CPTPP Could Affect Taiwan's Automotive Components Industry and How Taiwanese Companies Should React to It

1. Japan as the Top CPTPP Trading Partner with Taiwan

The top export destinations for Taiwan's automotive components in 2020 were the U.S. (52.2%), Japan (5.3%), China (3.9%), Germany (3.0%), and UK (2.8%). These countries account for a total of 67.2%. Taiwan created a trade surplus with the world as well as CPTPP members.

Taiwan's automotive components exported to the CPTPP members accounted for 13.8% of the total export value. Japan accounted for 5.3% and the other members accounted for 8.5%. Mexico, Canada and Australia took up a higher export proportion; and therefore, had market potential. Taiwan's automotive components imported from the CPTPP members accounted for 32.6% of the total import value. Japan accounted for 30.2% and other countries accounted for 2.4%. Taiwan is highly dependent on Japanese automotive components. The top imported components were motor vehicle components, automatic transmissions and their components, large diesel engines and their components, motor vehicle bodies and their components, brake servo systems and their components, mostly imported from Japan.

This is mainly due to the fact that most Taiwanese automakers have technical collaborations with Japanese automakers and import a large amount of critical components from Japan to assemble cars. This causes Taiwan's automotive component prices to be higher than other countries over a long time. If Japan's cars and components exported to Taiwan are exempted from tariffs, Japanese automakers will have to evaluate Taiwanese OEMs and automotive assembly within Taiwan since Taiwan's automotive assembly market is relatively smaller than Japan's. When that happens, it will reshuffle this industry involving 100 thousand employees including 10 thousand people who assemble cars, 2 thousand people who manufacture car bodies, and 88 thousand people who manufacture components; therefore, it calls for earlier business transformation and responses.

2. Taiwan May Encounter Competition from CPTPP Members for Having Higher Import Tariff

Taiwan's automotive components going out to Japan are tariff-free. Japanese products going into Taiwan are subject to 0~15% tariffs depending on product types. Taiwan still imposes 0~17.5% tariffs on incoming automotive components. Joining CPTPP will phase down or remove the tariffs and it should result in a huge impact on Taiwan's automotive components industry in the short term. If CPTPP kicks in, Japanese components going into Taiwan will be tariff-free. Components that used to be manufactured in Taiwan for the Japanese will be likely to be imported straight from Japan. This could impact automotive components manufacturing, and Taiwan will be confronted with the competition from Japanese cars and components. Even in the Japanese market, there could be competition from automotive and components manufacturing countries including Mexico, Canada and Malaysia. Besides the international export market, Taiwan will meet competition in ASEAN.

Particularly, Taiwan still imposes 15~25% tariffs on components with a domestic demand that created a production value of NTD 22.53 billion back in 2020, including NTD 1.45 billion from bus bodies, NTD 3.93 billion from truck bodies, and NTD 17.15 billion from chassis and suspension components. Even if Taiwan has lowered import taxes on a portion of car bodies and suspension components, it could still face competition from CPTPP members including Japan.

3. Automotive Component Cost Could Decrease Allowing for Industry Transformation

The top CPTPP destinations for Taiwan's automotive components export were Japan, Mexico, Australia, Malaysia and Vietnam in 2020. These countries accounted for a low proportion of 13.8% of the total export value and show the market potential for Taiwan to export. The target countries implementing policies to phase out or remove tariffs will benefit Taiwan's automotive component export. Automotive components imported from CPTPP members will be cheaper due to tariff reduction or exemption and this will decrease car assembling cost, possibly closing the price gap between imported cars and domestic cars. The price of imported cars may decrease but there will be a certain degree of impact on domestic cars.

The automotive components industry is generally subject to higher tariffs and comes across higher hurdles in overseas market expansion. Taiwanese suppliers mostly rely on international trade or take advantage of overseas operations to evade high tariffs and maintain competitiveness. Joining CPTPP will enable Taiwan to remove the barrier of high tariffs for the automotive components industry and seek fair market competition. It will help increase production in Taiwan, encourage companies to develop high value-add products, make policies to transform and develop critical components (VCU, MCU, BMS for EVs) within the phaseout of tariffs, reduce tariff, or head for the emerging realms such as EVs and self-driving cars. This will create room for collaboration with intimate countries such as Japan. ■