

Overview of Taiwan Textile Industry-2021

Taiwan Textile Federation

2022.04

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Overview of Taiwan Textile Industry – 2021

A. Status of Taiwan Textile Industry

At the beginning stage, Taiwan textile industry imported raw materials for processing and exported most of the finished goods to overseas markets. Later, the sector turned to using materials derived from petrochemicals, and concurrently also imported raw cotton yarn and man-made staple yarn. Gradually, the industry became vertically integrated, eventually joining all the links in the supply chain, including the manufacture of man-made fibers, yarn spinning, weaving and knitting, dyeing and finishing, and apparel and accessories industries.

From its origin, the Taiwan textile industry has steadily invested in new machinery and developed novel products to meet the global market demand. As a result of these efforts, the textile industry has built a comprehensive production system, making Taiwan a major supplier of textile products to the world.

(A) Overview of Taiwan Textile and Apparel Industry

a. Scale of production, manufacturing and employment

Taiwan's textile industry is the main force in the upper and middle reaches, and the downstream industry needs ample labor, and more of them are scattered overseas, and they play a role as the driving force for the development of the upper and middle reaches of the industry. According to statistics, in 2021, there were about 4,568 textile factories in Taiwan, with an estimated number of 140,884 employees, and a total output value of NT\$345.6 billion, of which the output value of the textile industry was NT\$328.1 billion, accounting for 94.9% of the overall textile industry output value; the garment industry the output value is NT\$17.5 billion, accounting for 5.1% of the overall textile industry output value. (please refer to Table 1).

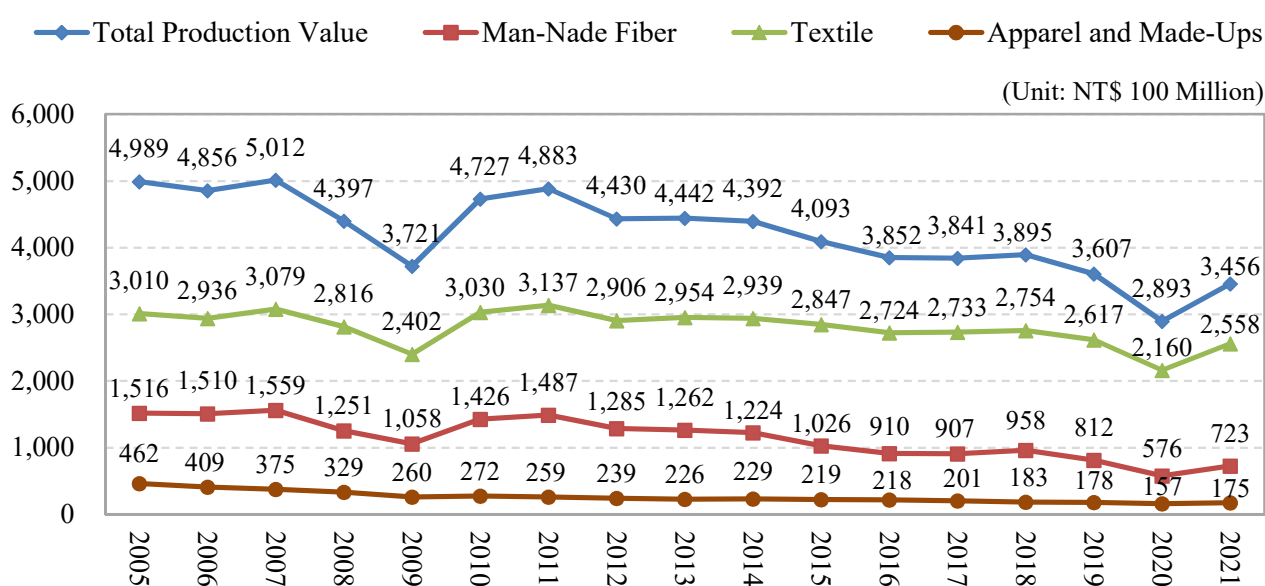
Table 1 Production Value, Manufacturers and Employees of Taiwan's Textile and Apparel Industry

Item		Year			
		2005	2010	2015	2021
Production Value (NT\$ 100 million)	Textile	4,526	4,455	3,874	3,281
	Apparel	462	272	219	175
	Total	4,989	4,727	4,093	3,456
Manufacturers	Textile	3,614	3,134	3,163	3,406
	Apparel	1,244	1,119	1,144	1,162
	Total	4,858	4,253	4,307	4,568
Employees	Textile	125,378	95,736	110,943	109,267
	Apparel	39,228	31,271	32,071	31,617
	Total	164,606	127,007	143,014	140,884

Sources: Directorate General of Budget, Accounting and Statistics, Executive Yuan (employees), Dept. of Statistics, MOEA (production value).

The cloth and apparel industry of Taiwan is highly export-oriented. The export value accounts for more than 75% of total textile and apparel production over 10 years. Textile and apparel industry's production value, manufacturers and the employees all declined in the past 17 years (2005~2021). In 2021, the production value of textile and apparel in Taiwan was NT\$345.6 billion, went down 30.7% from NT\$498.9 billion in 2005; the production value of textile dropped 15%, and apparel and made-ups shrunk 62.1%, while the man-made fiber decreased 52.3% (Fig. 1).

