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Original Paper

A Comparative Study on the Trade Structure between China and Major Spanish American Countries

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Abstract

As one of the largest emerging economies in the world, the Latin American region is also a region with high global strategic value. The trade between 19 Spanish American countries and China has a significant impact on economic and trade cooperation between China and Latin America. This article is based on the perspective of trade commodity structure, analyzing trade data between China and Spanish American countries in recent years, comparing and studying the import and export commodity structure between China and three major Spanish American countries: Mexico, Chile, and Peru, and analyzing the changes. Finally, in response to the issues identified in the study, some suggestions are proposed for trade exchanges between China and Spanish American countries, with the hope of providing reference for optimizing the trade commodity structure between China and Spanish American countries and for enterprises to further develop the Latin American market.

Keywords

Spanish America, trade in goods, commodity structure, trade cooperation

1. Introduction

As one of the largest emerging economies in the world, Latin America mainly includes 33 countries such as Brazil, Mexico, Argentina, Chile, Colombia, Peru, etc. According to World Bank statistics, the total GDP of Latin America in 2022 reached $6323.15 billion, ranking fourth among the world economies. As of 2022, the total population of Latin America has reached 650 million, accounting for 8.3% of the world's total population, with Brazil and Mexico both having populations exceeding 100 million. The Latin American region has become a region with high global strategic value due to its unique geographical location, vast territory, abundant resource endowment, high level of economic development, and activity in global and regional governance.

Latin America is also an extension of China's "The Belt and Road" Initiative. As a country with global influence, China has increasingly close cooperation with Latin America. Since 2010, China and Latin America have had close cooperation in economy and increased political mutual trust, with cooperation fields deepening and diversifying from trade, investment to finance. Since 2012, China has maintained its position as the second largest trading partner in Latin America. During the epidemic prevention and control period, China-Latin America economic cooperation demonstrated resilience. The total trade

volume between China and Latin America exceeded 450 billion US dollars for the first time in 2021, reaching a new high of 485.79 billion US dollars in 2022, an increase of over 7% compared to 2021.

Spanish America refers to 19 countries and regions that speak Spanish in the Americas, including Mexico, Cuba, Dominican Republic, Puerto Rico, Guatemala, Honduras, Nicaragua, El Salvador, Costa Rica, Panama, Colombia, Venezuela, Ecuador, Peru, Bolivia, Chile, Uruguay, Paraguay, and Argentina.

According to World Bank data, in 2022, the total GDP of Spanish American countries and regions (hereinafter referred to as Spanish American countries) was 4306.962 billion US dollars, accounting for 68.11% of the total GDP of Latin America. The trade between Spanish American countries and China has a significant impact on the economy and trade cooperation between China and Latin America. Therefore, the paper analyzes and compares the trade structure between China and major Spanish American Countries, and proposes relevant countermeasures and suggestions, which has important practical significance for China to achieve high-level opening-up and strengthen trade cooperation with Latin American countries.

2. Literature Review

The relevant research on trade between China and Spanish American countries is mainly reflected in two aspects: firstly, analyzing the overall investment and trade relationship between China and Latin America, which involves analyzing the trade of Spanish American countries. For example, Zhao Guohua and Zhao Ziwei (2022) analyzed the technical structure of China's export of manufactured goods to some Spanish American countries when studying the factors affecting China's export trade to Latin American countries; Lv Hongfen et al. (2022) empirically studied the trade effects of China's direct investment in seven Latin American countries from 2005 to 2019, including Brazil, Mexico, Chile, Peru, Argentina, Colombia, and Venezuela; Kong Shuai et al. (2019) studied the export performance and specialized division of labor patterns of China and Latin America in the world market and the US market, and found that except for Mexico, the trade structures of China and Latin America are highly complementary and competitive. When Zhou Chong and Zhou Dongyang (2019) studied the trade potential between China and Latin American countries in the context of "The Belt and Road Initiative", they involved the analysis of trade volume and trade structure of some Spanish American countries, such as Mexico, Chile, Peru, and divided them into different types of trade potential. The second is to conduct research on the trade between China and a Spanish American country. For example, Li Ziying (2017) studied the export structure of China and Mexico, pointing out that the complementarity of China Mexico's export structure is weak, the competitiveness of export products is fierce, and the Mexican trade deficit is too large; He Yangyang (2021) analyzed the impact of the upgraded protocol of the China Chile Free Trade Agreement on the economic and trade development of the two countries by studying the characteristics of the upgraded protocol; Zhao Lifang (2017) analyzed the current situation, advantages and disadvantages of trade development between China and Peru, and proposed strategies for upgrading and developing the China Peru Free Trade Agreement in the new era; Yan Shigang (2017) believes that the bilateral trade structure between China and Colombia has strong complementarity based on trade integration and trade complementarity index research, but there is still room for further improvement in trade integration.

Research on the trade structure between China and different countries and regions is mostly conducted from the entire region. For example, Lu Zheng et al. (2021) studied the impact of the China Europe train on the trade structure between China and Central and Eastern European countries, Li Lin et al. (2022) analyzed and studied the trade structure of agricultural products between China and the regions along the "21st Century Maritime Silk Road" Liu Wei and Liu Chenxi (2021) studied the trade structure complementarity between China and Southeast Asian countries from the perspective of "The Belt and Road". There are also studies on the trade structure between China and a specific country, such as the bilateral trade structure and potential between China and Iran (Ren Mengru et al., 2019), and the trade structure and characteristic potential between China and Canada (Yuan Xiangzhou et al., 2015).

From the above review, it can be seen that there is relatively little analysis of the trade structure between China and certain regions and countries with certain characteristics, such as the trade structure between China and Spanish American countries. Some scholars have mentioned that the trade structure between China and Latin America is relatively single (Lin Binbin, 2021), but it is relatively general. Therefore, this article adopts a data comparison method to analyze the trade commodity structure between China and major Spanish American countries, in order to provide relevant suggestions for promoting further economic and trade development.

3. Overall Trade Situation between China and Spanish American Countries and Regions

3.1 Overall Situation of Trade between China and Spanish America in the Past 5 Years

3.1.1 Total Bilateral Trade Volume

Figure 1 shows the overall trade situation between China and Spanish America from 2018 to 2022. From Figure 1, it can be seen that from 2018 to 2022, the trade between China and Spanish America showed an overall annual growth trend, with the largest increase reaching 43.41% in 2021, except for a slight decline in 2020.

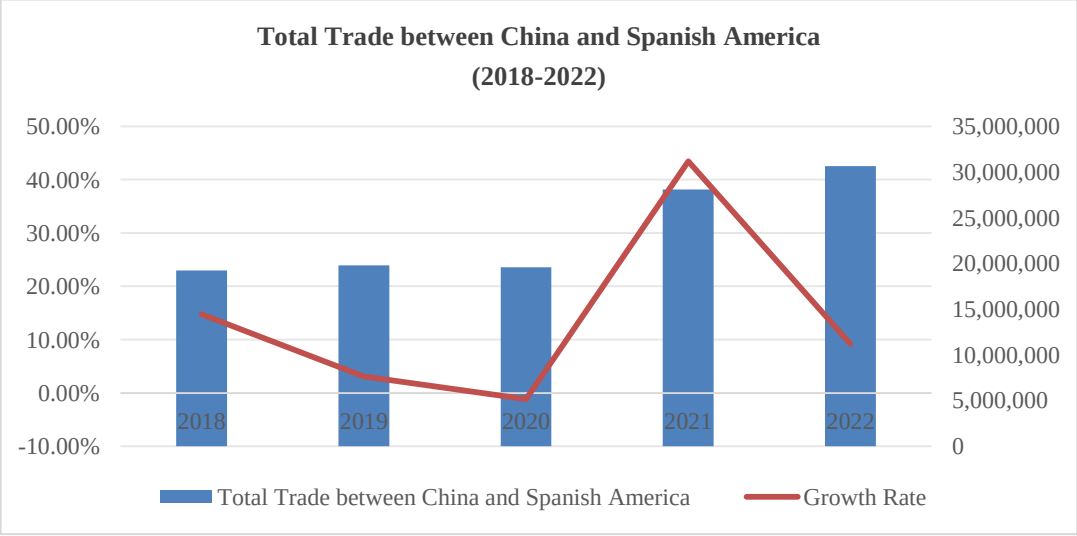

Figure 1. Total Trade and Growth Rate between China and Spanish America from 2018 to 2022 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

3.1.2 The Total Import and Export Volume between China and Spanish America in the Past 5 Years

Figure 2 shows the total import and export volume between China and Spanish America from 2018 to 2022. It can be seen that from 2018 to 2022, except for a slight decline in 2020, China's imports from and exports to the Spanish America showed an overall trend of increasing year by year. Among them, the growth rate was the highest in 2021, with import growth reaching 33.83% and export growth reaching 50.47%.

