A Case Study of EU Countervailing Investigations on Chinese Wind Power Companies--Based on the Perspective of Trade Effects

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Abstract. Against the background of the EU's countervailing investigations against Chinese wind power enterprises, this paper, based on the WTO Agreement on Subsidies and Countervailing Measures (SCM Agreement) and based on the theory of trade effects, discusses the impact of the countervailing investigations on the Chinese, European, and global markets, and reviews the case of the EU's "double-reverse" investigations against Chinese photovoltaic products. Finally, it proposes strategies for the government, industry and enterprises to deal with the issue.

Keywords: Chinese wind power enterprises; countervailing investigations; trade effects

1 Introduction

In October 2021, the Central Committee of the Communist Party of China and the State Council issued the Opinions on Complete and Accurate Comprehensive Implementation of the New Development Idea of Doing a Good Job in Carbon Peak and Carbon Neutrality, which puts forward the construction of a green, low-carbon and recycling economic system and other objectives[1].China is rich in wind energy resources, and the development of the wind power industry is an important way to realize energy transformation. However, in 2023, the European Union launched a countervailing investigation against Chinese wind power enterprises based on the Foreign Subsidies Regulation, making the industry face the challenge of international trade friction. This paper takes the countervailing investigation as an example and analyzes the status quo, challenges and coping strategies of China's wind power industry by combining trade effects and international rules.

P. S. Borah et al. (eds.), *Proceedings of the 2025 5th International Conference on Enterprise Management and Economic Development (ICEMED 2025)*, Advances in Economics, Business and Management Research 346,
https://doi.org/10.2991/978-94-6463-811-0_37

2 Development Status

2.1 Steady Expansion of Market Size and High Degree of Concentration

In 2023, the country (excluding Hong Kong, Macao and Taiwan) added 14,187 new installations with a capacity of 79.37 million kilowatts, a year-on-year increase of 59.3%[2], and the cumulative installations exceeded 195,000 units, totaling 474.6 million kilowatts, a year-on-year increase of 20%.From 2017 to 2022, the number of companies operating wind farms in China increased fluctuatingly, and as of 2022(Fig.1), a A total of 55 power generation group (investment) companies are involved in the production and operation of wind farms, and their 3,782 wind farms participated in the annual benchmarking[1] .

In 2022, the number of wind farms owned by three enterprises, accounted for more than 40%; the number of wind farms owned by each of the top ten enterprises exceeded 100, totaling 3,032, accounting for the proportion of the total number of statistics totaling 80.23% of the field of concentration is high.

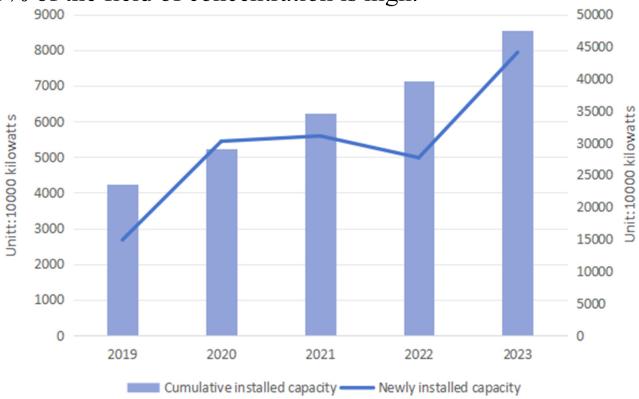

Fig. 1. China's newly added and cumulative installed capacity of wind power from 2019 to 2023

2.2 Leading Enterprises are Among the World's Leading Companies[2]

In 2023, among the top 15 OEMs with newly installed capacity globally, there were 10 Chinese companies, accounting for a combined share of approximately 66.8% of the newly installed capacity in the global market, representing an increase of approximately 10% from 2022.Among the top 10 OEMs with cumulative installed capacity of wind power globally as of 2023(Fig.2), there were 5 Chinese companies, accounting for a combined share of approximately 27.2%. China's wind power industry maintains a relatively fast development speed and has become an important player and leader in the global wind power industry[15][16].

[1]Source: China Electricity Council

[2] The following data have been sourced from: Global Wind Energy Council. Global Wind Power Market Development - Supply Side Data to 2023.