Fig. 1 Production Value of Taiwan's Textile and Apparel Industry in 2005~2021

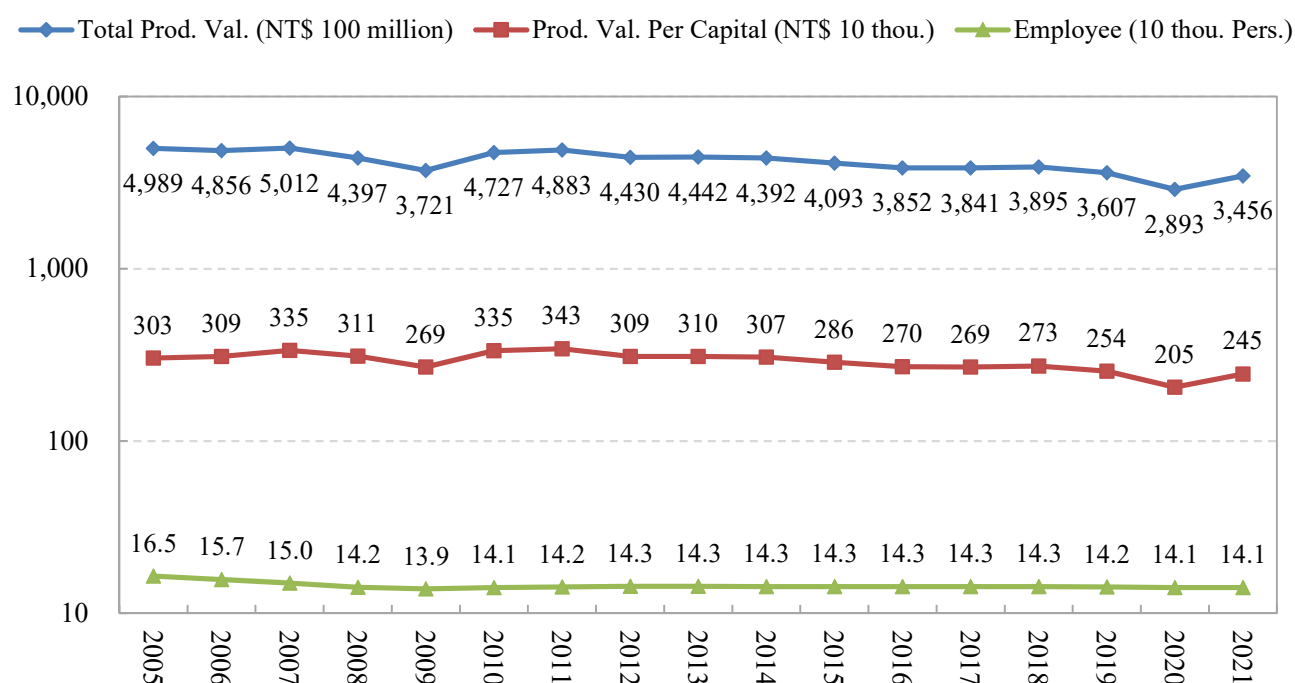


Note: The textile and apparel industry's production value includes three sub-segments, i.e. man-made fiber, apparel and made-ups, and textile.

Sources: Dept. of Statistics, MOEA.

Considering the production value per capita, the average value dropped from NT\$3 million in 2005 to NT\$2.5 million in 2021, with a growth rate of -19.1%. The impact of the US-China trade war and the outbreak of the COVID-19 caused disruptions of the global supply chains as well as a shrinking production value per capita in 2019 and 2020. The level in 2020 has even plummeted to a record low since 2005. However, last year, in 2021, as countries started to reopen and vaccines became available, the global economy was recovering. It resulted in the production value of textile and apparel industry increasing in the year, and the production value per capita in 2021 almost bounced back to pre-pandemic level (in 2019). (Fig. 2).

Fig. 2 Production Value Per Capita of Taiwan’s Textile and Apparel Industry in 2005~2021

