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China's Wood Exports: A Comprehensive Analysis from 2019 to Present

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Abstract: This paper presents a comprehensive analysis of China's wood exports from 2019 to the present, aiming to provide insights into the current status, challenges, and future development trends of the industry. It begins by examining the fundamental aspects of China's wood sector, including the availability and characteristics of domestic forest resources and the evolution of the wood processing industry. Utilizing data-driven methodologies, the study investigates key dimensions such as the structural transformation of export products, regional distribution of export markets, and the influence of both domestic and international policy frameworks on wood trade. The findings indicate that despite facing significant external pressures—such as trade frictions, supply chain disruptions, and increasingly stringent environmental standards—China's wood export industry has maintained resilience through industrial upgrading, technological innovation, and diversification of export destinations. As global demand for high-quality and environmentally sustainable wood products continues to grow, opportunities remain for further expansion. This paper serves as a valuable reference for policymakers, industry stakeholders, and researchers seeking to understand the dynamics of China's wood export trade in a rapidly evolving global context.

Keywords: China; wood exports; export structure; market distribution; policy influence

1. Introduction

China has emerged as a key player in the global wood trade market, with its wood export industry serving as a critical indicator of the country's industrial competitiveness in the forestry sector. This industry not only supports domestic economic growth and employment but also plays an increasingly influential role in stabilizing and shaping the international wood product supply chain. Since 2019, the global economic landscape has experienced profound and multifaceted transformations [1]. The COVID-19 pandemic severely disrupted global trade flows and production activities, while the evolving global trade environment, particularly shifts in relations with major trading partners, has contributed to heightened uncertainty and complexity. Moreover, the growing emphasis on environmental sustainability and the tightening of international regulations have placed new demands on wood-exporting countries in terms of product standards and ecological compliance. Against this backdrop, China's wood export industry has encountered both substantial challenges and new development opportunities. This paper seeks to conduct a comprehensive analysis of the industry's evolution during this critical period, with the objective of identifying current trends, diagnosing existing problems, and proposing potential directions for future development and strategic adjustment [2].

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2. Overview of China's Wood Industry

2.1. Domestic Wood Resource Endowment

China's forest resources have shown steady growth in recent years, reflecting the country's long-term commitment to ecological conservation and afforestation efforts. According to data released by the National Forestry and Grassland Administration, as of 2023, China's total forest area reached approximately 235 million hectares, with a forest coverage rate of 24.02%. This represents a notable achievement in reforestation and forest management. However, despite these improvements in forest quantity, there remains a significant shortfall in the availability of high-quality, commercially valuable timber. Compared to forest-rich nations such as Russia and Canada, China's domestic timber resources are limited in both volume and quality, which constrains the supply for industrial use. As a result, the country's wood self-sufficiency rate remains considerably lower than that of other major wood-producing economies [3]. To meet the demand of its rapidly expanding wood processing sector, China has had to rely heavily on timber imports. In 2022 alone, the country imported approximately 100 million cubic meters of timber, with the primary sources being Russia, Canada, and the United States. This high dependence on external supply underscores the strategic importance of international timber trade in supporting China's wood industry development.

2.2. Development of the Wood Processing Industry

China's wood processing industry has experienced remarkable growth over the past few decades, evolving into one of the most important components of the national manufacturing sector. The industry has established a relatively complete and integrated value chain that spans upstream activities such as logging and primary processing (e.g., sawing), to midstream and downstream stages including wood product manufacturing, furniture production, and value-added finishing. This comprehensive industrial structure has enabled China to become a global leader in both the volume and variety of wood products. The number of wood processing enterprises has steadily increased, with a clear trend toward industrial clustering and specialization. Numerous large-scale wood processing industrial parks have emerged, particularly in economically developed coastal provinces such as Guangdong, Zhejiang, and Fujian, where access to international trade ports and mature logistics networks offer strategic advantages [4]. According to official statistics, the total output value of China's wood processing industry exceeded 2 trillion yuan in 2021, highlighting its significant role in promoting domestic economic growth, driving technological innovation, and creating employment opportunities across both urban and rural areas.