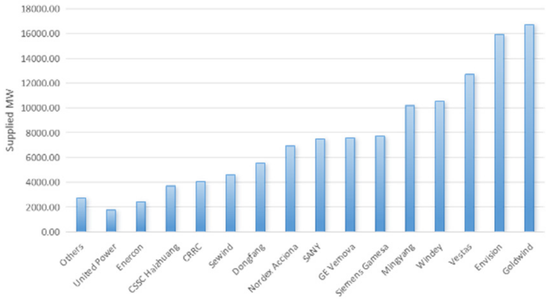

Fig. 2. The top 15 global wind turbine manufacturers in terms of newly installed capacity in 2023

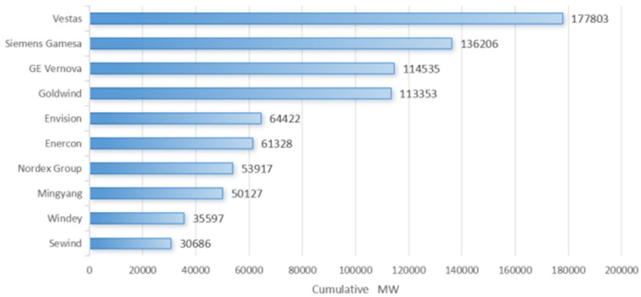

Fig. 3. The top 10 global wind turbine manufacturers in cumulative installed capacity in 2023

3 Impact of Countervailing Investigations Analysis

3.1 Theory of Trade Effects

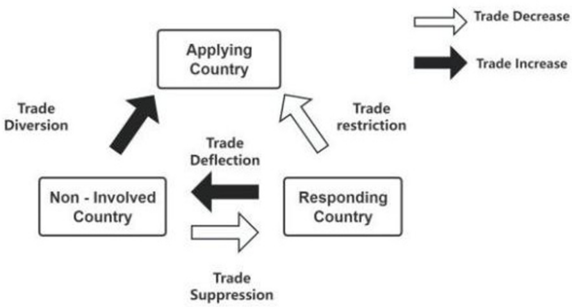

Fig. 4. Schematic diagram of countervailing trade effects

Prusa (2001) and Bown, Crowley (2007) study put forward the trade effects of anti-dumping, that is, the importing country to the exporting country of a product with trade remedies to launch anti-dumping investigations, to restrict imports to protect the development of domestic industries, directly affect the country under investigation import and export trade, and indirectly affect the import and export trade of third countries(Fig.4). Countervailing investigation is also so.

3.2 Trade Restriction Effects

The restrictive effect exists in both the countervailing investigation stage and the final determination stage[3]. The temporary countervailing duty or price commitment adopted in the investigation stage directly leads to the increase of import and export costs, and exporters facing the complicated countervailing investigation process such as questionnaire investigation and evidence collection will produce the fear of withdrawal and reduce the export of products involved in the case. Even if the final ruling stage did not make a positive conclusion, once the launch of countervailing investigations, that is, to release negative signals to the domestic market, importers will consider to avoid the risk of future uncertainty, and gradually reduce trade activities with exporters in the country being investigated; and affirmative conclusion of the countervailing duty levied by the direct result of the restrictive effect of the higher the tax rate, the greater the restrictive effect.

3.3 Trade Diversion Effects

For the respondent country, its reduced export share is filled by third-country exports; for the complainant country, the domestic import demand remains unchanged, the import target is shifted, to a certain extent, weakening the trade restriction effect of countervailing duties[4], opening up new overseas trade targets, reducing import dependence, and at the same time, market demand can be satisfied.

3.4 Trade Deflection Effects

Trade deflection can be regarded as a passive measure of the respondent country to make up for the loss of trade restriction, but it also promotes the development of overseas markets, and for exporters it is an opportunity to enhance their survivability and survival of the fittest, so as to ensure the sustainable development of the industry.

3.5 Trade-Suppressing Effects

But open up new export markets need a lot of time, the short-term export market structure of the product is relatively fixed, in the big trading countries, the export market will be more fixed, so the short-term trade deflection effect is generally not obvious[4]. Trade inhibition effect is the indirect impact of countervailing investigations, the respondent country involved in the product exports are blocked, even if seeking a third country market is difficult to quickly make up for the original for the complaining country's share of exports, that is, the trade deflection effect is often smaller than the trade restriction effect. Therefore, the total amount of exports of the products involved in the case is reduced, for the products of raw materials, production equipment imports are reduced accordingly, resulting in a third country (may also be the complaining country itself) trade inhibition effect.