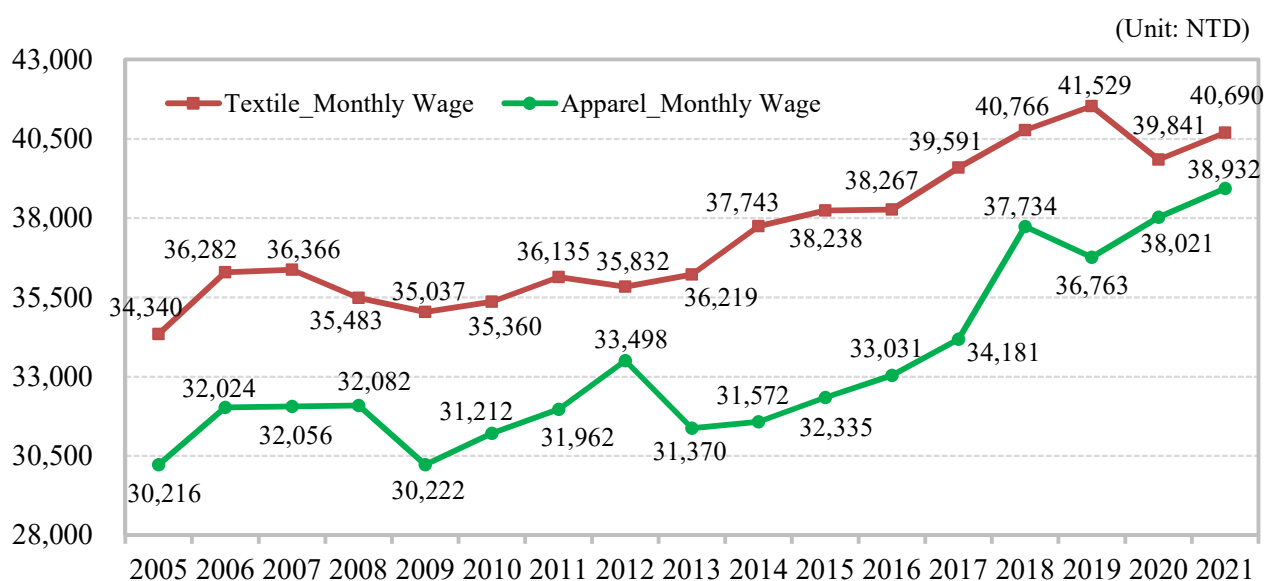


Sources: Dept. of Statistics, MOEA.

b. Taiwan’s labor cost of manufacture industry

According to labor statistics from the Directorate-General of Budget, Accounting & Statistics, Executive Yuan, from 2005 to 2021, the monthly wages of textile industry and apparel industry grew from NT\$34,340 and NT\$30,216 to NT\$40,690 and NT\$38,932 respectively, the average growth rate of 18.5% and 28.8%. (Fig. 3).

Fig. 3 The Average Monthly Wage of Textile and Apparel Industry



Sources: Directorate-General of Budget, Accounting & Statistics, Executive Yuan.

- c. Textile and apparel industry: The fourth largest foreign exchange earner segment in Taiwan.

In 2021, the gross export and import values of Taiwan textile products were US\$9 billion and US\$3.9 billion respectively. In that same year, the textile and apparel industry recorded a total trade surplus of US\$5.2 billion, which marking it Taiwan's fourth largest trade surplus industry. (Table 2).

Table 2 The Export and Import Value/Trade Surplus of Textile & Apparel Industry from 2005 to 2021

(Unit: US\$ 100 Million)

Year \ Item	Export Values (A)	Import Values (B)	Trade Surplus of Textile & Apparel Industry (C=A-B)	Trade Surplus of Total Trade (D)
2005	118.3	26.4	91.9	158.2
2010	113.1	29.4	83.7	233.7
2011	127.1	36.3	90.8	268.2
2012	118.4	34.4	84.0	307.1
2013	117.3	33.8	83.5	355.4
2014	116.2	35.0	81.2	396.7
2015	108.0	34.6	73.4	515.6
2016	99.3	33.5	65.8	494.6
2017	100.7	33.6	67.1	578.8
2018	100.7	36.8	63.9	494.0
2019	91.8	35.5	56.3	434.8
2020	75.3	33.7	41.6	587.9
2021	90.2	38.6	51.6	652.8

Source: Compiled by TTF with data from Dept. of Statistics, MOFA.

(B) Taiwan's Textile and Apparel Exports

a. Export proportion

Due to the impact of the COVID-19 pandemic, the export value of Taiwan's textile and apparel stood at US\$9 billion in 2021, grew by 19.8%, comparing to the year of 2020. Fabric category exports amounted to US\$6.3 billion, went up by 23.7%; the export volume was 697 thousand tons, increased by 11.6%, comparing to the same period in 2020. Yarn exports amounted to US\$1.3 billion, went up by 24.7%; the export volume was 429 thousand tons, grew by 7.7%. The fabric was the main export item, took up 69.4% of total textile exports, indicating that fabric not only play an important role in the full stream of textile production, but also a major export item. Yarn with the share of 14.2% took up the second place. (Table 3).

Table 3 2021 Taiwan's Textile and Apparel Exports

Items	Export Volume (10,000 Tons)			Export Value (US\$ 100 million)				Unit Price (US\$/Kg)		
	2020	2021	20/21 (%)	2020	2021	20/21 (%)	Share (%)	2020	2021	20/21 (%)
1. Fiber	40.1	38.8	-3.3	4.8	5.1	5.1	5.6	1.2	1.3	8.7
2. Yarn	39.8	42.9	7.7	10.2	12.8	24.7	14.2	2.6	3.0	15.8
3. Fabric	62.5	69.7	11.6	50.6	62.6	23.7	69.4	8.1	9.0	10.9
4. Apparel	2.1	2.2	6.3	4.1	4.7	14.4	5.2	19.9	21.5	7.6
5. Miscellaneous	7.1	7.1	0.4	5.6	5.1	-8.3	5.7	7.9	7.2	-8.7
Total	151.6	160.7	6.0	75.3	90.2	19.8	100.0	5.0	5.6	13.0

Source: Compiled by TTF with data from Taiwan Customs Statistics.

b. Major export markets

Taiwan's major export market is Vietnam, which represented 25.7% of the total export value, amounting to US\$ 2.3 billion in 2021, went up by 21.7%; followed by China at 16.4% (US\$1.5 billion), increased by 17.8%; followed by the United States at 9% (US\$0.8 billion), increased by 19.5%; followed by Indonesia at 5.1% (US\$0.46 billion), rose by 28.4%, and Cambodia at 4.9% (US\$0.45 billion), went up by 33.9%. The five major export markets accounted for 61.1% of total textile exports. (Table 4).

