

# RESEARCH ON EXPORT COMPETITIVENESS OF WENZHOU TEXTILE AND GARMENT INDUSTRY

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**Abstract:** In today's competitive market, Wenzhou textile and garment industry faces multiple challenges at home and abroad. Exports have to face trade barriers from various countries. Meanwhile, due to the impact of the epidemic, the growth rate of foreign trade has slowed down, and the pace of "going global" has hit a bottleneck. In addition, In the process of production, there are general trade, lack of independent innovation, limited capital and other problems. This paper studies the export status of Wenzhou textile and garment industry, calculates several export competitiveness indicators, and makes an objective evaluation of its current export competitiveness. At the same time, the influential factors of Wenzhou textile and garment industry are studied, and the significant influencing factors are analyzed. Based on this, specific suggestions are put forward, so as to improve the export competitiveness of Wenzhou textile and garment industry and promote the development of Wenzhou better.

**Keywords:** Textile and garment industry; Export competitiveness; Wenzhou City; Export trade

## 1. INTRODUCTION

The export of textile and garment is Wenzhou's main export products except leather shoes. However, in recent years, the rising labor cost has lost the original labor advantage, and the continuous global economic crisis and epidemic diseases have made the development of textile and garment industry a little brake. Due to the relatively concentrated overseas export market, lack of brand construction, limited available funds, lack of industrial clustering, lack of product and technology innovation and other reasons, Wenzhou's export competitive advantage in the increasingly fierce competition in the market is in a state of decline. Based on this, how to put forward countermeasures and suggestions for the problems existing in Wenzhou textile and garment industry has become the key to improve the export competitiveness of Wenzhou textile and garment industry.

## 2. WENZHOU TEXTILE AND GARMENT INDUSTRY EXPORT STATUS

### 2.1 Export Scale

Zhejiang is a major province of textile and garment export in China. In recent years, the export of textile and garment has grown rapidly, and its share in the country's total export has been increasing year by year. The textile and garment industry is the second largest export industry in Zhejiang province. According to the statistics of Hangzhou Customs, in the first half of 2022, Zhejiang's textile and garment exports were 288.55 billion yuan, an increase of 20.9% compared with the same period last year[1-5]. Among them, the export of textile was 182.76 billion yuan, up 17.1 percent; And the export of clothing was 105.79 billion yuan, up 28.2 percent. In the first half of the year, Zhejiang textile and garment export scale ranked first in China, accounting for 28.7% of the total value of the country's textile and garment export, the share increased by 2.5 percentage points compared with the same period last year; Its contribution rate to the national textile and garment export growth was as high as 51.0%, ranking the first among all provinces and cities in China. At the same time, according to the data, Zhoushan's export growth rate was the fastest, with an increase of 70.9%, followed by Wenzhou, with an increase of 37.3%.

The export of textile and garment is Wenzhou's main export products except leather shoes. The export scale of Wenzhou's textile and garment industry also ranks among the top in China. In 2019, Wenzhou's textile and garment export volume reached 11.76 billion yuan, accounting for 6.8% of Wenzhou's total export volume and 11.9% of Zhejiang's textile and garment export volume.

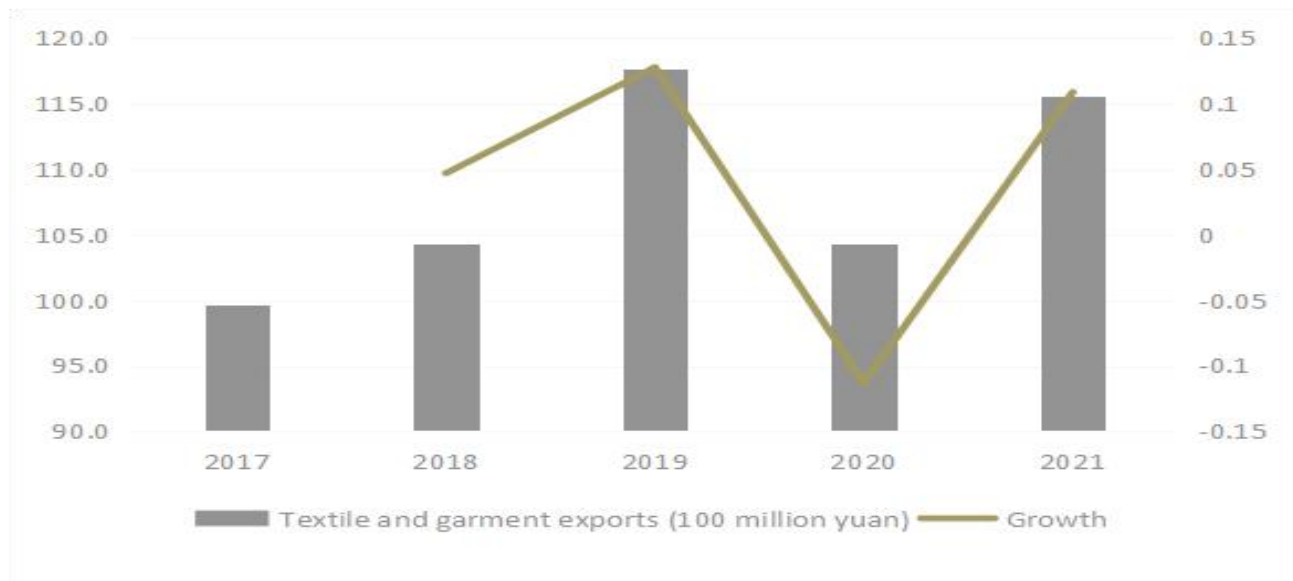
Based on the specific data of Wenzhou textile and garment export, this paper analyzes its export scale and development speed. Table 1 shows the situation and proportion of Wenzhou textile and garment export from 2017 to 2021. Figure 1 is drawn according to Table 1, showing the development trend and scale growth of Wenzhou textile and garment export.