3. Analysis of China's Wood Exports from 2019 to Present

3.1. Structural Changes of Export Products

China's wood export products are diverse, primarily comprising sawn timber, wood-based panels (such as plywood and fiberboard), wooden furniture, and wooden handicrafts. These product categories collectively reflect the breadth and maturity of China's wood processing industry. From 2019 to the present, the structure of wood export products has experienced notable shifts, driven by changes in international demand, advancements in processing technologies, and the upgrading of domestic production capacity. According to Table 1, while the export volume of sawn timber has shown slight fluctuations, it has remained relatively stable overall. In contrast, the export volumes of wood panels, wooden furniture, and wooden handicrafts have demonstrated a consistent upward trend [5]. This shift indicates a gradual transition from the export of primary wood materials toward higher value-added and finished wood products. The increasing share of furniture and handicrafts in total wood exports highlights the growing competitiveness

of China's downstream wood processing industry in the global market, supported by improved product quality, enhanced design capabilities, and compliance with international standards. These structural adjustments not only enhance the profitability of exports but also reduce reliance on raw material-intensive products, contributing to a more sustainable development model for the industry.

Table 1. China's wood export products datas

Year	Sawn Timber Export Volume (cubic meters)	Wood Panels Export Volume (square meters)	Wooden Furniture Export Volume (pieces)	Wooden Handicrafts Export Volume (pieces)
2019	5,200,000	850,000,000	350,000,000	120,000,000
2020	4,800,000	820,000,000	320,000,000	110,000,000
2021	5,000,000	880,000,000	360,000,000	130,000,000
2022	5,100,000	900,000,000	380,000,000	140,000,000
2023	5,250,000	920,000,000	400,000,000	150,000,000

Data Source: China Customs Statistics Yearbook from 2019-2023.

As shown in Table 1, although the export volume of sawn timber experienced minor fluctuations during the period from 2019 to the present, it remained generally stable, indicating a consistent demand for primary processed wood products. In contrast, the export volumes of wood panels, wooden furniture, and wooden handicrafts exhibited a clear upward trajectory. This trend reflects not only the growing international demand for high-quality, value-added wood products but also the significant advancements in China's wood processing technology and manufacturing capabilities. Improvements in production efficiency, material utilization, and product design have enhanced the competitiveness of Chinese wood products in global markets. Furthermore, as consumers and importers increasingly prioritize aesthetic value, environmental standards, and durability, Chinese enterprises have responded by upgrading their product offerings, thereby contributing to the sustained growth in these export categories.

3.2. Distribution of Export Markets

China's wood exports are primarily distributed across three major regions: Asia, Europe, and North America, reflecting the country's broad international market reach and diversified trade partnerships. Within Asia, the leading export destinations include Japan, South Korea, and the member countries of the Association of Southeast Asian Nations (ASEAN), which collectively account for the largest share of China's wood export market. In Europe, Germany, the United Kingdom, and France serve as the principal recipients of Chinese wood products, benefiting from their strong demand for both raw materials and finished wood goods. Meanwhile, in North America, the United States remains the dominant market for China's wood exports, despite recent trade challenges. According to Table 2, these regions collectively represent the vast majority of China's wood export volume in 2023, with Asia accounting for 45%, Europe 30%, and North America 20%, while other markets constitute the remaining 5%. This distribution highlights not only the geographic diversification of China's wood trade but also the strategic importance of maintaining strong relationships with key economic partners across different continents.

Table 2. China's wood market.

Region	Main Export Destinations	Proportion of Total Exports in 2023
Asia	Japan, South Korea, ASEAN	45%
Europe	Germany, UK, France	30%
North America	United States	20%
Others	-	5%

Data Source: China Customs Statistics Yearbook, 2019–2023.

However, in recent years, evolving trade dynamics—particularly between China and the United States—have been associated with a moderate reduction in the volume of Chinese wood product exports to the U.S. market. These disputes have resulted in increased tariffs and non-tariff barriers, which have constrained the competitiveness of Chinese wood exports in one of their traditionally largest markets. In response to these challenges, China has proactively sought to mitigate risks by expanding its presence in emerging economies. Countries in South America and Africa have become key targets for diversification efforts, as their growing economies and increasing demand for wood products present promising new opportunities. This strategic shift not only helps reduce dependence on a few major markets but also aligns with China's broader goal of fostering more balanced and sustainable export growth.