Table 4 2021 Taiwan's Main Markets of Exported Textile Products – by Country

Country	Export Volume(10,000 Tons)			Export Value (US\$ 100 million)				Unit Price (US\$/Kg)		
	2020	2021	20/21 (%)	2020	2021	20/21 (%)	Share (%)	2020	2021	20/21 (%)
Global	151.6	160.7	6.0	75.3	90.2	19.8	100.0	5.0	5.6	13.0
1. Vietnam	30.9	33.9	9.8	19.0	23.2	21.7	25.7	6.2	6.8	10.8
2. China	31.4	32.2	2.6	12.6	14.8	17.8	16.4	4.0	4.6	14.8
3. USA	10.3	10.9	5.7	6.8	8.2	19.5	9.0	6.6	7.5	13.1
4. Indonesia	4.8	5.7	18.9	3.6	4.6	28.4	5.1	7.4	8.0	8.0
5. Cambodia	3.5	4.3	24.3	3.3	4.5	33.9	4.9	9.6	10.4	7.7

Source: Compiled by TTF with data from Taiwan Customs Statistics.

By area, the ASEAN 10 countries were the biggest area with the export amount of US\$3.8 billion, taking the share of 42.2%. Of all export markets, China and Hong Kong, accounted for 20.6% of total exports, amounting to US\$1.9 billion. In the past years, the main markets such as North America Free Trade Area (America, Canada and Mexico) and the EU has lost their shares in the export markets year by year, with the share of 10.4% and 3.8% respectively in 2021. (Table 5)

Table 5 2021 Taiwan's Main Markets of Exported Textile Products – by Area

Area	Export Volume(10,000 Tons)			Export Value (US\$ 100 million)				Unit Price (US\$/Kg)		
	2020	2021	20/21 (%)	2020	2021	20/21 (%)	Share (%)	2020	2021	20/21 (%)
Global	151.6	160.7	6.0	75.3	90.2	19.8	100.0	5.0	5.6	13.0
1. ASEAN 10	50.0	56.2	12.5	31.1	38.1	22.6	42.2	6.2	6.8	9.0
2. China+H.K	35.2	36.2	3.0	16.1	18.6	15.9	20.6	4.6	5.1	12.5
3. NAFTA	13.8	13.4	-2.6	8.1	9.4	15.5	10.4	5.9	7.0	18.6
4. Japan+Koren	10.4	10.3	-0.9	3.8	3.9	2.5	4.4	3.7	3.8	3.5
5. EU 27*	8.7	8.7	-0.5	3.1	3.4	10.3	3.8	3.6	4.0	10.9
6. Middle East	6.3	6.3	-0.5	2.8	3.4	19.6	3.8	4.5	5.4	20.2
5. Others	27.3	29.6	8.7	10.3	13.4	29.9	14.9	3.8	4.5	19.5

Note: Since 31st Jan, 2020, UK had officially left the EU, hence this table uses data from 27 member states.

Source: Compiled by TTF with data from Taiwan Customs Statistics.

(C) Taiwan's Textile and Apparel Imports

a. Import proportion

The import value of Taiwan's textile and apparel was US\$3.9 billion in 2021, increased by 14.5% over 2020. Apparel & accessories, imports amounted to US\$1.9 billion (49.7% of the total), yarn was US\$0.59 billion (share of 15.2%), fabric amounted to US\$0.57 billion (share of 14.9%), miscellaneous textile was US\$0.4 billion (share of 11.3%), and fiber was US\$0.3 billion (share of 8.8%). (Table 6).

Table 6 2021 Taiwan's Textile and Apparel Imports

Items	Import Volume (10,000 Tons)			Import Value (US\$ 100 million)				Unit Price (US\$/Kg)		
	2020	2021	20/21 (%)	2020	2021	20/21 (%)	Share (%)	2020	2021	20/21 (%)
1. Fiber	17.3	17.5	1.0	2.9	3.4	18.3	8.8	1.7	1.9	17.1
2. Yarn	9.6	13.0	35.0	3.4	5.9	73.6	15.2	3.5	4.5	28.5
3. Fabric	9.6	9.0	-6.7	5.4	5.7	6.3	14.9	5.6	6.4	13.9
4. Apparel	11.6	11.6	0.1	18.1	19.2	5.8	49.7	15.6	16.5	5.7
5. Miscellaneous	7.8	8.5	9.9	3.9	4.4	12.0	11.3	5.0	5.1	1.9
Total	56.0	59.7	6.6	33.7	38.6	14.5	100.0	6.0	6.5	7.4

Source: Compiled by TTF with data from Taiwan Customs Statistics.