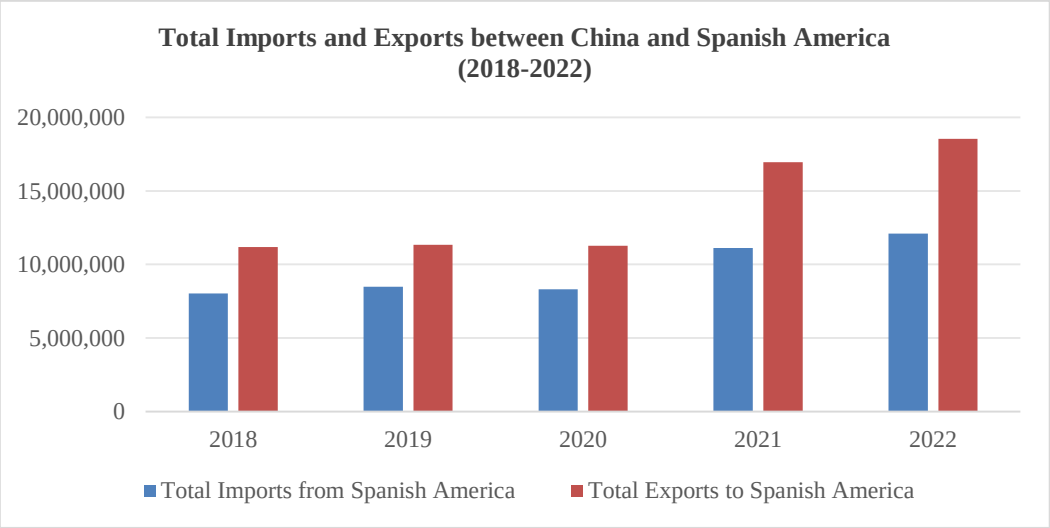

Figure 2. Total Imports and Exports between China and Spanish America from 2018 to 2022 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

3.2 Situation of Trade Countries and Regions between China and Spanish America in the Last 5 Years

3.2.1 Total Trade Volume by Country and Region

Figure 3 shows the bilateral trade situation between China and 19 countries and regions in Spanish America from 2018 to 2022. It can be seen that from 2018 to 2022, China had the largest trade volume with Mexico, Chile, and Peru. Except for a few years, China's import and export trade volume with these three countries has maintained a growth trend. In 2022, China's import and export trade volume with these three countries was $94713.49 million, $66866.47 million, and $37571.34 million, respectively. The import and export trade volume between China and these three countries accounts for 64.97% of the total import and export trade volume between China and the Spanish America.

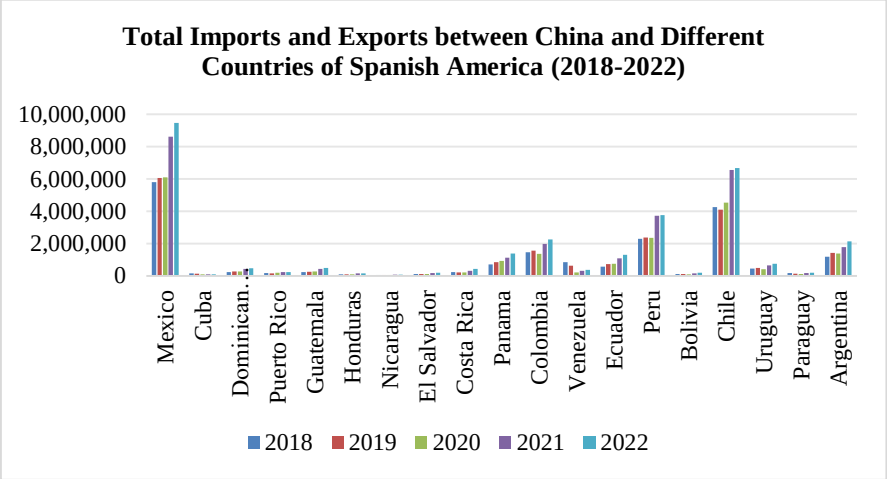

Figure 3. Total Imports and Exports between China and Different Countries of Spanish America from 2018 to 2022 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

3.2.2 Country and Region Situation of China's Imports from Spanish America

Figure 4 shows the import of China from 19 countries and regions in Spanish America from 2018 to 2022. It can be seen that from 2018 to 2022, China imported the largest trade volume from Chile, Peru, and Mexico. In 2022, China's imports from Chile, Peru, and Mexico were $44433.34 million, $24121.88 million, and $17433.75 million, respectively. The trade volume imported by China from these three countries accounts for 71.02% of China's total imports from Spanish America. Except for a few years, China's import trade volume from these three countries has shown an increasing trend year by year.

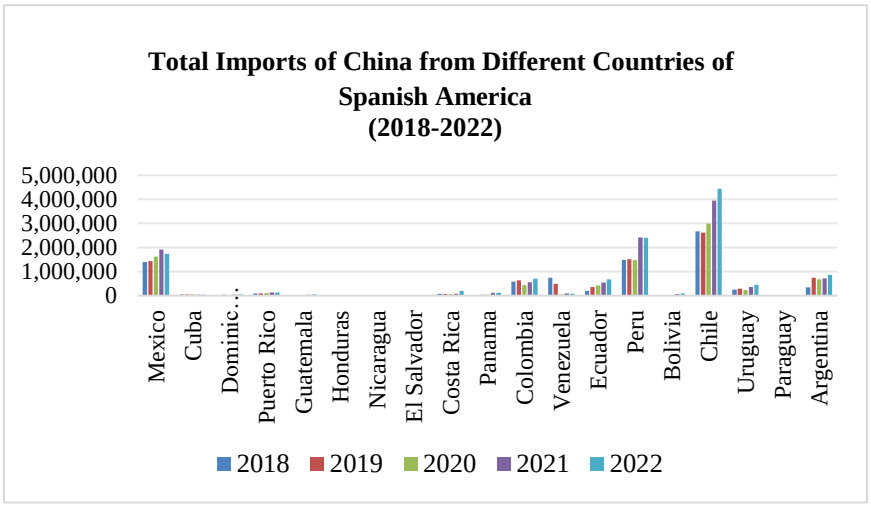

Figure 4. Total Imports of China from Different Countries of Spanish America from 2018 to 2022 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

3.2.3 Country and Region Situation of China's Exports to Spanish America

Figure 5 shows the situation of China's exports to 19 countries and regions in Spanish America from 2018 to 2022. As shown in Figure 5, from 2018 to 2022, China exported the largest amount of goods to Mexico, Chile, Colombia, and Peru. In 2022, the trade volume of China's exports to these four countries was 77279.74 million US dollars, 22433.13 million US dollars, 15540.58 million US dollars, and 13449.45 million US dollars, respectively. The trade volume of China's exports to these four countries accounts for 69.4% of China's total exports to the Spanish America.

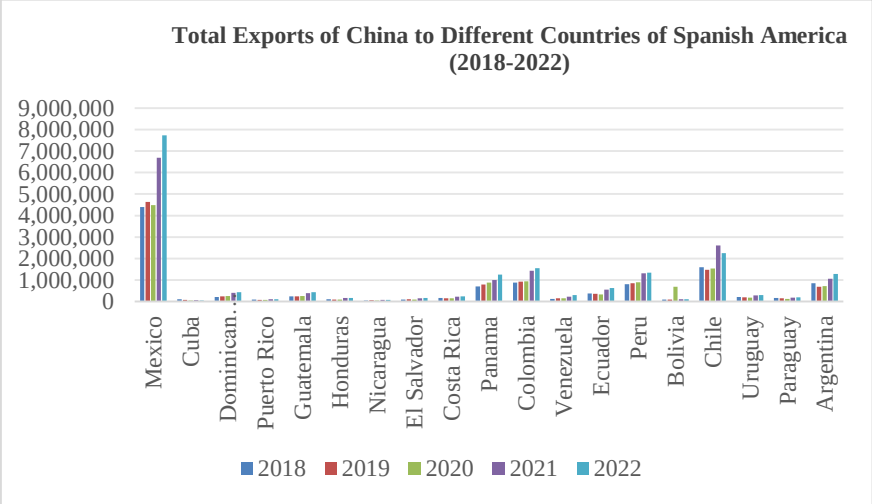

Figure 5. Total Exports of China to Different Countries of Spanish America from 2018 to 2022 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

4. Trade Structure between China and Major Spanish American Countries

From the previous analysis, it can be seen that Mexico, Chile, and Peru are the top three countries in the total trade volume of goods with China among the Spanish American countries (regions). Next, the paper will analyze the trade commodity structure between China and these three countries.