**Table 1** The proportion of textile and garment exports in Wenzhou's total exports from 2017 to 2021

Year	Textile and garment exports (100 million yuan)	Total exports (100 million yuan)	proportion
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2017	99.7	1157.9	8.61%
2018	104.3	1302.4	8.01%
2019	117.6	1685.3	6.98%
2020	104.3	1878.1	5.55%
2021	115.6	2035.8	5.68%

Data source: Wenzhou Statistical Yearbook, 2018-2022



**Figure 1** Scale and growth rate of textile and garment export in Wenzhou from 2017 to 2021

Data source: Calculated and plotted according to data in Table 1

According to the data from 2017 to 2021, the export scale of Wenzhou textile and garment industry is on the rise, increasing from 9.97 billion yuan in 2017 to 11.76 billion yuan in 2019. In 2020, due to the impact of the epidemic, the export volume dropped sharply, but gradually rebounded in 2021. As can be seen from Figure 1, due to the impact of COVID-19 in 2019, the growth rate of Wenzhou textile and garment export decreased from 12.7% to negative in 2020. In 2021, the growth rate rose rapidly from negative 11.3% to 10.8% through the support of national policies and the efforts of enterprises to turn the tide. Through the comparison between Table 1 and Figure 1, it can be found that the overall export volume of Wenzhou is growing continuously[6-8]. Although the export volume of the garment textile industry has increased, its proportion in the total export volume has decreased year by year. It can be seen from this that the export scale of Wenzhou textile and garment industry has yet to be enhanced compared with other industries.

## 2.2 Trade Mode

According to the commodity, region, trade object and the demand of the buyer and seller, the two trading parties will adopt different trading methods. With the development of international trade, new ways of international trade are constantly emerging. At present, the most common ways of international trade are: general trade, processing trade, agreement trade, bilateral trade, multilateral trade and so on.

The way of textile and garment trade in Zhejiang province can be roughly divided into three parts: general trade, processing trade and other trade. At present, Zhejiang textile and garment trade mainly through the general trade and other trade, processing trade as a supplement[9-12]. Among them, the proportion of general trade is always high, reaching more than 80% all year round, while the proportion of processing trade is not only low, but also shows a trend of decline year by year. Table 2 shows the export value and the proportion of textile and garment in different trade modes in Zhejiang Province from 2020 to 2023.

**Table 2** Export value and proportion of textile and garment of different trade modes in Zhejiang Province from 2020 to 2023

Year	General trade exports (100 million yuan)	Proportion of general trade	Exports by other trade methods (100 million yuan)	Proportion of other trade methods	Processing trade exports (100 million yuan)	Proportion of processing trade
2020						
2021						
2022						
2023						

2020						
2021	19862.6	80.9%	1644.6	12.38%	3037.9	6.70%
2022	23685.3	80.8%	1973.3	12.46%	3653.1	6.73%
2023 (January-March)	26927.6	80.9%	2107.9	12.75%	4244.7	6.33%
	6573.1	81.0%	476.1	13.12%	1064.8	5.87%

Data source: Hangzhou Customs, People's Republic of China

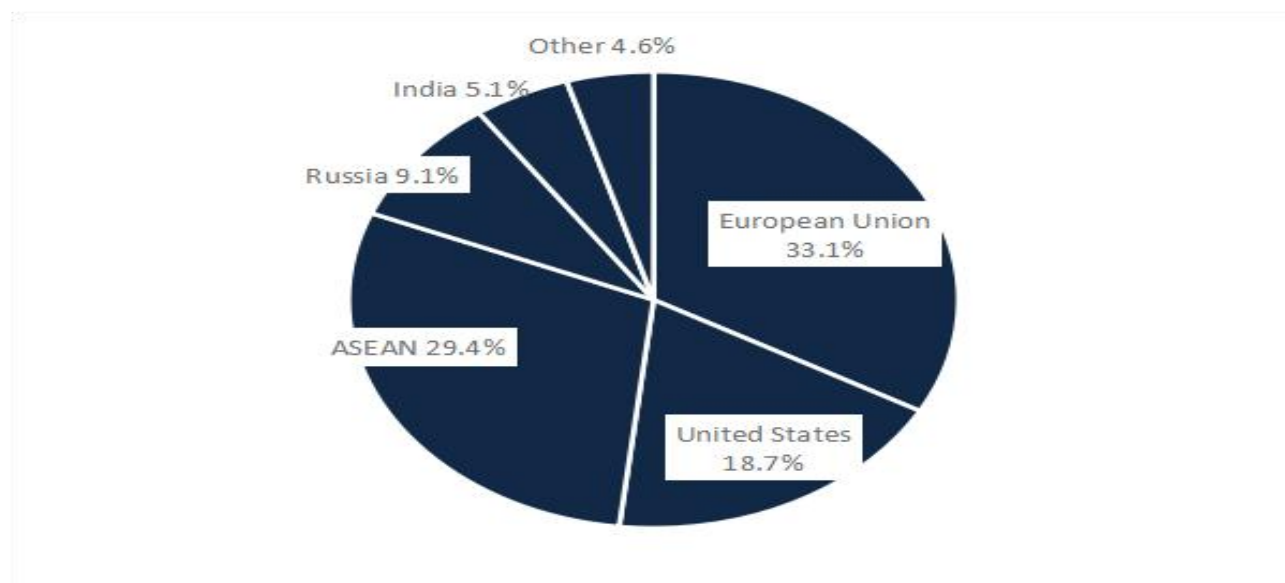
From Table 2, we can see that the textile and garment trade in Zhejiang Province is mainly general trade, with little overall fluctuation. On the other hand, the proportion of processing trade shows a decreasing trend, from 6.7% in 2020 to 6.33% in 2022. Both the export value and the proportion of other trade modes increased year by year. Zhejiang's textile and garment processing trade, most enterprises are using the way of OEM processing. These enterprises often only pay attention to direct interests, belong to their own profit space is very limited, and do not have their own brand advantages.