b. Major import market

Taiwan's biggest import market was China (44.5% of the total import, amounting to US\$1.7 billion), increased by 17.8% over 2020, with major import items of apparel and made-ups. Other major import sources are Vietnam (with major import item of apparel and made-ups), the USA (cotton), Japan (fabric), and Italy (apparel). (Table 7)

Table 7 2021 Taiwan's Main Market of Imported Textile Products—by Country

Country	Import Volume(10,000 Tons)			Import Value (US\$ 100 million)				Unit Price (US\$/Kg)		
	2020	2021	20/21 (%)	2020	2021	20/21 (%)	Share (%)	2020	2021	20/21 (%)
1. Global	56.0	59.7	6.6	33.7	38.6	14.5	100.0	6.0	6.5	7.4
2. China	25.1	26.8	7.0	14.6	17.2	17.8	44.5	5.8	6.4	10.0
3. Vietnam	7.5	9.4	24.2	4.7	5.4	15.3	14.0	6.2	5.8	-7.2
4. USA	1.7	4.3	-4.6	1.7	2.1	23.9	5.4	3.7	4.8	29.9
5. Japan	4.5	1.5	-13.9	2.0	2.0	-1.3	5.2	11.9	13.7	14.6
6. Italy	0.2	0.2	-4.4	1.5	1.8	21.3	4.6	95.7	121.4	26.9

Source: Compiled by TTF with data from Taiwan Customs Statistics.

B. Overview of Global Textile and Apparel Industry

After the textile trade was liberalized in 2005, the production was shifted to emerging economies such as China, India, Pakistan, Bangladesh and Vietnam. Meanwhile, the trade of textile and apparel flourished more than in the era of quota restraint. The WTO data reveal that the trade of textile and apparel kept on growing during the past 16 year. The average growth rate for textile and apparel between 2005 and 2020 was 3.1% and 4.8% respectively. (Table 8)

Table 8 Growth of Global Textile and Apparel Export

(Unit: US\$ Billion)

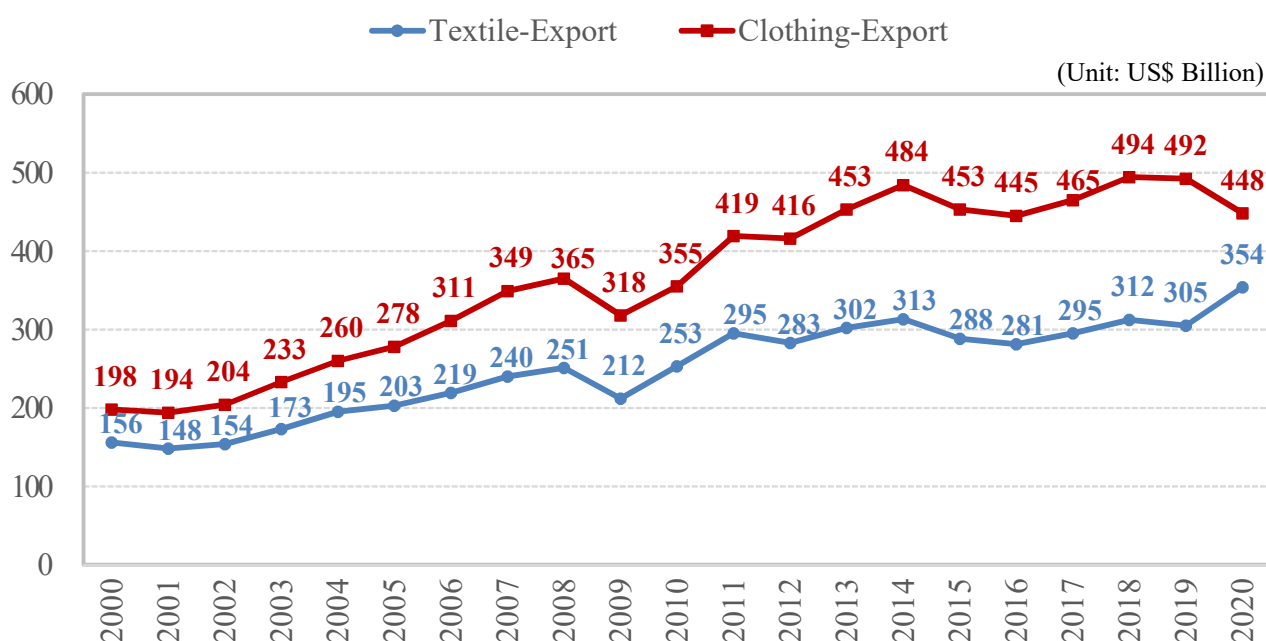
Product	2005	2010	2015	2020	2005-2020 Growth Value	2005-2020 Growth Rate	Average Growth Rate
Textile	203	252	291	354	16.1%	151	3.1%
Apparel	279	354	453	448	-8.9%	170	4.8%
Total	482	606	744	802	0.6%	321	4.1%

Sources: WTO.

(A) The Statistics of Global Textile and Apparel Trade

The global textile trade amounted to US\$354 billion, and US\$448 billion for apparel trade in 2019. Total export value of textile and apparel was US\$802 billion, increased by 0.7% compared to the year of 2019. (Fig. 4).