4.1 Trade Commodity Structure between China and Mexico

Mexico is a major economy in Latin America and a member of the US Mexico Canada Agreement (formerly the North American Free Trade Area). It is one of the most open economies in the world and has signed free trade agreements with 52 countries. The industrial categories are complete, and the petrochemical, power, mining, metallurgy, and manufacturing industries are relatively developed. According to statistics, the GDP in 2022 is 1.4 trillion US dollars, with a per capita GDP of 11000 US dollars [source: official website of the Chinese Ministry of Foreign Affairs]. China established diplomatic relations with Mexico in February 1972, and in June 2013, the relationship between the two countries was upgraded to a comprehensive strategic partnership. At present, China is Mexico's second largest global trading partner, and Mexico is China's second largest trading partner in Latin America.

From Figure 3 above, it can be seen that the bilateral trade between China and Mexico was relatively stable from 2018 to 2020, with only a slight decline in 2020. After 2020, it showed a significant upward trend, especially in 2021, where there was a significant growth, and China's exports have

always been higher than imports. But overall, the bilateral trade volume between China and Mexico accounts for a very low proportion compared to China's overall foreign trade volume. In addition, Chinese customs data shows that in 2022, the total import and export volume of trade goods between China and Mexico increased by 10% compared to 2021, with a significant decrease in growth rate. Among them, the total amount of goods imported by China from Mexico decreased by 8.91%; the total amount of goods exported from China to Mexico increased by 15.41%. From a data perspective, the trade volume of China's imports from Mexico has decreased, but the trade volume of China's exports to Mexico has increased, and China's trade with Mexico has remained in a surplus since 2015. The following is an analysis of the commodity composition of trade between China and Mexico in the past 5 years.

4.1.1 Total Trade Commodity Structure between China and Mexico

Figure 6 shows the structure of trade goods between China and Mexico from 2018 to 2022. As shown in Figure 6, the goods traded between China and Mexico from 2018 to 2022 were mainly concentrated in the following nine categories: the fifth category of mineral products, the sixth category of chemical products, the seventh category of plastics and rubber and their products, the eleventh category of textiles and textile articles, the fifteenth category of base metals and their products, the sixteenth category of machinery and mechanical appliances, the seventeenth category of transportation equipment, the eighteenth category of optical and medical instrument products, and the twentieth category of miscellaneous manufactured products. According to Chinese customs data, the proportion of machinery and mechanical appliances is extremely high, at about 45%, and the trade volume is still increasing year by year, with a particularly significant growth rate in 2021. Compared with the machinery category, the trade volume of the other eight categories of products is not significantly different and is basically on the rise year by year. Only the trade volume of the fifth and eighteenth categories has decreased in 2022.

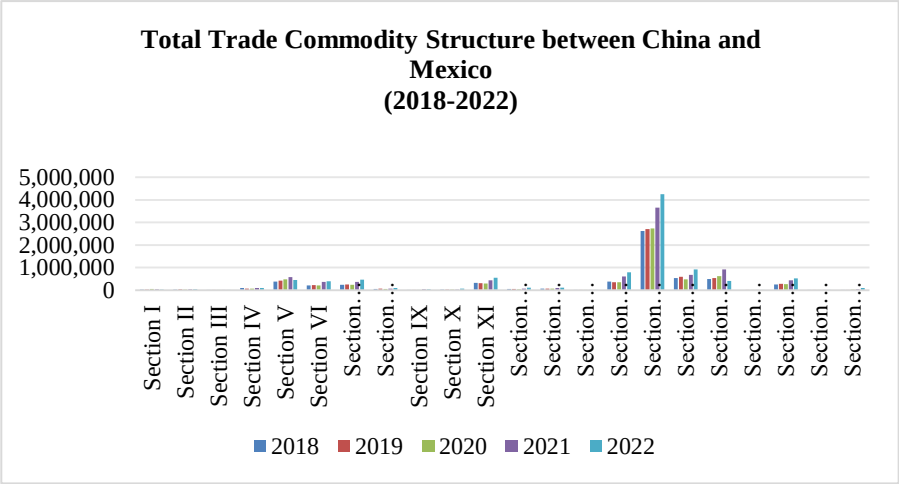

Figure 6. Total Trade Commodity Structure between China and Mexico from 2018 to 2022 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

4.1.2 The Import Structure of China from Mexico

Figure 7 shows the structure of China's imported trade goods from Mexico from 2018 to 2022. As shown in Figure 7, from 2018 to 2022, the top five categories of goods imported by China from Mexico were: Section 5 mineral products, Section 15 base metals and their products, Section 16 machinery and mechanical appliances, Section 17 transportation equipment, and Section 18 optical and medical instrument products. According to Chinese customs data, the above five categories of products account for about 90% of China's total import trade from Mexico. The top two with a relatively high proportion are machinery and mineral products, accounting for about 40% and 20% respectively. The other three categories showed a growth trend before 2021, and the growth rate was significant in 2021. In 2022, except for slight growth in the 18th and 15th categories, the import volume of other products has decreased, especially in the mineral category, with the largest decrease of 29.75%.

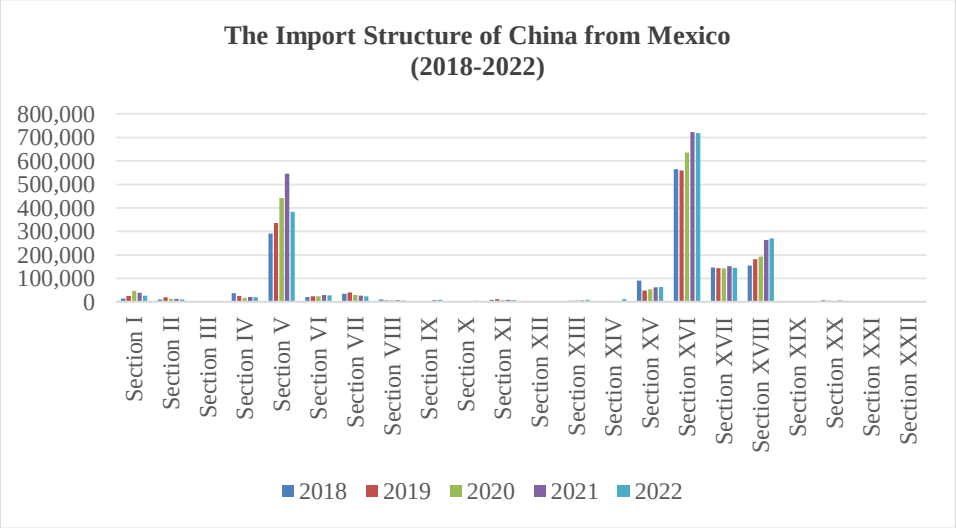

Figure 7. The Import Structure of China from Mexico from 2018 to 2022 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

4.1.3 The Export Structure of China to Mexico

Figure 8 shows the structure of trade goods exported by China to Mexico from 2018 to 2022. As shown in Figure 8, the top eight categories of goods exported from China to Mexico are: Section 6 chemical products, Section 7 plastic and rubber products, Section 11 textiles and textile articles, Section 15 base metals and their products, Section 16 machinery and mechanical appliances, Section 17 transportation equipment, Section 18 optical and medical instrument products, and Section 20 miscellaneous manufactured products. According to Chinese customs data, the exports of the above eight categories of goods account for over 90% of China's total export trade to Mexico, with machinery accounting for the highest proportion, accounting for over 40%, and there has been significant growth in the past two years. Except for the 18th category, which saw a significant decline in export volume in 2022, with a decrease of up to 79.23%, the growth trend of the other six categories of products is similar to that of the machinery category, with the largest increase being in the transportation equipment category, which is about 46%.