### 2.3 Export Markets

**Table 3** Main export markets of textile and garment in Wenzhou from 2017 to 2021

	2017	2018	2019	2020	2021
European Union	32.9	35.7	39.5	34.5	41.5
United States	18.7	22.7	22.8	19.5	30.6
ASEAN	10.2	11.5	25.6	30.7	33.6
Russia	8.3	9.1	10.0	9.5	10.7
India	3.7	4.6	7.4	5.3	6.4

Data source: Wenzhou Statistical Yearbook, 2018-2022



**Figure 2** Main export market share of textile and garment in Wenzhou in 2021

Data source: Calculated and plotted according to data in Table 3

As can be seen from Table 3, the export markets of Wenzhou textile and garment industry are relatively concentrated, the European Union, the United States, ASEAN, Russia, India and other countries and regions are the most important export markets of Wenzhou textile and garment industry. The above five countries together account for 70% of the total value of the same period. Affected by the epidemic in 2020, the export value declined in general, but it will gradually recover in 2021. In 2021, Wenzhou exported 4.15 billion yuan of textile and garment to the EU, accounting for 33.5%, up 2 percentage points from 2020. As can be seen from Figure 2, the EU is the first largest export market of Wenzhou, ASEAN is the second largest export market of Wenzhou, and the United States is the third largest export market of Wenzhou, with the total exports of the three accounting for more than 60%. At the same time, it can be seen that the ASEAN market began to develop rapidly in 2019, with the export volume increasing from 1.15 billion yuan in 2018 to 2.56 billion yuan in 2019 and growing year by year, which cannot be separated from the help of China's accession to RCEP in 2020[13-18]. Joining the RCEP is of great significance for Chinese enterprises to explore the market of Southeast Asian countries.

In general, Wenzhou textile and garment export markets are relatively concentrated and lack diversity. At the same time, the market of some countries and regions such as the United States and the European Union has been relatively saturated. We should not focus too much on developing these countries and regions. Instead, we should pay more

attention to other overseas markets which can be better development. In addition, after the cancellation of the global textile and garment trade quota, many countries in order to better protect the development of domestic enterprises, took certain preventive measures to restrict the import of Chinese textile and garment products, such as green barriers and so on. These adverse factors have increased the uncertainty of Wenzhou textile and garment export to a certain extent, restricting and hindering the good development of the industry. Therefore, Wenzhou should actively explore the market of other countries, such as many developing countries, their market potential is very large, so as to better promote the diversification of export markets[19].

## 2.4 The Proportion of the Output Value of Wenzhou's Textile and Garment Industry in the Whole Country

According to Upward Pressure of the Industry, the scale breaks one trillion Yuan for the first time -- The Operation Situation of Zhejiang Textile and Garment Industry in 2021, the enterprises above the scale of Zhejiang's textile and garment industry achieved a total industrial output value of 100.3 billion yuan and a business income of 107.16 billion yuan in 2021, both breaking the trillion mark for the first time, ranking first in the country in terms of scale; achieving textile and garment export value of \$82.2 billion, ranking first in China. According to the "Top 100 Enterprises in China's Garment Industry in 2021" list officially released! In the list of the top 100 enterprises in the garment industry in 2021, Zhejiang Province has 26 enterprises on the list, ranking second in the country after Jiangsu Province (33). Among them, Wenzhou has four enterprises on the list, which are Taiping Bird Group Co., LTD., Zhejiang Senma Garment Co., LTD., Newspaper Bird Holding Co., LTD., and Fapai Garment Co., LTD. According to the "Wenzhou Fashion Industry Development White Paper Release" , Wenzhou's garment industry achieved a total industry output value of about 65.2 billion yuan in 2019, of which 25.668 billion yuan was the business income of the above the scale enterprises.

## 3. ANALYSIS OF EXPORT COMPETITIVENESS OF WENZHOU TEXTILE AND GARMENT INDUSTRY

### 3.1 Export Competitiveness Index

#### 3.1.1 International Market Share

Refers to the share of Wenzhou textile and garment industry in the global textile and garment export market, reflecting the scale advantage and influence of Wenzhou textile and garment industry in the international market. According to reports, the international market share of China's textile and garment industry is 33.09% in 2020, which is 0.48 percentage points higher than that in 2019 and 0.8 percentage points lower than that in 2018. It remained at the top, with a significant share lead over second place Vietnam of 25.78 percentage points. Thus, it can be estimated that Zhejiang Province, as a large export province of Chinese textile and garment, its international market share is not to be underestimated. Wenzhou, as the main force of Zhejiang garment export, also has a certain share of the international market.