3.6 Case Study--EU's "Double Reverse" Investigation on China's Photovoltaic Products[3]

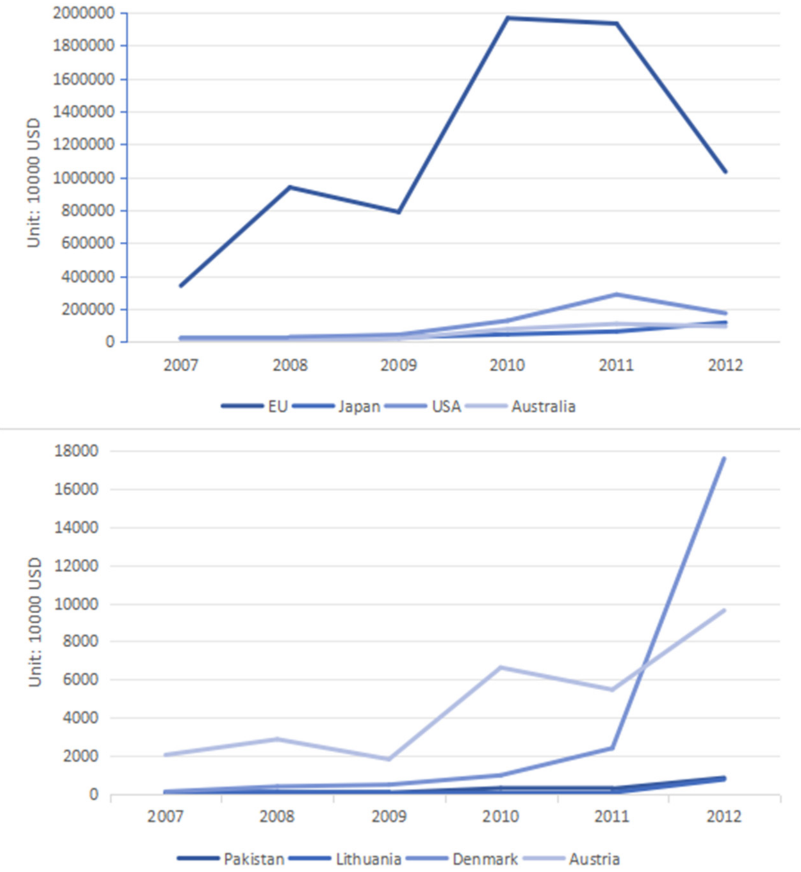

Fig. 5. China's PV Product Exports to Major Countries and Emerging Markets, 2007-2012

On September 6, 2012, the European Commission announced that it would launch an anti-dumping investigation into Chinese photovoltaic panels[10][11][12], photovoltaic cells, and other photovoltaic modules(Fig.5). On November 8, the European Commission issued another announcement, launching a countervailing investigation into Chinese photovoltaic products.

3 Source for this section: UNCTAD databases

Fig. 6. China's High Purity Silicon Import Volume and Value, 2007-2012

Before 2011 showed a steady increase in the trend, the EU launched a "double reverse" investigation of China's photovoltaic products in 2012, resulting in a sharp decline in exports that year, the effect of short-term trade restrictions is obvious. China's wind power enterprises should be prevented in advance(Fig.6).

At the same time, also showed that China's exports of photovoltaic products to the European Union and the United States exports were downward trend, China's exports to Japan's exports of photovoltaic products of the base is small, but was upward trend.

As the European Union, the United States photovoltaic market of Chinese photovoltaic products launched one after another "double reverse" investigation, Europe and the United States photovoltaic product imports declined, China's exports to Pakistan, Lithuania, Denmark, Austria and other emerging markets is a growing trend, there is a certain amount of trade deflection effect. The wind power enterprise countervailing investigation is also an opportunity to use the deflection effect to optimize the market layout.

Some of the enterprises involved in the case in China to deflect exports, explore emerging markets to produce time lag effect, solar photovoltaic cells, for example, its raw materials for high-purity silicon, production demand is difficult to quickly recover, which in turn affects the demand for imports of high-purity silicon. Figure 3 shows that China's imports of high-purity silicon in 2012 decreased significantly, but imports continued to increase, the growth rate have declined, indicating that the "double reverse" investigation did not lead to significant trade inhibition effect[18].