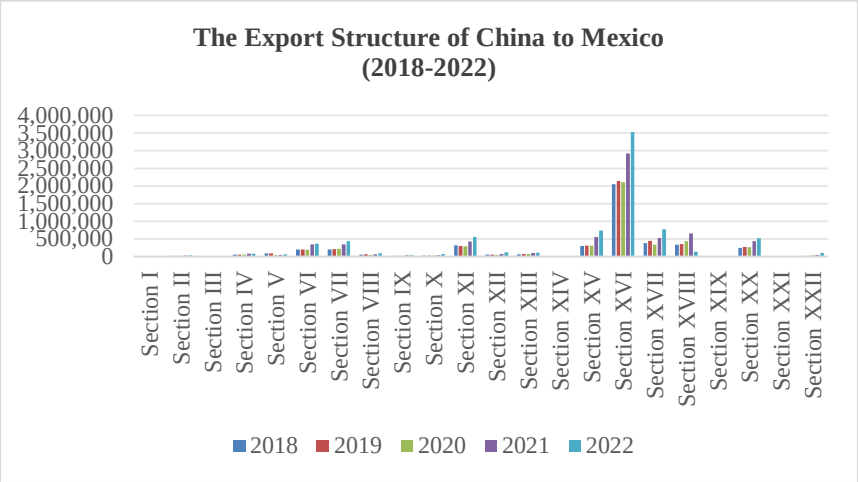

Figure 8. The Export Structure of China to Mexico from 2018 to 2022 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

4.2 Trade Commodity Structure between China and Chile

Chile is one of the more developed countries in Latin America, with mining, forestry, fisheries, and agriculture as the four pillars of the national economy. Chile's economy has maintained rapid growth for many years, with its comprehensive competitiveness, degree of economy's liberalization, market openness, and international credit rating ranking first in Latin America, and is considered a model for Latin American economic development. According to statistics, Chile's GDP in 2022 was 301.4 billion US dollars, with a per capita GDP of 15600 US dollars [source: official website of the Chinese Ministry of Foreign Affairs].

China and Chile established diplomatic relations in December 1970 and upgraded their relationship to a comprehensive strategic partnership in November 2016. At present, China is Chile's largest trading partner, export destination, and import source country in the world, and Chile is China's third largest trading partner in Latin America.

From Figure 3 above, it can be seen that the bilateral trade between China and Chile has shown an overall upward trend, with only a slight decline in 2019. Especially in 2021, the increase was significant, with imports consistently exceeding exports. But overall, the bilateral trade volume between China and Chile accounts for a very low proportion compared to China's overall foreign trade volume. In addition, Chinese customs data shows that the total import and export volume of trade goods between China and Chile increased by 2.05% compared to2021, with a relatively small increase. Among them, the total amount of goods imported by China from Chile increased by 12.5%; the total amount of goods exported from China to Chile decreased by 13.81%. From a data perspective, the trade volume of China's imports from Chile has increased, but the trade volume of China's exports to Chile has decreased, and China's trade with Chile has remained in deficit since 2015. The following is an analysis of the commodity composition of trade between China and Chile in the past 5 years.

4.2.1 Total Trade Commodity Structure between China and Chile

Figure 9 shows the structure of trade goods between China and Chile from 2018 to 2022. As shown in Figure 9, the goods traded between China and Chile from 2018 to 2022 were mainly concentrated in the following nine categories: second category vegetable products, fifth category mineral products, sixth category chemical products, tenth category wood pulp and paper products, eleventh category textiles and textile articles, fifteenth category base metals and their products, sixteenth category machinery and mechanical appliances, seventeenth category transportation equipment, and twentieth category miscellaneous manufactured products. According to Chinese customs data, the top three products in terms of proportion are mineral products, base metals and their products, and machinery products, accounting for approximately 60% of the total trade volume between China and Chile. Although the proportion of chemical products and transportation equipment is not significant, there has been significant growth in the past two years: chemical products have increased by about 2.6 times compared to the same period in 2022, and transportation equipment has increased by about 1.8 times compared to the same period in 2021. The above nine types of products have shown a basic growth trend, except for a few years where the trade volume has decreased.

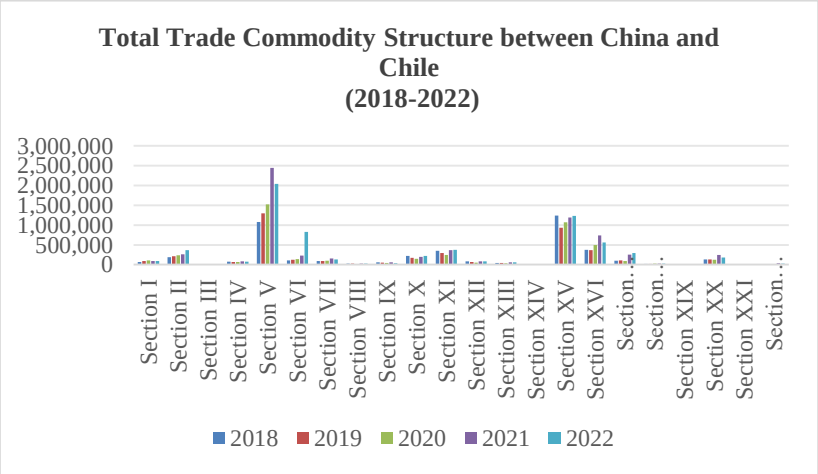

Figure 9. Total Trade Commodity Structure between China and Chile from 2018 to 2022 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

4.2.2 The Import Structure of China from Chile

Figure 10 shows the structure of China's imported trade goods from Chile from 2018 to 2022. Figure 10 shows that the top six categories of goods imported by China from Chile from 2018 to 2022 are: first category animal products, second category vegetable products, fifth category mineral products, sixth category chemical products, tenth category wood pulp and paper products, and fifteenth category base metals and their products. According to Chinese customs data, the top two categories with the highest proportion are mineral products and base metals and their products. The total proportion of these two categories is close to 70% and 80% of the total import value, with mineral products accounting for between 40% and 61% of the total import value. From 2018 to 2021, the import volume of mineral products steadily increased for four consecutive years, especially with a significant increase

in 2021 and a decrease of about 16% in 2022. The import volume of base metals and their products reached its highest level in 2018, with a slight increase from 2019 to 2022, but has not yet recovered to the level of 2018. The trend of import volume changes in animal products and wood pulp and paper products in the past five years is exactly opposite, with the former increasing first and then decreasing, reaching its peak in 2020; the latter fell first and then rose, reaching a trough in 2020. Vegetable products and chemical products have been steadily increasing for the past five years, especially in 2022, where the import volume of chemical products increased by nearly nine times compared to 2021.

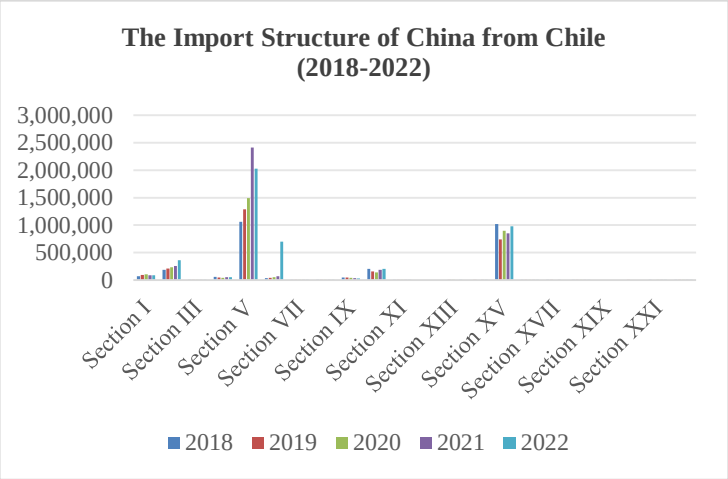

Figure 10. The Import Structure of China from Chile from 2018 to 2022 (Unit: 10000 US dollars)
Data source: General Administration of Customs of China.

4.2.3 The Export Structure of China to Chile

Figure 11 shows the structure of trade goods exported by China to Chile from 2018 to 2022. As shown in Figure 11, the top five categories of goods exported from China to Chile are: 11th category textiles and textile articles, 15th category base metals and their products, 16th category machinery and mechanical appliances, 17th category transportation equipment, and 20th category miscellaneous manufactured products. According to China's customs data, the above five categories of goods account for 74% of China's total trade volume exported to Chile. The highest proportion among them is machinery and mechanical appliances, accounting for about 25%. In 2021, the export value also exceeded the $7 billion mark. Secondly, textiles and textile articles, as well as base metals and their products, experienced three consecutive years of decline from 2018 to 2020, but resumed growth in 2021. In 2022, the export value of textiles and textile articles exceeded the level of 2018. Base metals and their products experienced strong growth in 2021 and reached a historic high. However, there was a decline in 2022, with a decline of approximately 26%. The trend of export volume of transportation equipment and miscellaneous manufactured products is basically consistent, first decreasing, and then sharply increasing in 2021. What is different is that the transportation equipment category continued to grow in 2022, but the export value of miscellaneous manufactured products has decreased, with a decline of about 26%.