#### 3.1.2 Priority Index of Export Growth Rate

It refers to the ratio of the export growth rate of Wenzhou textile and garment industry to the total export growth rate of Wenzhou, reflecting the gap and potential between the export growth rate of Wenzhou textile and garment industry and the export growth rate of Wenzhou as a whole. According to data from the statistical yearbook, Wenzhou's exports in 2021 reached 203.58 billion yuan, with a year-on-year growth of 8.4%, which was the first time that Wenzhou's annual exports stood on the new level of 200 billion yuan. Among them, the export of textile and garment industry was 11.56 billion yuan, up 10.8 percent year on year. The export growth advantage index  $D_t$  is expressed by the formula:  $D_t = G_i - G_t$ . In the formula,  $G_i$  represents the export growth rate of a certain commodity of a country or region, and  $G_t$  represents the total export growth rate of a country or region. Therefore, it can be estimated that the export growth rate advantage index of Wenzhou textile and garment industry in 2021 is  $10.8 - 8.4 = 2.4$ . If this index is positive, it means that the export growth of this kind of product is higher than the total export growth of the country (region). The higher the index is, the faster the export growth of this kind of product and the stronger the competitiveness. When this index is negative, it means that the export growth of the product is lower than the overall export growth of the country (region). Through calculation, the  $D_t$  value of Wenzhou textile and garment industry is 2.4, which has a certain export competitiveness.

#### 3.1.3 Explicit Comparative Advantage Index

It refers to the ratio of the export proportion of Wenzhou textile and garment industry to the export proportion of global textile and garment industry, reflecting the comparative advantage and competitiveness of Wenzhou textile and garment industry in international trade. In 2021, the import and export value of Wenzhou reached 241.12 billion yuan, and the export value was 203.58 billion yuan. Among them, the export of textile and garment industry reached 11.56 billion yuan. According to the report, in 2021, the global export value of textile and garment was 6,244.77 billion yuan. The formula for the dominant comparative advantage index is:  $RCA = (X_i/X_t) / (W_i/W_t)$ .  $X_i$  represents the export value of a commodity a country or region;  $X_t$  represents the total value of commodity exports of a country or region;  $W_i$  represents the export value of a commodity in the world;  $W_t$  stands for the value of world commodity exports. From this, it can be estimated that the index of Wenzhou textile and garment industry in 2021 is  $(115.6/2035.8)/(6244.7/3098023.8) = 2.85$ . The RCA value is greater than 1, indicating that Wenzhou textile and garment industry has comparative advantages in the international market and has certain international competitiveness.

#### 3.1.4 Trade Competition Index

Refers to the proportion of the balance of import and export trade of Wenzhou textile and garment industry in the total

import and export trade, reflecting the internal structural international competitiveness and trade surplus level of Wenzhou textile and garment industry. In 2021, the total export of Wenzhou textile and garment industry reached 11.56 billion yuan, and the total import was 470 million yuan. The formula of trade competition index is:  $TC = (P_i/Q_i) / (P_i + Q_i)$ . In the formula,  $P_i$  represents the total export value of a certain commodity of a country or region;  $Q_i$  represents the total amount of a country or region's import of a certain commodity. Therefore, the trade competition index of Wenzhou textile and garment industry in 2021 can be calculated as  $(115.6 - 4.7) / (115.6 + 4.7) = 0.9$ . The closer the TC value is to 0, the closer the competitiveness is to the average level; When the index is -1, it means that the industry only imports but does not export, and the closer it is to -1, the weaker its competitiveness. When the index is 1, it means that the industry only exports and does not import, and the closer it is to 1, the more competitive it is. According to the calculation results, the trade competition index of Wenzhou textile and garment industry is very close to 1, which indicates that Wenzhou textile and garment industry has certain trade competitiveness[20-24].

To sum up, Wenzhou textile and garment industry has a certain export competitiveness, which is an important driving force for the continuous growth of Wenzhou textile and garment export. However, according to the data analysis, although its international market share is there, but not high, indicating that Wenzhou textile and garment export still has development potential, still need to expand their own market.

### 3.2 Analyze the Advantages and Disadvantages of Wenzhou Textile and Garment Export Competitiveness

#### 3.2.1 Advantages of Export Competitiveness of Wenzhou Textile and Garment Industry

- (1) Wenzhou textile and garment industry adopts virtual operation mode, dividing and outsourcing production, design, marketing and other links, improving the efficiency of resource allocation and market response speed.
- (2) Wenzhou textile and garment industry is highly competitive in the international market. In 2019, the export of garment reached 11.744 billion yuan, with a competitiveness coefficient of 0.512.
- (3) Wenzhou textile and garment industry actively develops emerging markets, especially the countries along the "Belt and Road". In 2019, the export to ASEAN and Middle East markets increased by 118.51% and 63.17% respectively.
- (4) Wenzhou textile and garment industry has cultivated a number of influential self-owned brands, such as Senma, Aokang, Fabai, Annunciation Bird, etc., which has established a good image and reputation in overseas markets.
- (5) Wenzhou textile and garment industry has certain advantages in scale. Wenzhou is one of the important garment production bases in the country, with a large number of enterprises and well-known brands. The total output value of Wenzhou's garment industry exceeds 60 billion yuan, accounting for about 5 percent of the national total.
- (6) Wenzhou textile and garment industry has certain advantages in export. Wenzhou is one of the important bases of garment export in China, with extensive international market and network resources of Wenzhou commerce. The export value of Wenzhou's garment industry has grown steadily, reaching 11.744 billion yuan in 2019, accounting for about 3 percent of the country's total garment export value.

