An Empirical Analysis of the Outward Development of Strategic Emerging Industries

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Abstract. China has proposed a major strategic decision to speed up the cultivation and development of strategic emerging industries, making it a leading industry and pillar industry for the national economy. This is of great significance in promoting the upgrading of the industrial structure and the transformation of the economic development mode, enhancing China's capacity for independent development and international competitiveness, and promoting sustainable economic and social development. The emerging role of strategic emerging industries in China's economic development has become more and more significant. To promote the construction and development of China's strategic emerging industries, the selection and optimization of China's strategic emerging industries must take into account the international economic situation changes and China's actual national conditions.

Keywords: outward development; policy change; risk; strategic emerging industries.

1. Introduction

In 2015, the value-added ratio of China's strategic emerging industries accounted for 8% of GDP, including: new generation information technology, high-end manufacturing, biology, green low-carbon, and digital creative industries. The Chinese economy is entering a new normal state of development, and the economic growth rate is in a downward cycle. However, the performance of strategic emerging industries has risen in a contrarian direction and a number of new growth points have been cultivated, supporting the steady economic growth. As countries compete for future economic commanding heights, under the background of global economic imbalances, the trade friction between developed countries and China will increase, and various forms of trade protection measures will continue to change. The development of China's strategic emerging industries is facing opportunities and challenges.

2. Changes in International Economic Climate

The U.S.-China Economic Safety Assessment Committee has submitted a very weighty report to the U.S. Congress that the final cause of the 2008 financial crisis was an imbalance, and that China and the United States should bear half of their responsibilities. However, some experts suggested that the global economic imbalances indicate that the countries in the world that are participating in the global economy are in an imbalanced state. To correct global economic imbalances should be the common responsibility of all countries in the world. To deal with global economic imbalances, it is necessary to establish an effective financial regulatory framework based on broader international cooperation. For China, under the current international economic background, China’s foreign trade will maintain a long-term surplus, the scale of foreign exchange reserves will continue to increase, domestic savings will be greater than domestic investment, and liquidity will be relatively surplus. This means that China's economy must correct its internal and external imbalances, and it must not only adjust its economic structure in depth, but must also comprehensively adjust its development strategy. Global economic imbalances have led to increased trade frictions between China and the United States and other western developed countries. Western countries have restricted the import of Chinese products by strengthening trade protection, which has led to a deterioration of the external environment for China's economic development. [1]
The Chinese Academy of Social Sciences released the “World Economy Yellow Book” today and pointed out that in 2011, the global economic imbalances continued and the G20’s global economic rebalancing work made further progress. Due to its long-term nature, destructiveness, and the complexity of national policy coordination, the global economic imbalance has become one of the hot topics throughout the year on the G20 Global Governance Platform in 2011. However, under the imbalance of the global economy, the international economic environment is complex and changeable. The global economy is still undergoing deep structural adjustment. The industries that are gradually affected are high-pollution and high-emission industries. The outbreak of the financial crisis has provided China with an adjustment of its industrial structure. With rare opportunities, China can use this opportunity to adjust its strategy and scientifically conduct industrial positioning and promote the optimization of its industrial structure. By supporting the rapid development of strategic emerging industries, it can seize opportunities, sharpen its international influence and improve its global economic structure status.

3. The Overall Situation of Foreign Trade in Strategic Emerging Industries

Because it is difficult to obtain detailed breakdown of the foreign trade of strategic new industrial products, and high-tech products include the content of strategic emerging industries, we analyze the overall situation of foreign trade development of China’s strategic emerging industries with the overall situation of changes in foreign trade of high-tech products.

![Figure 1. 2009-2013 export of high-tech products](image)

The export of high-tech products from 2009 to 2013 is increasing year by year, but one can see from the curve's bending characteristics that the increase rate in 2011 and 2012 has decreased. One of the reasons is that they are affected by foreign trade protection measures. In 2009, the total export of high-tech products was 1,8055.1 US dollars, and in 2013 it had reached 4,2062.4 US dollars, which was more than doubled in 2009. This indicates that foreign trade of high-tech products has developed rapidly and its boosting effect on economic development has been increasing. Not only that, but also from the changes in the pattern of foreign trade in various regions, high-tech products have also shown strong economic growth. For example, in the first quarter of 2014, Zhejiang’s export of labor-intensive industries such as clothing and footwear slowed down, but exports of high-tech products accelerated. Zhejiang's computer and communication technology products exported 7.59 billion yuan, an increase of 18.4% year-on-year; private enterprises exported 8.78 billion yuan of high-tech products, a year-on-year increase of 13.7%. (See Figure 1 for details.)


In recent years, the industries on which Euro-American has a greatest influence are mainly concentrate in emerging industries and high-end manufacturing fields. This trend has become more and more obvious in anti-dumping, anti-subsidy and intellectual property protection.

Photovoltaic industry is an industry with a certain comparative advantage from its development speed in China. As a strategic emerging industry, it is also highly valued by many countries. Photovoltaic industry will be an important industry which is rapidly developing after IT and microelectronics. China is the largest photovoltaic production country in the world. Form the global
export volume of photovoltaic products in 2011, China’s target is 27.95 billion dollars, ranking first in the world, followed by Japan, south Korea and the United States. In 2010, the annual output volume of China's photovoltaic industry is more than 300 billion RMB, and the number of employees it brought is 300,000. However, the consumer market of photovoltaic is mainly in foreign countries. And the changes of foreign policies directly affect the development of photovoltaic industry. (See Table 1 for details.)

Table 1. 2011 top 4 countries of global photovoltaic products exports (Unit: 100 million US dollars)

<table>
<thead>
<tr>
<th>Country</th>
<th>Ranking</th>
<th>China</th>
<th>Japan</th>
<th>South Korea</th>
<th>U.S. A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export volume</td>
<td>1</td>
<td>279.5</td>
<td>66</td>
<td>38.8</td>
<td>29.6</td>
</tr>
</tbody>
</table>

For the economic effects of photovoltaic products encountering double countermeasures, some scholars have used the commercial policy analysis system to use the data from 2000 to 2011 to conduct the quantitative analysis. The study found that double counter measure while making Chinese exports to the United States of photovoltaic products prices, exports declined, but demand is rigid demand for photovoltaic products in the United States, makes the increase in price to offset some of the external cause negative economic benefits, eventually making increased export revenues still display the results. (See Table 2 for details)

Table 2. Effect of countervailing duty on China's PV exports to the US

<table>
<thead>
<tr>
<th>Changes in export prices of China's photovoltaic products to the US</th>
<th>Changes in export volume of China's photovoltaic products to the US</th>
<th>Changes in export earnings of China's photovoltaic enterprises to the US</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4%</td>
<td>-2.2%</td>
<td>1.2%</td>
</tr>
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</table>

China's PV products have certain advantages in foreign trade and international market share. Despite the certain impact and pressure brought about by changes in foreign policy, as a high-tech industry, its development potential is huge, especially in developed countries, the rigid nature of the demand is enough to confirm its importance in international trade and the development of countries. Therefore, for China's photovoltaic industry, the government needs to actively guide, take effective measures to help enterprises actively respond to risks, minimize the risks faced in the outward development, and ensure the stable development of the industry.

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