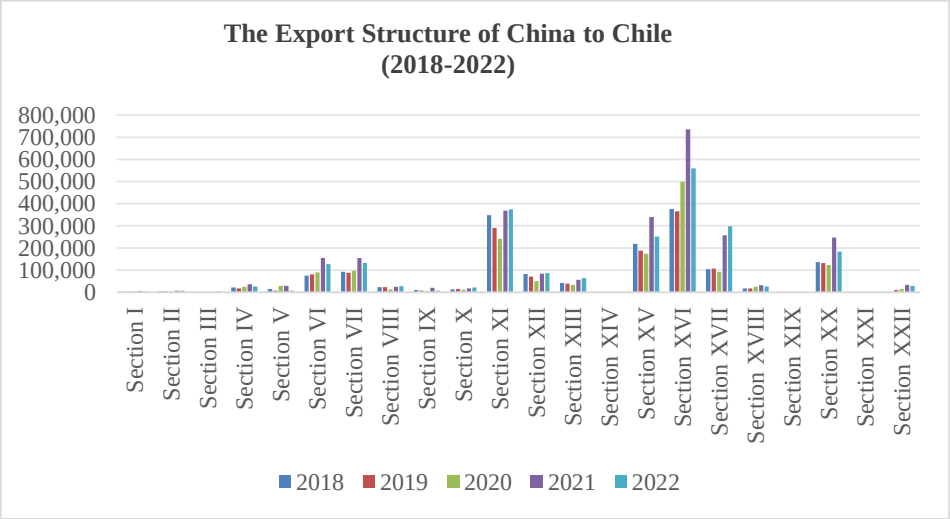

Figure 11. The Export Structure of China to Chile from 2018 to 2022 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

4.3 Trade Commodity Structure between China and Peru

Peru is a traditional agricultural and mining country, with an economy at a moderate level among Latin American countries. Mining, forestry, and fishery resources are abundant. The gross domestic product in 2022 is 240.884 billion US dollars [source: official website of the Chinese Ministry of Foreign Affairs], with a per capita gross domestic product of approximately 7000 US dollars. China and Peru established diplomatic relations in November 1971, and their relationship was upgraded to a comprehensive strategic partnership in April 2013. At present, China is Peru's largest global trading partner, and Peru is China's fourth largest trading partner in Latin America.

From Figure 3 above, it can be seen that the bilateral trade between China and Peru is generally relatively stable, with only a slight decline in 2020 and a significant increase in 2021, with imports consistently exceeding exports. But overall, the bilateral trade volume between China and Peru accounts for a very low proportion compared to China's overall foreign trade volume. In addition, China's customs data shows that the total import and export volume of trade goods between China and Peru increased by 0.8% in 2022, with a slight increase. Among them, the total amount of goods imported by China from Peru decreased by 0.08% compared to 2021; the total amount of goods exported from China to Peru increased by 2.43%. From a data perspective, the trade volume of China's imports from Peru has decreased, but the trade volume of China's exports to Peru has increased, and China's trade with Peru has remained in deficit since 2015. The following is an analysis of the commodity composition of trade between China and Peru in the past 5 years.

4.3.1 Total Trade Commodity Structure between China and Peru

Figure 12 shows the structure of trade goods between China and Peru from 2018 to 2022. As shown in Figure 12, the commodities traded between China and Peru trade in the past five years have mainly concentrated in the following nine categories: the fourth category of foodstuffs, beverage and tobacco, the fifth category of mineral products, the sixth category of chemical products, the seventh category of plastics and rubber and their products, the eleventh category of textiles and textile articles, the fifteenth category of base metals and their products, the sixteenth category of machinery and mechanical

appliances, the seventeenth category of transportation equipment, and the twentieth category of miscellaneous manufactured products. According to China's customs data, the top three categories in terms of proportion are mineral products, base metals and their products, and machinery. These three categories of products account for about 70% of the total trade volume between China and Peru, with mineral products alone accounting for about half of the total trade volume between China and Peru. The trade volume of chemical products, textiles and textile articles and machinery has shown a basic upward trend year by year, with only a slight decline in machinery in 2022. The trend of trade volume changes in the other six categories of products is basically consistent: it fell to a low point around 2020, and there was a significant increase in 2021.

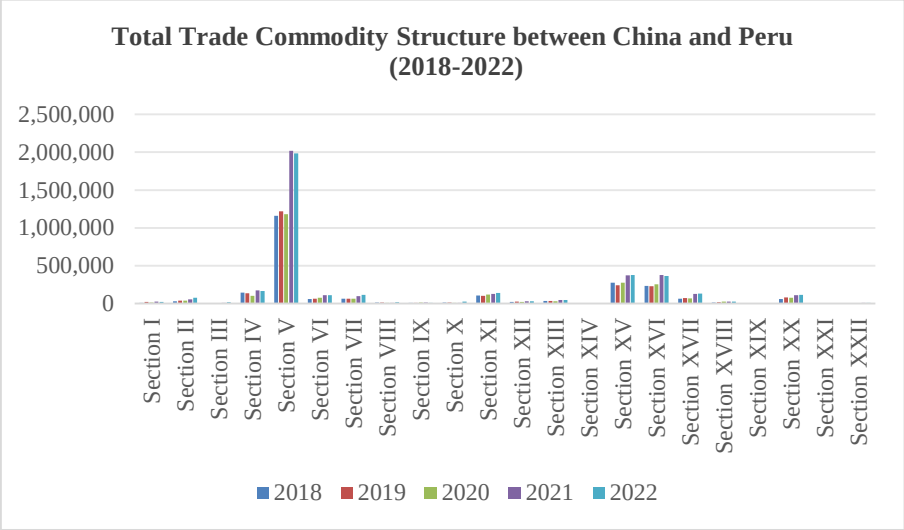

Figure12. Total Trade Commodity Structure between China and Peru from 2018 to 2022 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

4.3.2 The Import Structure of China from Peru

Figure 13 shows the structure of China's imported trade goods from Peru from 2018 to 2022. As shown in Figure 13, the top four categories of goods imported by China from Peru in the past five years are: the second category of vegetable products, the fourth category of foodstuffs, beverage and tobacco, the fifth category of mineral products, and the fifteenth category of base metals and their products. According to Chinese customs data, the highest proportion is mineral products, which account for about 70% to 80% of China's imports from Peru. In 2021, the import volume of mineral products surged, with a growth rate of about 70%, but it slightly declined again in 2022. The second and third largest proportion are base metals and their products, as well as foodstuffs, beverage, and tobacco. Although their import volume has increased, their proportion in the total import volume is constantly decreasing. The proportion of vegetable products is even smaller, only about 2%, but the growth rate in 2022 is relatively large, about 40%.

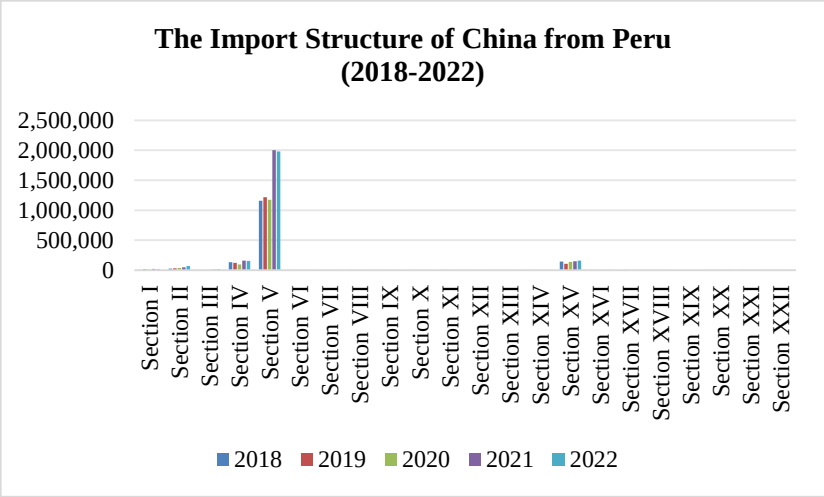

Figure 13. The Import Structure of China from Peru from 2018 to 2022 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

4.3.3 The Export Structure of China to Peru

Figure 14 shows the structure of trade goods exported by China to Peru from 2018 to 2022. As shown in Figure 14, the top seven categories of goods exported by China to Peru in the past five years are: Section VI chemical products, Section VII plastic and rubber products, Section XI textiles and textile articles, Section XV base metals and their products, Section XVI machinery and mechanical appliances, Section XVII transportation equipment, and Section XX miscellaneous manufactured products. According to Chinese customs data, the top three in terms of proportion are machinery, base metals and their products, and textile articles, accounting for approximately 30%, 10%, and 10% respectively. Except for the decrease of 3.35% and 2.55% in the export volume of machinery and base metals and their products in 2022, the other five categories of commodities have been steadily increasing over the past five years, especially with significant growth in the past two years.