#### 3.2.2 Weaknesses of Export Competitiveness of Wenzhou Textile and Garment Industry

- (1) Wenzhou textile and garment industry is faced with the problem of lagging intellectual property protection, and there are widespread infringements such as plagiarism and theft in the industry, which affect the innovation ability and brand value.
- (2) The product structure of Wenzhou textile and garment industry is unreasonable, mainly middle and low grade products, the proportion of high value-added products is small, self-owned brands only account for 10% of the export products, and the profit level is low.
- (3) Wenzhou textile and garment industry encountered protection measures from overseas markets. For example, the European Union implemented new rules and market protection mechanism for Chinese products, which restricted the export of Chinese garment.
- (4) Wenzhou textile and garment industry faces the pressure of vicious market competition. International famous brands have entered our market one after another, and export-oriented traditional companies are also turning to the domestic market, leading to the increase of product promotion and discounting, homogenized competition, channel construction and other behaviors.

In summary, Wenzhou textile and garment industry has certain advantages in terms of scale and export, but mainly low and medium products, lack of independent innovation and brand construction, it is difficult to adapt to multi-level, fashion, personalized consumer demand, compared with other regions, Wenzhou textile and garment industry still have greater room for improvement in the design and development ability, product innovation, brand influence and other aspects. Wenzhou textile and garment industry has some advantages in cost control and rapid response, but it also faces challenges such as labor shortage, brain drain and comprehensive cost rising[25-31]. At the same time, Wenzhou textile and garment industry is also faced with the complicated international trade environment, encountered various technical trade barriers and tariff barriers, traditional advantages of the market such as the United States, the European Union export share decline. Wenzhou textile and garment industry has certain opportunities in regional cooperation and the "Belt and Road" Initiative, but it also needs to strengthen its own capacity building and internationalization level. In 2020, China formally signed the Regional Comprehensive Economic Partnership Agreement (RCEP) with 15 countries including ASEAN, Japan, South Korea, Australia and New Zealand, providing Wenzhou's textile and garment industry with bigger market space and lower tariff preferences. At the same time, the Belt and Road Initiative has also provided the Wenzhou textile and garment industry with a platform and opportunity for global layout and production capacity cooperation. Wenzhou textile and garment industry should seize these opportunities, strengthen brand building and

innovation capacity, improve product added value and market influence, accelerate digital and intelligent transformation, improve production efficiency and quality, enhance the ability to connect with international standards and rules, expand domestic and overseas markets and channels, increase market share and coverage, and enhance competitiveness in the international market to cope with the increasingly fierce competition environment.

#### 4. ANALYSIS OF INFLUENCING FACTORS

##### 4.1 Production Cost

(1) Raw material cost: Wenzhou textile and garment industry mainly relies on imported raw materials such as cotton and chemical fiber, which prices are greatly affected by the international market supply and demand and exchange rate fluctuations. In recent years, due to the tension of the international cotton market and the appreciation of RMB, the raw material cost of Wenzhou textile and garment industry has been rising, which has compressed the profit margin of export.

(2) Labor cost: Wenzhou textile and garment industry is labor-intensive, with labor cost accounting for more than 30% of the total cost. With the development of China's economy and society, the contradiction between supply and demand in the labor market has become increasingly prominent, leading to the double pressure of difficult employment and rising wages in Wenzhou textile and garment industry.

(3) Cost of environmental protection: Wenzhou textile and garment industry in the production process will produce a large number of waste water, waste gas, waste slag and other pollutants, causing serious impact on the environment. In order to cope with the increasingly strict environmental protection requirements at home and abroad, Wenzhou textile and garment industry has to invest more capital and technology in pollution control and energy conservation and emission reduction, increasing the cost of environmental protection.

(4) Cost of trade barriers: the main export markets of Wenzhou textile and garment industry are Europe and the United States and other developed countries and regions, these countries and regions in order to protect their own industries, often take a variety of trade barriers measures, such as anti-dumping, countervailing, technical barriers, green barriers, limit the Wenzhou textile and garment industry export scale and price.

How to reduce the production cost of Wenzhou textile and garment industry:

Reduce the cost of raw materials: we can reduce the procurement cost and use cost of raw materials by optimizing procurement channels, choosing stable and reliable suppliers, reducing intermediate links, improving the utilization rate of raw materials, reducing the rejection rate and other ways[32-33].

Reduce labor costs: can improve the production process, the introduction of intelligent equipment, improve production efficiency and quality, reduce labor input and error rate; can also be through flexible employment mode, according to the production needs of reasonable arrangement of personnel, to avoid surplus or shortage.

Reduce the cost of environmental protection: by strengthening environmental awareness, promoting energy-saving and emission reduction measures, such as saving water, electricity, coal and other resources, the use of environmentally friendly materials and clean energy, reduce the emission of pollutants and treatment costs.

Reduce the cost of trade barriers: through strengthening market research, understand the needs and norms of the target market, improve the design and quality of products, in line with consumer tastes and preferences; and can also explore new markets and channels to find more favorable partners and opportunities.

##### 4.2 Industrial Concentration

(1) According to the Wenzhou Garment Industry Transformation and Promotion Work Plan 2021, Wenzhou garment industry strive to achieve the total output value of 64 billion yuan, the total output value above the scale of 28.5 billion yuan, an increase of more than 8%; On the scale of enterprises per mu tax revenue reached 550,000 yuan, per mu increased value reached more than 2.2 million yuan.

(2) According to Wenzhou Fashion Industry Development White Paper, in 2019, the industrial added value of Wenzhou fashion manufacturing industry above scale was 11.559 billion yuan, accounting for 9.23% of the province's industrial added value of fashion manufacturing industry above scale, with a year-on-year growth of 6.6% and 2.4 percentage points higher than the provincial average level.

(3) According to 2021 China Textile and Garment Industry Chain Status and Regional Market Pattern Analysis, Jiangsu and Zhejiang region is an important gathering place of China's textile and garment industry, with a complete industrial chain and dominant brands, among which Wenzhou fashion light industry cluster represented by shoe leather, glasses and clothing has a high market share and brand influence.