Fig. 4 2000~2020 Global Textile and Apparel Exports



Sources: WTO.

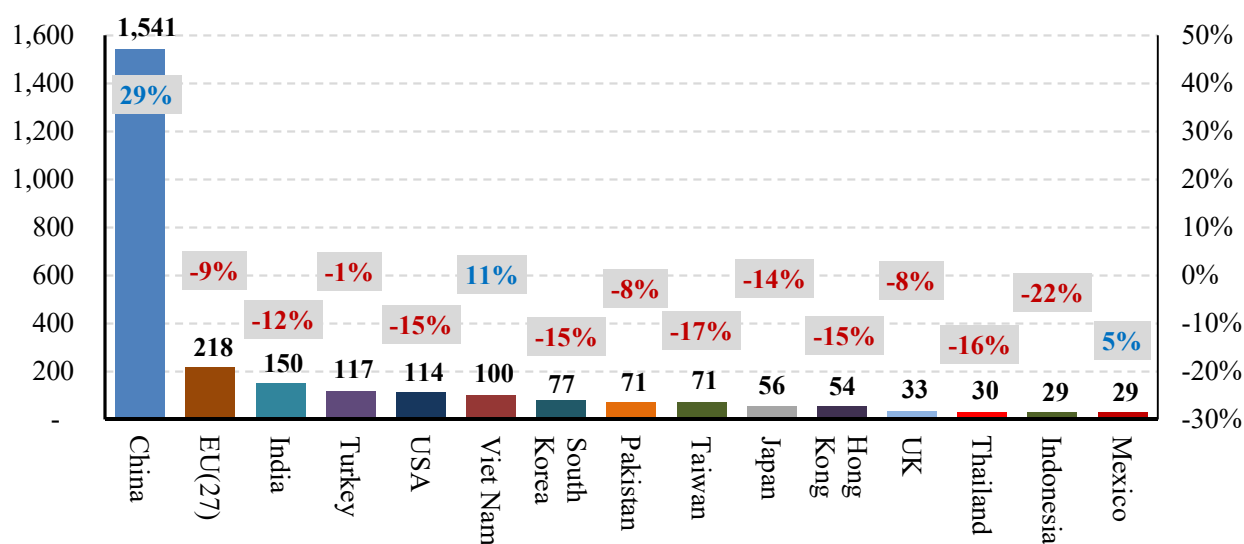
(B) The Leading Textile and Apparel Exporting Countries in 2020

a. The leading textile exporting countries in 2020

In 2020 the global trade of textile industry amounted to US\$354 billion, grew by 16.1% compared with 2019. China was the biggest textile exporting country with the export amount of US\$154.1 billion, accounting for 43.5% of the global textile trade, followed by the EU, India, Turkey, and the USA. Vietnam for the first time has surpassed South Korea, and ranked sixth. Taiwan was the 9th biggest country with the export amount of US\$7.1 billion, and plays a key role in functional and Eco-friendly textiles. (Fig. 5).

Fig. 5 The Leading Textile Exporting Countries in 2020

(Unit : US\$ 100 Million)



Note: Since 31st Jan, 2020, UK had officially left the EU, hence WTO only uses data from 27 member states.

Sources: WTO.

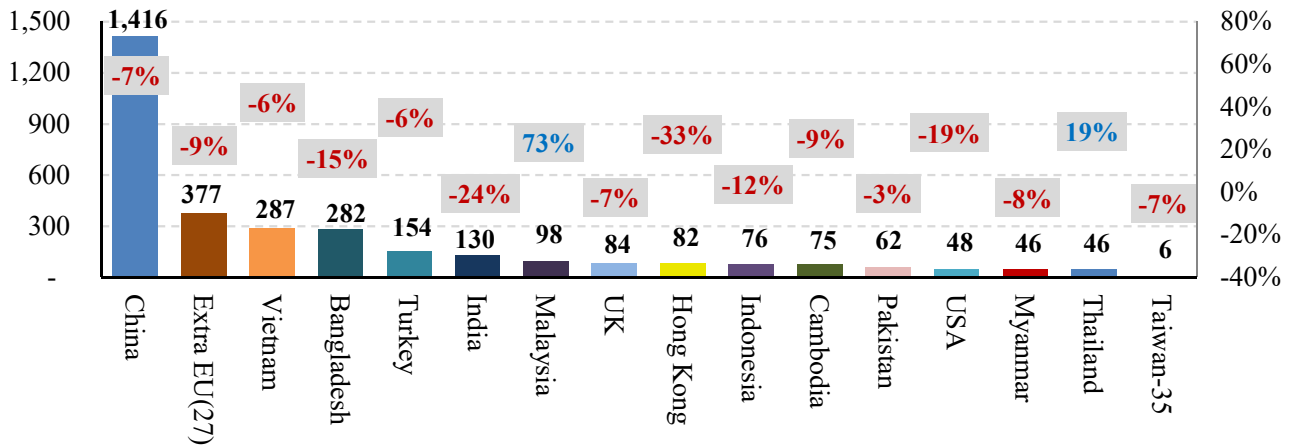
b. The leading apparel exporting countries in 2020

In 2020 the global trade of clothing industry amounted to US\$448 billion. China remained the biggest clothing exporting country with the export amount of US\$141.6 billion, accounting for 31.6% of the global clothing trade, followed by the EU, Vietnam, Bangladesh, and Turkey.