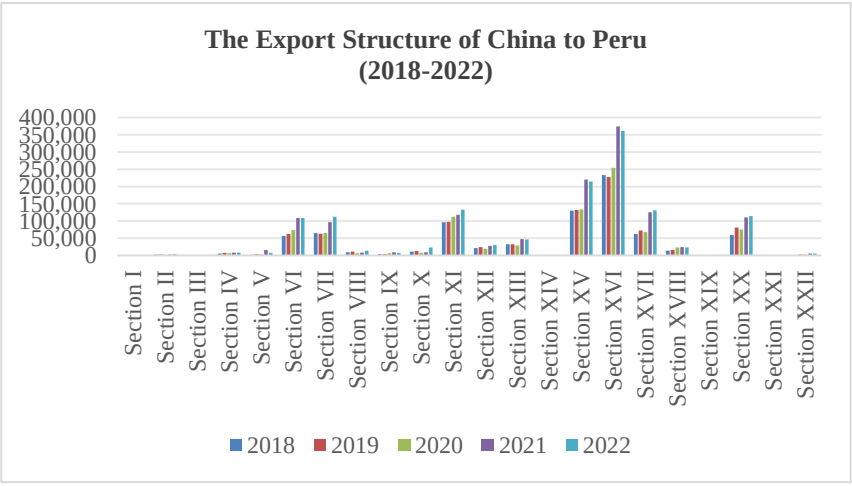

Figure 14. The Export Structure of China to Peru from 2018 to 2022 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

5. Comparative Analysis and Suggestions on the Trade Commodity Structure between China and Mexico, Chile, and Peru

The previous article analyzed the trade commodity structure between China and Mexico, Chile, and Peru. Next, a comparative study will be conducted on the trade commodity structure between China and these three countries, mainly in 2018, 2020, and 2022. There are currently four recognized industrial classifications: resource intensive industries, labor intensive industries, knowledge intensive industries, and capital intensive industries. Based on this classification standard, the paper will conduct further comparative research on the import and export commodity categories between China and Mexico, Chile, and Peru.

5.1 Comparison of Trade Commodity Structure between China and Mexico, Chile, and Peru

5.1.1 Comparison of China's Import Structure from Mexico, Chile, and Peru

Figures 15, 16, and 17 show the structure of Chinese imports from Mexico, Chile, and Peru in 2018, 2020, and 2022, respectively.

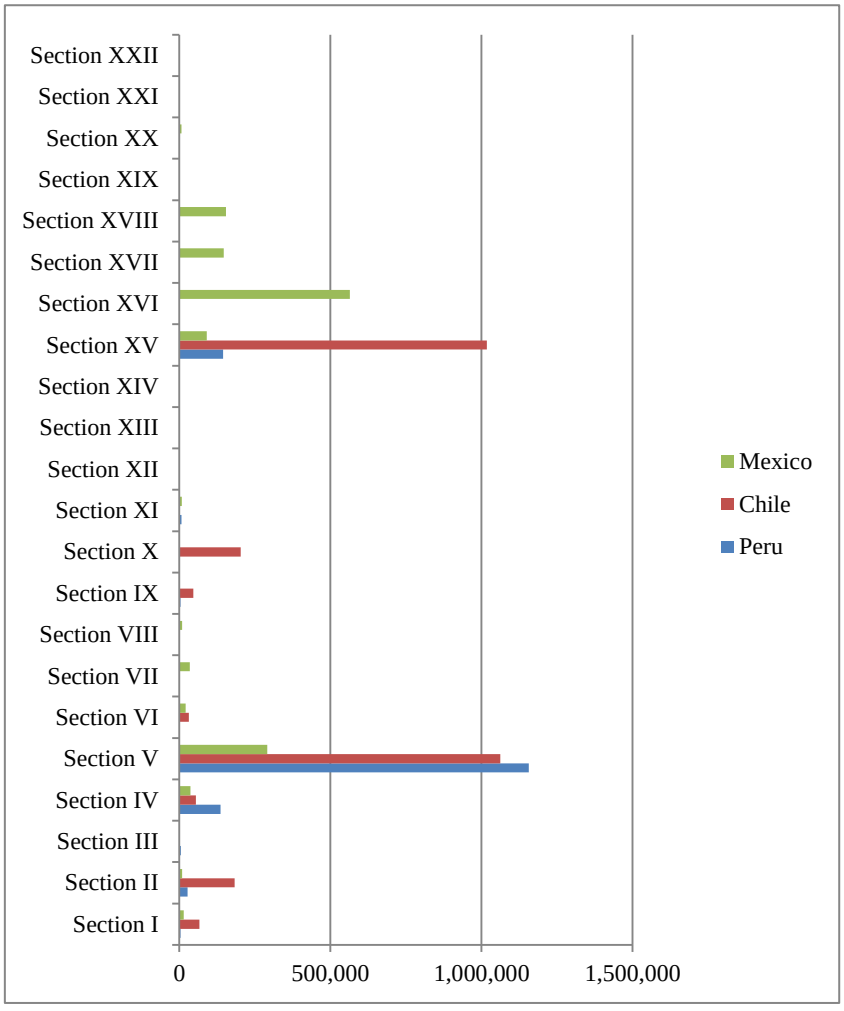

Figure 15. The Import Structure of China from Mexico, Chile and Peru 2018 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

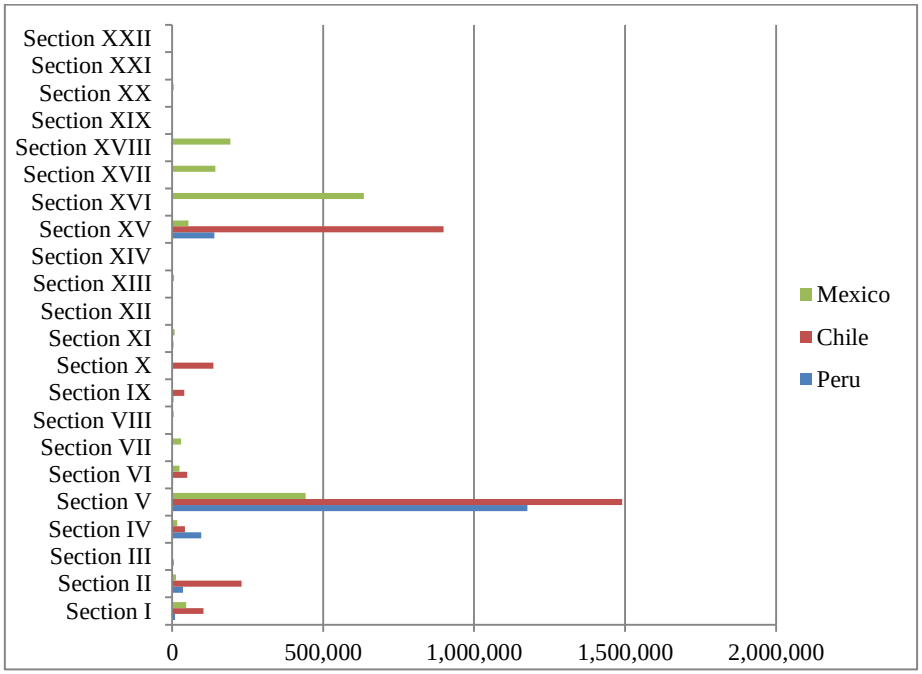

Figure 16. The Import Structure of China from Mexico, Chile and Peru 2020 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