(4) According to the Research on the Distribution and Development Trend of Domestic Textile Industry! Zhejiang, Shandong, Hebei, Guangdong, Jiangsu, Fujian are the most concentrated areas of textile and garment industry in China. These areas have advantages in foreign trade, industrial base, talent attraction and so on. Followed by Hubei, Hunan, Jiangxi, these areas also gradually formed the textile industry cluster, mainly benefit from the coastal area industry gradually spillover, plus these areas developed transportation, the labor cost is relatively low, the textile industry has been a certain development[34-36]; Northeast, Xinjiang distribution of a small number of industrial clusters, mainly driven by the local special market demand and characteristic resources (for example, Liaoning Kangping knitting products as a feature, supply food, feed, chemical enterprises in the northeast; Xinjiang relies on cotton, wool and ethnic handicrafts to support the development of textile industry). However, due to the lack of complete industrial chain

supporting conditions, relatively backward urban infrastructure conditions, location and transportation disadvantages, it is still not attractive to textile enterprises and talents in coastal provinces, which hinders the further development of textile industry in these areas.

(5) According to Zhejiang Garment Industry Market Status and Competition Pattern Analysis in 2022 to build a world-class modern textile and garment industry base, from the proportion of Zhejiang garment industry revenue in the national garment industry revenue, 2016-2020, the proportion of Zhejiang's garment industry revenue in the national garment industry revenue showed an increasing trend. In 2020, the proportion of the garment industry in Zhejiang Province was 13.83%, a slight increase compared with 2019 and an increase of nearly 4 percentage points compared with 2016. The status of the garment industry in Zhejiang Province has gradually risen in the country. Leading enterprises such as Sema, Youngor and Taiping Bird gather in Zhejiang, among which, Sema, Taiping Bird and Annunciation Bird belong to Wenzhou.

(6) According to the Economic Operation Report of China's Textile Industry. In 2020, the business revenue of garment enterprises above scale in China in 2020 was 1,369.73 billion yuan. Among the A-share listed garment enterprises in 2020 represented by Heilan Home, Senma Apparel, Youngor and other enterprises, the top ten enterprises accounted for only 5.59% of the total revenue. In terms of the market shares of the top 10 Ashare listed companies in China's garment industry in 2020, the number one Heilan Home accounted for only 1.31%; Sema Clothing ranked the second with 1.11%; In third place was Youngor with just 0.84 percent. In 2020, the CR3, CR5 and CR10 of China's garment industry were 3.26 percent, 4.29 percent and 5.59 percent. Overall, the market concentration of China's garment industry is low and the competition is fierce.

How to improve the industrial concentration in Wenzhou:

Strengthen collaborative innovation of industrial chain, support the construction of provincial (key) laboratory, provincial technology innovation center and provincial industrial innovation service synthesis in the field of modern textile, organize and implement a number of key industrialization projects, such as key scientific and technological breakthroughs, collaborative innovation of industrial chain and transformation of production and manufacturing mode.

Enhance creative design capabilities, strengthen the construction of various design platforms such as national textile and garment creative design pilot parks (platforms), and gather high-end design resources.

We will deepen the cultivation of enterprises, carry out the reform of cultivating highquality enterprises on a gradient basis, improve the cultivation and growth mechanism of highquality enterprises, and establish a pattern of integrated development of large, small and medium-sized enterprises.

To accelerate the transformation of industrial digitalization with digital reform as the traction, actively promote the construction of industrial brain in the textile and garment field, and encourage the exploration of the application of digital reform scenarios in the textile and garment field[37].

To build a world-class modern textile and garment industry base, and build a world-class advanced garment manufacturing cluster.

### 4.3 Domestic and Foreign Policies

In terms of domestic policies, China's textile and garment industry has benefited from the opening up of the international market and the country's stable foreign trade policy after joining the WTO, and has achieved rapid development, the scale and structure of exports have been optimized continuously, and the international influence of brands has been enhanced day by day. At the same time, a series of plans and measures have been introduced to adjust and revitalize the textile and garment industry, such as support enterprises' transformation and upgrading, innovative development, expanding domestic demand and improving quality and efficiency and so on. Wenzhou, as an important garment production base and export region in China, has also actively responded to national policies by increasing investment in technological innovation and brand building, strengthening industrial chain coordination and supporting services, increasing investment in talent training and introduction, and improving the added value and competitiveness of garment exports.

In terms of international policy, China's textile and garment export is affected by multiple factors such as international market demand, overseas supply chain competition, economic and trade friction. In recent years, due to the impact of the novel coronavirus pandemic, the global economic recovery has been slow and tortuous, and uncertainties and destabilizing factors have emerged. The consumer price index in major markets such as the US and Europe continues to rise, and consumer demand is clearly peaking. The drop in shipping costs and the depreciation of the exchange rate have eased the pressure on some companies, but competition in overseas supply chains remains fierce. The impact of China-US economic and trade frictions has become more pronounced[38]. Trade barriers, marked by the "Xinjiang-related Bill", have increased, and export companies are facing more uncontrollable factors.

The specific documents include:

(1) Policies at the national level:

The 14th Five-Year Development Plan for Textile Industry puts forward the goals and tasks for high-quality development of textile industry, including improving innovation ability, optimizing industrial structure, enhancing brand value, strengthening green development, expanding domestic and foreign markets, promoting coordinated regional development, etc.