Taiwan was the 35th leading apparel exporting countries. Export-oriented apparel producers have advantages of yarn and fabrics with good quality and competitive prices, and produce garments for orders of small quantity and complex style or orders with short delivery time in Taiwan. (Fig. 6).

Fig. 6 The Leading Apparel Exporting Countries in 2020

(Unit : US\$ 100 Million)



Note: Since 31st Jan, 2020, UK had officially left the EU, hence WTO only uses data from 27 member states.

Sources: WTO.

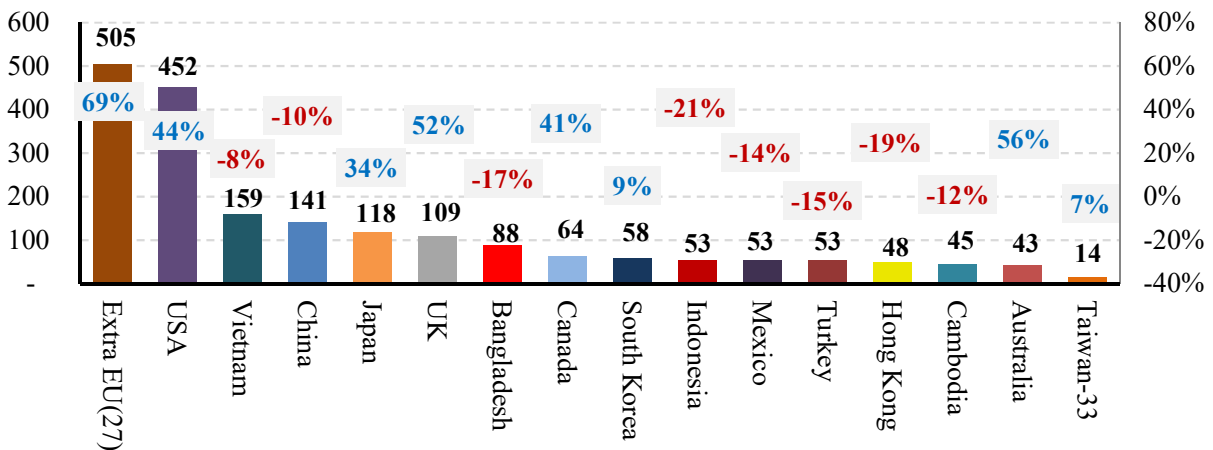
(C) The Major Textile and Apparel Importing Countries in 2020

a. The leading textile importing countries in 2020

The EU, the USA and Vietnam were the three major leading textile importing countries in 2020. The demand for personal protective equipment in the EU and the USA have increased, driving a significant growth in textile imports. China import value including re-exports from Hong Kong, was US\$14.1 billion in 2020. In the same year, Taiwan was the 33rd leading textile importing country with the importing amount of US\$1.4 billion. (Please refer to Fig. 7).

Fig. 7 The Leading Textile Importing Countries in 2020

(Unit : US\$ 100 Million)



Note: Since 31st Jan, 2020, UK had officially left the EU, hence WTO only uses data from 27 member states.

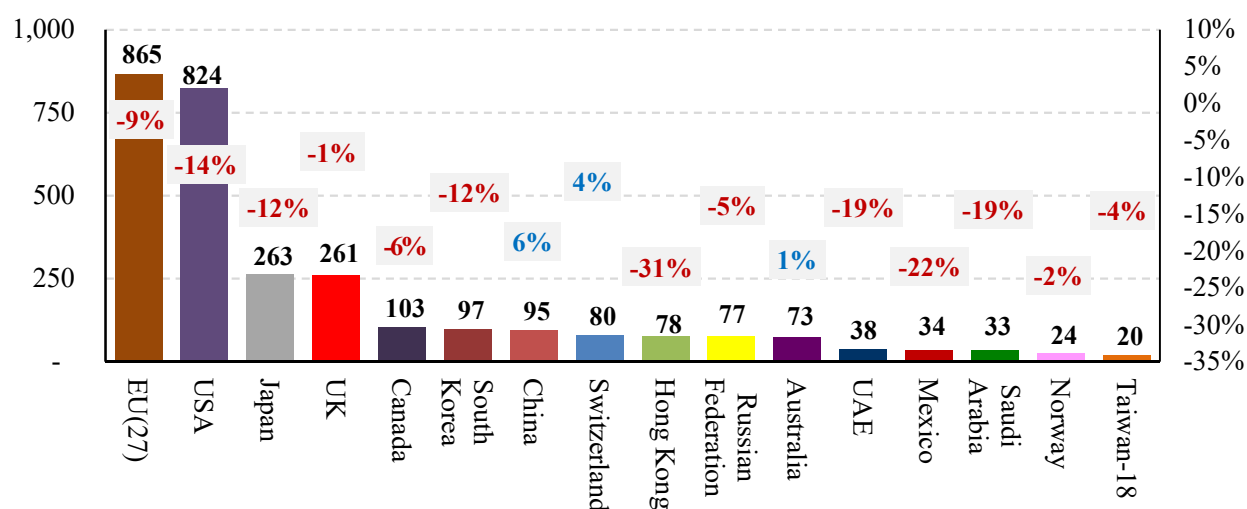
Sources: WTO.

b. The leading apparel importing countries in 2020

The EU, the USA and Japan were the three major leading apparel importing countries with the aggregated import amount of US\$195.2 billion in 2020, accounting for 39.7% of the global apparel import. Taiwan imported apparel worth of US\$2 billion and is the 18th leading apparel importing country in 2020. (Please refer to Fig. 8).