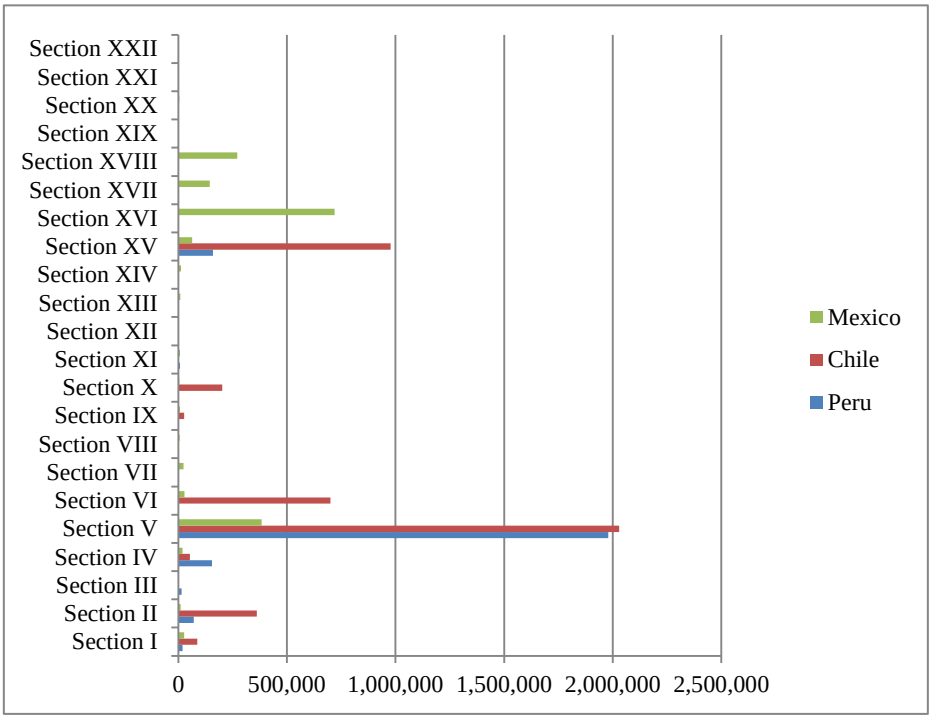

Figure 17. The Import Structure of China from Mexico, Chile and Peru 2022 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

Figures 15, 16 and 17 show that China imports a total of 16 types from the three countries, with Mexico, Chile, and Peru decreasing in order of import types. However, the import volume order is Chile, Peru, and Mexico (except for 2020). Comparing these three figures, it can be found that in recent years, there has been almost no change in the types of goods imported by China from Mexico, Chile, and Peru, but there has been a significant increase in trade volume. From the perspective of the amount of imported goods, the highest imported goods have always been HS25-27 mineral products, which have a significantly higher import value than other goods. It is the category with the largest proportion of China's imports from Chile and Peru, and its proportion in imports from Mexico has jumped from fourth to second. In addition, the most imported products are HS72-83 base metals and their products from all the three countries, HS84-85 machinery and mechanical appliances, HS90-93 optical and medical instruments, and HS86-89 transportation equipment from Mexico, HS47-49 wood pulp and paper products, HS28-38 chemical products from Chile, HS16-24 foodstuffs, beverage and tobacco products from Peru, and HS6-14 vegetable products from both Chile and Peru. The proportion of primary products is relatively heavy, while the proportion of industrial manufactured products is low. From Peru China has imported the highest proportion of primary products, accounting for over 80%, while the lowest proportion is from Mexico, accounting for about one-fifth.

According to industry classification: firstly, Resource intensive products account for a high proportion. Among the main products imported from Chile and Peru, resource intensive products account for approximately 87% and 93% respectively; among the main products imported from Mexico, the proportion of resource intensive products is not the highest, but account for approximately 31%. The proportion of labor-intensive products is relatively low. The proportion of these products imported from Peru is the highest, followed by Chile, and the proportion of these products imported from Mexico is very small. The overall volume of knowledge intensive products is relatively low, and there are significant differences among the three countries. The proportion of imports of these articles from Mexico is the highest, about 14%; secondly, from Chile, especially chemical products deserves attention. In recent years, their import volume has increased significantly, ranking sixth in China's imports from Chile in 2020 and third in 2022, with a 9-fold increase in its proportion; finally, Peru has exported few knowledge intensive products to China. The import of capital intensive products is mainly from Mexico, accounting for approximately 55% of China's main imports from that country; the proportion of capital intensive products imported from Chile and Peru is very small and almost negligible. Based solely on the proportion, China's imports from Mexico are mainly capital intensive products, followed by resource intensive and knowledge intensive products, with the lowest being labor intensive products. The products imported by China from Chile are mainly resource intensive, followed by knowledge intensive and labor intensive, with relatively few capital intensive products. The products imported by China from Peru are mainly resource intensive, followed by labor intensive, and there are relatively few knowledge intensive and capital intensive products.

5.1.2 Comparison of China's Export Structure to Mexico, Chile, and Peru

Figures 18, 19, and 20 show the commodity structure of China's exports to Mexico, Chile, and Peru in 2018, 2020, and 2022, respectively.

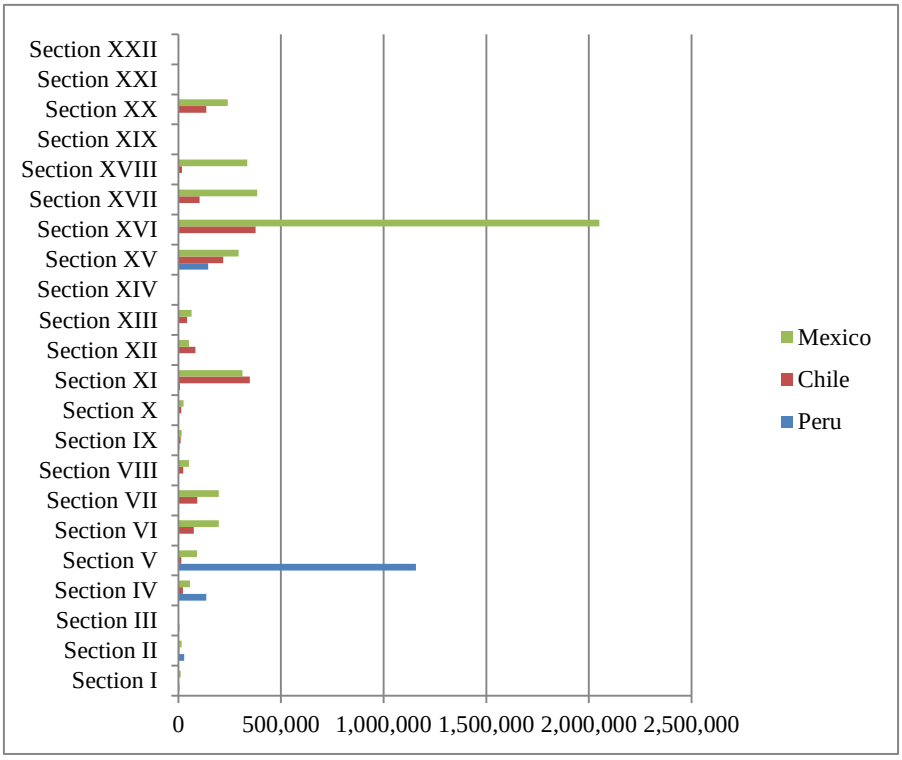

Figure 18. The Export Structure of China to Mexico, Chile and Peru 2018 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China

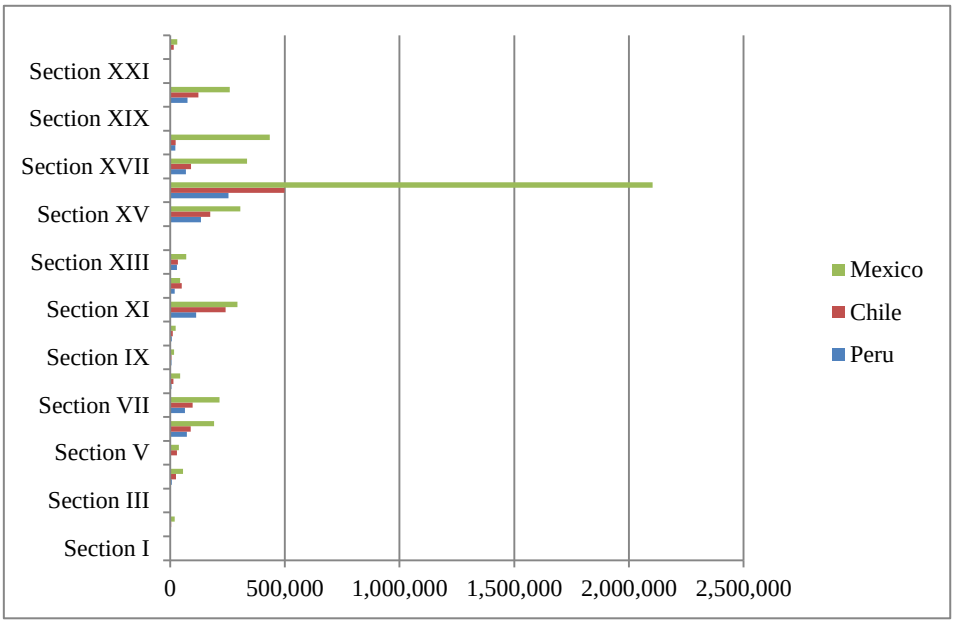

Figure 19. The Export Structure of China to Mexico, Chile and Peru 2020 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