Opinions on Further stabilizing foreign trade puts forward measures to stabilize the basic foreign trade, optimize the foreign trade structure, improve the level of foreign trade, promote the transformation and upgrading of foreign trade,

including supporting enterprises to explore diversified markets, strengthening international production capacity cooperation, promoting the development of cross-border e-commerce and other new business forms, increasing financial support, improving the export tax rebate policy.

(2) Policies of Wenzhou:

Action Plan for Transformation and Upgrading of Textile and Garment Industry of Wenzhou (2020-2022) puts forward aims and measures for transformation and upgrading of textile and garment industry of Wenzhou, including accelerating the construction of an international fashion city, building an international well-known brand cluster, cultivating high-end fashion industry cluster, promoting digital and intelligent transformation, strengthening the construction of talent team, etc.

Implementation Opinions of Wenzhou on Further stabilizing Foreign Trade puts forward specific measures for stabilizing foreign trade development of Wenzhou, including supporting enterprises to participate in the formulation of international standards, strengthening intellectual property protection and rights protection ability, encouraging enterprises to carry out cross-border e-commerce and cross-border service trade, expanding the coverage of export credit insurance, simplifying export tax rebate procedures, etc.

(3) Foreign Policies:

US policy: The United States is the second largest market for China's textile and garment exports, accounting for about 16% of the total. US policies have a significant impact on our textile and garment exports. In recent years, the US government has taken a series of trade protectionist measures, which have caused a negative impact on our textile and garment exports. For example, the US government has imposed additional tariffs of 10- 25% on some Chinese textiles and garments since 2018, resulting in a decline in the competitiveness of Chinese textiles and garments in the US market and a decline in both export volume and value. In 2020, China's textile and garment exports to the US market were only 38.29 billion dollars, down 18.5 percent year on year. In addition, under the pretext of Xinjiang-related issues, the US government has imposed embargoes, sanctions and other measures on some Chinese textile and garment exports, bringing unpredictable risks to our textile and garment exports[39].

EU policy: The EU is the largest market for China's textile and garment exports, accounting for about 20% of China's total textile and garment exports. EU policy has an important impact on our textile and garment exports. In recent years, EU policies have both advantages and disadvantages for our textile and garment exports. On the one hand, the EU and China signed the Agreement on Geographical Indications, which protects the geographical indication products of both sides, including some textile and garment products, and provides legal guarantee and market advantages for the export of Chinese textile and garment to the EU market. On the other hand, the EU has also strengthened the technical trade barriers to the export of Chinese textiles and garment, such as environmental, social, human rights and other requirements, increasing the cost and difficulty of the export of Chinese textiles and garment.

Japanese policy: Japan is the third largest market for our textile and garment exports, accounting for about 7% of our total textile and garment exports. Japanese policy has an important impact on our textile and garment exports. In recent years, Japanese policies have both advantages and disadvantages for our textile and garment exports. On the one hand, Japan has signed the Regional Comprehensive Economic Partnership Agreement (RCEP) with China, which has removed or reduced tariff and non-tariff barriers for some textile and garment products, providing convenient conditions for Chinese textile and garment exports to the Japanese market. On the other hand, Japan has also strengthened supervision and inspection of the quality, safety and labeling of Chinese textile and garment exports, and raised the entry threshold of Chinese textile and garment exports.

To sum up, Wenzhou textile and garment industry export is affected by both domestic and foreign policies, both positive factors and challenging factors. Wenzhou textile and garment industry should respond flexibly, seize opportunities and defuse risks according to the changing situation.

## **5. SUGGESTIONS ON IMPROVING THE EXPORT COMPETITIVENESS OF WENZHOU TEXTILE AND GARMENT INDUSTRY**

According to the above analysis, put forward the corresponding suggestions, so as to better improve the export competitiveness of Wenzhou textile and garment industry.

### **5.1 Accelerate the Digital Transformation, Improve the Level of Intelligence**

Wenzhou textile and garment industry is faced with labor shortage, brain drain, comprehensive cost rising and other problems. With the help of government support platforms and service organizations, relevant enterprises in Wenzhou have introduced advanced intelligent production lines and key technologies to realize the interconnection between the upstream and downstream of the industrial chain and reduce the burden of technology investment on small and medium-sized enterprises. At the same time, big data, cloud computing, artificial intelligence and other technical means are used to realize the digital management and intelligent optimization of the whole process of clothing design, production, sales, logistics and so on, improve production efficiency and product quality, reduce production costs.

### **5.2 Strengthen Brand Building and Promotion to Increase Added Value**

The textile and garment industry in Wenzhou has some problems, such as unreasonable product structure, mainly middle and low grade products, low proportion of high value-added products, lack of independent innovation and brand



construction. At the same time, there is also the pressure of vicious competition in the market and fierce homogenization competition. Wenzhou textile and garment enterprises should pay attention to these problems and try to solve them. First of all, enterprises can actively participate in international brand exhibitions and trade fairs to show the fashion style and creative characteristics of Wenzhou textile and garment, expand export channels and international communication channels, and improve the international competitiveness of products. Secondly, it is necessary to strengthen the cooperation and exchange with international famous brands, learn from advanced management experience and marketing strategies, enhance the core competitiveness of Wenzhou textile and garment brands, Finally, it is necessary to cultivate a batch of garment brands with international influence, create a batch of garment products with characteristics and advantages, improve the visibility and reputation of Wenzhou textile and garment industry in the international market, and increase the added value and premium ability of products.