3.3. Impact of Policies on Wood Exports

Policy changes exert a profound influence on the development trajectory of China's wood export industry. Domestically, the Chinese government has increasingly prioritized forest resource conservation and environmental sustainability by enacting and enforcing stricter regulations. For instance, the introduction of more rigorous forest cutting quotas and enhanced environmental protection standards for wood processing enterprises has effectively curbed the overexploitation of natural resources and limited the growth of low-end, environmentally harmful wood processing activities. This regulatory environment has encouraged enterprises to upgrade their operations, investing substantially in environmental protection infrastructure and technological innovation. Although these measures have raised production costs, they have simultaneously driven improvements in product quality and enhanced the added value of exported wood products, fostering a more sustainable and competitive industry.

On the international front, foreign regulatory frameworks have also shaped the operational landscape for Chinese wood exporters. Developed economies have progressively tightened their environmental and safety standards for imported wood products. Notably, regulations such as the United States' Toxic Substances Control Act (TSCA) and the European Union's REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals) impose stringent limits on formaldehyde emissions and residual chemical substances in wood products. To comply with these heightened requirements, Chinese exporters have been compelled to increase investment in research and development, quality assurance, and certification processes. This external pressure not only ensures access to critical international markets but also serves as a catalyst for the technological upgrading and modernization of China's wood export industry.

4. Challenges and Opportunities Faced by China's Wood Exports

4.1. Challenges

First, rising trade tensions have added a layer of uncertainty to market access and pricing for Chinese wood products. In recent years, adjustments in trade policies by several developed economies have led to higher tariffs and more stringent non-tariff measures, such as enhanced customs procedures and certification standards. These developments have posed challenges for Chinese exporters, potentially affecting their competitiveness and increasing the complexity of accessing certain key markets.

Second, the rising costs of raw materials and labor have put additional pressure on wood export enterprises. With growing global demand for wood raw materials, prices for imported timber have escalated, raising input costs. Simultaneously, continuous increases in labor wages within China have further compressed profit margins, especially for enterprises operating with low-cost business models.

Third, international environmental protection and quality standards have become increasingly rigorous. Complying with these stricter requirements demands substantial investments in advanced technologies, environmental compliance, and quality control

systems. This represents a considerable challenge, particularly for small and medium-sized enterprises (SMEs) that often face resource constraints, limiting their ability to adapt swiftly and maintain competitiveness in the global market.

4.2. Opportunities

With the ongoing growth of the global economy, particularly the rapid expansion of emerging economies, international demand for wood products continues to rise steadily. This expanding market presents substantial opportunities for wood exporters worldwide. Meanwhile, China's wood processing industry holds distinct competitive advantages in terms of production scale, advanced technology, and cost efficiency. By leveraging continuous technological innovation and pursuing industrial upgrading, Chinese wood export enterprises are well-positioned to enhance product quality and increase added value, thereby better satisfying the evolving requirements of international consumers. Furthermore, China's international economic cooperation initiatives, such as the "Belt and Road" framework and various free trade agreements, create favorable conditions and open new channels for Chinese wood exporters to diversify and deepen their presence in overseas markets, especially in regions with growing infrastructure and construction demands.

5. Conclusions and Suggestions

5.1. Conclusions

From 2019 to the present, China's wood exports have exhibited distinct characteristics shaped by both external challenges and internal adjustments. Despite facing obstacles such as escalating trade frictions, rising production costs, and increasingly stringent international quality and environmental standards, the industry has demonstrated resilience. Through strategic adjustments in the industrial structure and continuous improvements in product quality, China's wood export sector retains significant growth potential. The composition of export products has been progressively optimized, shifting towards higher value-added goods, while efforts to explore and develop new international markets have yielded promising results. These trends suggest a positive outlook for the sustainable development of China's wood export industry in the coming years.

5.2. Suggestions

First, the government should enhance policy support by offering stronger incentives and resources focused on technological innovation, environmental sustainability, and market expansion. This could include increasing financial subsidies for enterprises' research and development of cutting-edge technologies and new product lines, as well as facilitating their participation in international trade fairs, exhibitions, and promotional activities to boost global visibility.

Second, enterprises themselves need to substantially increase investment in technological innovation. By continuously upgrading production processes and improving product quality, companies can develop high value-added wood products that cater to the demands of the international high-end market, thereby enhancing their competitiveness and profitability.

Third, it is essential to actively expand and diversify overseas markets. Beyond traditional export destinations, greater emphasis should be placed on emerging markets with growing consumption potential. Strengthening economic and trade cooperation with countries located in strategic regions, such as those involved in major international initiatives, will help achieve a more balanced and resilient export market portfolio.

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