Fig. 8 The Leading Apparel Importing Countries in 2020

(Unit : US\$ 100 Million)



Note: Since 31st Jan, 2020, UK had officially left the EU, hence WTO only uses data from 27 member states.

Sources: WTO.

C. The Vision of Taiwan Textile Industry

As vaccines became available in 2021, "Coronavirus disease 2019 (COVID-19)" has been gradually brought under control. Although the Omicron variant continues to rage through the vast country, it has proved less likely to cause severe illness. Therefore, many countries have eased or ended their tough and often unpopular restrictive measures to fight COVID-19, and it resulted in global economy as well as apparel market recovering.

However, the recovery makes an upward pressure on inflation, and recent issues of container shortage, port congestion, and Russia-Ukraine war also caused an ascent of raw material prices and transportation costs. It means that global uncertainty is not on the wane. Moreover, global warming, nature, energy and resource issues are the most profound challenges of the 21st century, so sustainable development have been a priority task worldwide, and many countries have put a lot of efforts into achieving the UN Sustainable Development Goals. The EU also announced the draft Carbon Border Adjustment Mechanism (CBAM) in July 2021, which is expected to be officially implemented in 2026. Taiwan textile industry should respond as soon as possible to seek business opportunities from it.

To sum up, Taiwan's textile industry is not without space for development, and still has its advantages. It is recommended to develop towards the following points:

(A) Creating high-value and differentiated products

In recent years, Taiwan has successfully differentiated its textile products with their outstanding quality and added value which helped to enhance its global image. Taiwan's products have far surpassed the products made in other Asian countries, keeping pace with those of Europe, the United States and Japan, etc. Taiwan's textile manufacturers can further differentiate themselves by creating added value from selection of unique materials through technology and alertness to fashion trends to develop functional materials and garments for more business opportunities.

(B) Developing Supply Chain for Eco-Friendly Materials

Global warming continues to threaten our ecosystem, forcing governments to take measures to address the issues. Eco-friendly textile products are becoming a mainstream in the market. Numerous manufacturers in Taiwan have increasingly invested in the development of such materials, including recycling nylon, dope dyed fiber, bio-based Eco-Textiles, waterless dyeing

processes, marine yarns, and more. Among these, renewable PET fabrics made by recycled plastic bottles have become well recognized. As preservation of our earth is a common goal, eco-friendly materials will continue to be a major trend. Taiwan's textile industry should master the trends in global business and environmental regulations to consolidate and strengthen a global production-distribution supply chain.

(C) Developing Textiles for Function plus Fashion

Consumers become more discerning to quality of textiles, the rising trend in sports and growing extreme weather which contribute to open up market potential for functional textiles. At the same time, consumers are also more alert to fashionable taste. The customer preference is inclined to a lifestyle in a combination of sports, work and quality of life. As the result, the demand for the textiles with function and fashion continues to grow. Taiwan has already established itself as the main base for R&D and the production of global functional textile products. In view of the growing number of international major brands introducing sportswear, Taiwan's textile industry should leverage on the opportunity to further expand its market.

(D) Enhancing the capacity for design and branding

Taiwan's yarns and fabrics are highly recognized in the global market. Leading international brands have already placed orders on textile materials from Taiwan, in particular functional products. However, it still requires more work in developing fashion items and branding to get higher profit from the consumer goods. In addition to better monitor fashion trends to further enhance the quality of design, branding is also an important direction to take. Branding not only can create synergy for better business opportunity, but also to enhance the quality and innovation of yarns and fabrics. In order to detonate again its growth potential, the Taiwan textile industry has to consolidate the overall production and supply chain from materials and brands for a long term success.

(E) Developing high-potential smart textiles

Smart textiles and wearable technology have been emerging as one of the development priorities in the textile industry in recent years, and the future of this sector looks highly promising. In addition to the demand from the sports and fitness wear, market potential of smart textiles in the health care field is also set to grow in response to the aging populations around the world. Smart textiles featuring multiple functions such as performance, comfort, sensing and monitoring, and intelligent interpretation will be the

key products and technologies. While backed by advanced IT industry and innovative biomedical industry, along with advantages in component manufacturing, Taiwan's future success will depend on the ability to innovate through cross-disciplinary collaboration.

(F) Intellectualizing textile supply chain

Industrial upgrading and transformation, corporate social responsibility and business sustainability are the major concerns today of Taiwan textile industry for further development and higher competitiveness. With the support and assistance from the government, the industry intends to develop lean manufacturing, maximize production efficiency and productivity by bringing in IoT (Internet of Things), Big Data and cloud technologies.