### **5.3 Strengthen the Construction of Industrial Agglomeration and Innovation Platform, Enhance the Innovation Ability and Cluster Effect**

Wenzhou textile and garment industry has a good industrial foundation and a good reputation in the industry, but after years of development, it has not been able to form a strong brand cluster. Enterprises in Wenzhou should rely on G104 fashion corridor and other iconic platforms to build fashion industry clusters focusing on design and intelligent manufacturing, cultivate a number of chain master enterprises and leading enterprises, to form a spatial layout with roads as the axis, thriving cities with industries and driving industries with cities. At the same time, strengthen the cooperation alliance with colleges and universities, scientific research institutions, design teams, etc., to build public services for fashion industry design.

### **5.4 Strengthen International Cooperation and Market Development, Increase International Influence and Market Share**

Wenzhou textile and garment industry is also faced with the complicated international trade environment, encountered a variety of technical trade barriers and tariff barriers, traditional advantages of the market such as the United States, the EU export share decline. Relevant enterprises should make good use of Wenzhou business network and cross-border e-commerce platforms to explore and expand emerging markets. Moreover, they should actively participate in the construction of "One Belt and One Road", deepen the economic and trade exchanges with countries and regions along the routes, expand the export market and channels of Wenzhou textile and garment industry. At the same time, strengthen the communication with international organizations, industry associations, standards bodies, etc., understand the international market demand changes and rules constraints, improve the level of international standardization and adaptability of Wenzhou textile and garment industry.

### **5.5 Strengthen Policy Support and Service Guarantee, Improve the Development Environment and Conditions**

Improve relevant laws, regulations and industry standards, protect the intellectual property rights and brand rights of Wenzhou textile and garment industry, crack down on counterfeit and shoddy products and unfair competition. At the same time, increase the financial, tax, finance, talent and other aspects of support, to provide Wenzhou textile and garment enterprises with preferential policy environment and service guarantee. At the same time, pay close attention to domestic and foreign policy changes, timely deal with trade frictions, risks and challenges, to ensure the stability and sustainability of Wenzhou textile and garment industry export

## **6. CONCLUSION**

As the capital of China's private economy, Wenzhou boasts fashion light industry clusters represented by garment, shoe leather and eyeglasses, and is a world-class modern textile and clothing industry base. This paper studies the export competitiveness of Wenzhou textile and garment industry from three aspects, namely, export status, export competitiveness and influencing factors.

First, Wenzhou textile and garment industry export scale is large, trade modes are diverse, export market is wide. In 2019, the export value of Wenzhou textile and garment industry reached 11.744 billion yuan, accounting for 1.7% of the total value of national garment export, with an annual growth rate of 6.75%. The textile and garment industry in Wenzhou adopts general trade, processing trade, cross-border e-commerce and other trade modes. The export products cover many sub-categories such as men's, women's and children's wear. The export market of Wenzhou textile and garment industry covers more than 100 countries and regions such as the European Union, the United States, ASEAN, the Middle East, among which the market share of countries along the "Belt and Road" has been increasing.

Second, Wenzhou textile and garment industry export competitiveness is strong, compared with other regions have a certain advantage. According to the competitiveness index system adopted in this paper, including market share, export growth rate priority index, explicit comparative advantage index, trade competition index and so on, Wenzhou textile and garment industry has a higher level of competitiveness in the national garment export. The competitive advantages of Wenzhou textile and garment industry are mainly reflected in the following aspects: first, it has a complete industrial chain and supporting services, which can meet the needs of different customers; Second, Wenzhou textile and garment industry has high quality industrial advantages, constantly optimize the industrial structure, improve the quality of

supply, effectively enhance the competitiveness of the industry[40]. Third, Wenzhou has a wide range of business network and brand influence, can develop and maintain overseas markets; Fourth, it has flexible production mode and trade mode, which can adapt to market changes and policy adjustments.

Third, Wenzhou textile and garment industry export is affected by a variety of factors, among which production cost, industrial concentration, domestic and foreign policies are the main influencing factors. Based on the analysis of these factors, the following conclusions are drawn:

(1) Production cost is an important factor affecting the export of Wenzhou textile and garment industry. Labor cost, raw material cost and environmental protection cost have a significant negative impact on the export, while equipment input and technological innovation have a significant positive impact on the export. Therefore, Wenzhou textile and garment industry should reduce unnecessary costs and expenses, improve production efficiency and quality, strengthen equipment renewal and technological transformation, to enhance the added value and competitiveness of products.

(2) Industrial concentration is an important factor affecting the export of Wenzhou textile and garment industry. The higher the concentration, the more exports. Wenzhou textile and garment industry should take advantage of scale effect and specialization, form industrial cluster and brand effect, improve market share and bargaining power. At the same time, it is necessary to strengthen industrial cooperation and joint, promote industrial agglomeration and upgrading, and build distinctive advantages and regional brands.

(3) Domestic and foreign policies are important factors affecting the export of Wenzhou textile and garment industry. Domestic policies have a significant positive impact on the export, while foreign policies have a significant negative impact on the export. This shows that Wenzhou textile and garment industry benefits from domestic government support and encouragement, such as export tax rebate, trade facilitation, market access and other policies and measures, but at the same time, it also faces various foreign market trade barriers and restrictions, such as anti-dumping, green barriers, rules of origin and other policies and measures. Therefore, Wenzhou textile and garment industry should actively take advantage of domestic policy advantages, strive for more policy support and resource allocation, but also should actively respond to foreign policy challenges, enhance international cooperation and communication, safeguard their own legitimate rights and interests and market share.

To sum up, the export competitiveness of Wenzhou textile and garment industry has a good status, with a number of advantages and opportunities, but also faced with a number of crises and challenges. In the future, the industry needs to constantly iterate and upgrade, improve the quality of supply, expand market channels, in order to maintain and improve market competitiveness, towards a broader industrial road.

## COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

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