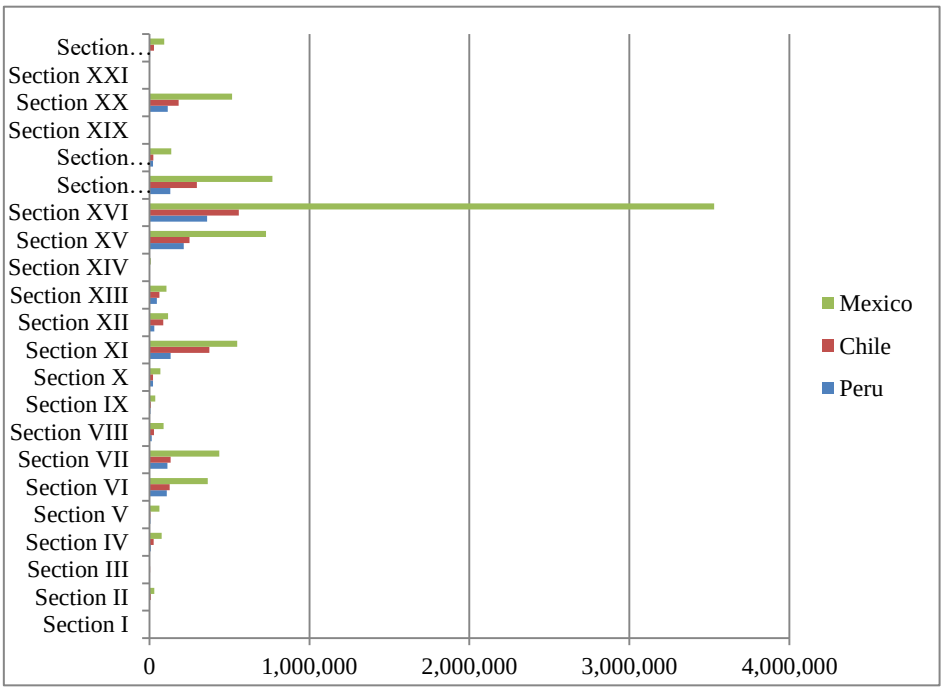

Figure 20. The Export Structure of China to Mexico, Chile and Peru 2022 (Unit: 10000 US dollars)

Data source: General Administration of Customs of China.

According to the data in Figures 18, 19 and 20, China exports 20 types of goods to Mexico, Chile, and Peru, with Mexico being the largest exporter in terms of types and amounts, followed by Chile and Peru. Since 2018, the types of goods exported by China to Chile have remained basically stable, while the types of goods exported to Mexico and Peru have been increasing year by year, especially to Peru, resulting in significant changes in the structure of export goods to Peru. Comparing the three charts, it can be observed that the total amount of China's exports to the three countries experienced a slight decline in 2020, but also experienced strong growth in 2022, with an increase of over 60% compared to 2020. The types of export commodities are also relatively concentrated and basically the same. The top seven categories are: HS84-85 machinery and mechanical appliances, HS72-83 base metals and their products, HS50-63 textiles and textile articles, HS86-89 transportation equipment, HS94-96 miscellaneous manufactured products, HS25-27 mineral products, HS39-40 plastic and rubber products. All are industrial manufactured products, without any primary products. From the perspective of countries and types of goods, the main products exported by China to Mexico and Chile are machinery and mechanical appliances, while the main products exported to Peru are base metals and their products.

According to industry classification, among the top seven categories of goods, China exports the most capital intensive products to Mexico and Chile, followed by labor intensive and resource intensive products, without knowledge intensive products. However, China exports the most resource intensive products to Peru, followed by capital intensive and labor intensive products, and there aren't knowledge intensive products. Through further comparative analysis, it can be found that China exports the largest proportion of capital intensive products to Mexico, accounting for over 60% of the

top seven categories of goods, followed by Chile and Peru. Among the three countries, Chile has the largest proportion of labor intensive products imported from China, accounting for about 40%, followed by Mexico and Peru. As mentioned earlier, China's exports of resource intensive products are the most to Peru, accounting for over 50%, followed by Chile and Mexico. Overall, China's trade with Mexico is in a significant surplus, while its trade with Chile and Peru is in a deficit and continues to expand.

5.1.3 Overall Comparison of Import and Export Trade Structure

From the perspective of product types alone, the types of products that China imports from Mexico, Chile, and Peru are mostly different from those that China exports to the three countries, with a strong contrast. However, there are also similar types, such as base metals and their products. This indicates that China and the three countries can complement each other in trade and also meet each other in different fields. From the perspective of import and export amounts, both the amount of China's exports to the three countries and the amount of exports from the three countries to China are on the rise, indicating that bilateral trade between China and the three countries is still continuously developing.

The distribution of products exported by China to the three countries is more balanced than that of products imported by China from the three countries, both in terms of type and proportion. The products exported by China to the three countries are mainly capital intensive, while the goods imported from the three countries are mainly resource intensive. When looking at China's trade with the three countries separately, it can be found that both China's exports and the exports of the three countries have shown a very uneven distribution in terms of product types and proportions. The products imported by China are relatively concentrated in resource intensive, which is quite extreme. However, in addition to capital intensive, labor intensive products also account for a relatively large proportion of exported products. However, there are few knowledge intensive products, indicating that China's industrial economic transformation has achieved certain results, but there is still great room for improvement. In addition, in terms of imports, apart from resource intensive products, only Chile and Mexico have exported knowledge intensive products to China, and there are relatively few capital intensive products, indicating that the import potential of these two types of products still needs to be explored. Labor intensive products account for a particularly small proportion, indicating that the trade potential of these types of products is also necessary for further development.

5.2 Suggestions

5.2.1 Utilizing the Advantages of Spanish American Countries and Attempting Trade Cooperation in Multiple Fields

The trade between China and major Spanish American countries has shown an overall growth trend in both imports and exports, but the scope of transactions is relatively narrow. Imports mainly focus on mineral resource cooperation, while exports mainly focus on mechanical products. However, from the perspective of the national conditions of Spanish American countries, trade cooperation between China and them can fully continue to explore other fields. For example, Chile and Peru have relatively developed agricultural and fishery industries, which can complement China's agricultural industries; Mexico's manufacturing industry is relatively developed, and cooperation in these industries can be attempted.

5.2.2 Increasing Product Promotion Efforts and Optimize Industrial Structure

China needs to increase its product promotion efforts in major Spanish American countries in the Americas. Through measures such as technological innovation, industrial structure and product structure optimization, we aim to enhance the competitiveness of Chinese products in the Spanish American market. Although China is Mexico's second largest trading partner and the largest trading partner of Chile and Peru, its cooperation with Chile and Peru is relatively less intensive than that with Mexico, and there are many other countries competing with China in their cooperation with these countries. Especially in Peru's export market, there is still great potential for development. In addition, among all types of products, China exports the 16th category of machinery products the most, while exports of other types of products are far behind. So, we can start with products in the sixth, seventh, eleventh, fifteenth, and twentieth categories, gradually balancing the export of other types of products, thereby reducing the concentration of exported goods.

5.2.3 Increasing Efforts in Research and Development of New Energy Sources and Reduce Dependence on Mineral Resource Imports

The fifth type of mineral product HS25-27, which China imports more from major Spanish American countries as a whole, is the most imported from Chile and Peru, followed by Mexico. The mineral resources imported from Latin America have a significant impact on the production and consumption of power batteries-lithium batteries-in China, and even affect the development of China's new energy vehicle industry. On the one hand, it is because the mineral resources in the Americas are relatively abundant, and on the other hand, it also indicates that China should vigorously carry out research on energy products, develop and produce new types of energy, in order to reduce China's dependence on the import of power energy mineral products.

5.2.4 Using "The Belt and Road" Initiative and Free Trade Agreement to Promote Trade Synergy through Industrial Investment

As a natural extension of the 21st Century Maritime Silk Road, Latin America is an indispensable and important participant in the joint construction of "The Belt and Road". China has good cooperation with the above three countries in the field of Five Pronged Approach and has achieved a series of fruitful results. At the same time, China and major Spanish American countries have different levels of free trade agreements, which have also played a significant role in promoting bilateral or multilateral trade. Therefore, in the future development, under "The Belt and Road" Initiative and relevant free trade agreements, a reasonable two-way investment layout can be carried out based on the industrial perspective to promote the development of relevant industries through investment, so as to promote the trade structure of both sides to move in a more reasonable direction.

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