3.7 Forecast of Findings

Since 2010, the EU launched the first countervailing investigation against China, up to now a total of 18 investigations have been launched, only 6 are no measures to close the case[4] ,although the EU has not yet disclosed more "evidence of subsidies", the lack of compliance and legitimacy, our country is firmly opposed to the abuse of trade remedies for protectionist practices, to make stern representations, but Combined with the PV double reverse case and energy security considerations, this countervailing investigation is more likely to give a positive final ruling, it is necessary for all parties to respond in advance.

4 Response Strategy

4.1 Government Level

In many cases of disputes between China and other countries, WTO panels have mostly ruled that our practices violate the rules. China should actively respond to and check the leakage, local enterprises have long existed problems such as overcapacity and over-dependence on exports, and there are also unsound laws and regulations and imperfect markets in the system. The application of countervailing rules should be strengthened from the legal procedures[5][17]. If the EU's countervailing investigation clearly violates international trade rules or causes substantial damage to China's interests, China will have to consider taking necessary countermeasures to safeguard its rights and interests[19].

4.2 Industry Level

First, in the face of foreign suppression, China's wind power industry should strengthen cooperation and resist vicious competition, and shall not sell products or provide services at prices lower than their own costs; shall not maliciously disparage and discredit the professional ability and level of peer enterprises in domestic and foreign market competition; and shall not solicit business by maliciously attacking the products and technologies of peers.

Then, can not rely on the government level dialogue issue subsidy initiator, the wind power industry can set up a special association which based on relevant laws and regulations and under the guidance of government departments to actively communicate with the outside world, to safeguard the reasonable rights and interests of the industry[6].

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[4] Source: Trade Remedy Investigation Bureau of the People's Republic of China

4.3 Enterprise Level

4.3.1 Optimize Business Layout.

Due to China's wind power enterprises business is mainly oriented to the domestic, by the EU sanctions will not have a hurtful impact. The trade deflection effect produced by this countervailing investigation is also an opportunity for the natural selection of the survival of the fittest, reminding enterprises to reduce dependence on a single market(Table 1), forcing Chinese enterprises to adjust the layout of overseas markets in a timely manner, increase product innovation and R&D efforts to improve their competitiveness, and seize the emerging markets of third countries, to further develop overseas trade[13][14].

Table 1. Business Layout of Listed Chinese Wind Power Companies in 2022

Company Name	Revenue Proportion in the Wind Power Sector	Sales Area Layout
Goldwind Sci& Tech Co.,Ltd	88.17%	Domestic:92.70% Abroad:7.30%
Ming Yang Smart Energy Group Limited	93.04%	Domestic:96.12% Abroad:3.88%
Sany Renewable Energy Co.,Ltd	91.27%	Domestic:99.99% Abroad:0.01%
Windey Energy Technology Group Co.,Ltd	96.28%	Domestic:95.98% Abroad:4.02%
Shanghai Electric Wind Power Group Co.,Ltd.	96.82%	Domestic:99.53% Abroad:0.47%
China Three Gorges Renewables (Group) Co.,Ltd	65.41%	East,Northwest and North regions of China
CECEP Wind-Power Corporation	99.53%	Xinjiang,Hebei and Gansu regions

Data source: company annual reports,self-organization

4.3.2 Updating Buiness Model.

Enterprises can build digital twin models to create virtual wind farms, monitor equipment safety issues in real time, optimize wind farm operations, increase wind power production capacity as well as reduce wind turbine maintenance costs, and maximize the benefits of wind farms[7][8] .

China's wind power enterprises should not stop at wind power, the development can focus on building a comprehensive and diversified energy system focusing on cross-border cooperation, to create a good "ecosphere". At the same time, offshore wind power is rich in resources, and wind farms with larger installed capacity can be developed[9].

5 Conclusion

This study examines the EU's 2023 countervailing investigation against Chinese wind power enterprises through the framework of trade effects, contextualized by China's commanding global industry position. The analysis identifies four key impacts:restriction, diversion, deflection, and suppression. Parallels with the EU's 2012 "double reverse" case against Chinese solar panels reveal significant initial export declines followed by market shifts to emerging economies. Given historical precedent, an affirmative ruling is anticipated. To mitigate risks, the authors propose multi-tiered strategies: Governments should enhance WTO compliance and challenge procedural violations; industries must foster collaboration, avoid price wars, and establish trade associations; enterprises ought to diversify markets, invest in digital innovation, and develop integrated energy ecosystems. The investigation, while disruptive, is framed as an opportunity to optimize China's global renewable trade strategy.[9]

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