
China's iron and steel industry is going to be productive under the background of all roads

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Abstract

Under the current situation of the new normal economy, the problem of excess capacity in the iron and steel industry needs to be solved urgently. From the point of view of consumption demand, there is still a relatively wide demand space for iron and steel in China, but relying on demand increment to absorb excess capacity can not be achieved. Therefore, "going out" is one of the main ways to solve the overcapacity of China's iron and steel industry. The "going out" of China's iron and steel production capacity is the output of production capacity and the international cooperation of superior production capacity. China's iron and steel industry has the objective strength of "going out", and the "one belt and one way" national strategy has provided a broad overseas market for the steel industry's "going out".

Keywords

Going out; iron and steel industry; overcapacity; one belt and one road.

1. Introduction

Since 2008, due to the global financial crisis and other factors, the demand for iron and steel in domestic and foreign markets has been declining continuously, and the problem of "excess capacity" in China's iron and steel industry has become increasingly serious^[1]. The production capacity of China's iron and steel industry is increasing year by year, while the utilization rate of crude steel production capacity is decreasing year by year. In view of the situation of domestic steel and other industries, the State Council issued a document in 2013, clearly pointing out that the focus of regulation and control of the steel industry is to resolve overcapacity. In 2016, in the 13th Five-Year Plan for the Development of Iron and Steel Industry, the State Council put forward a clear requirement to eliminate the excess capacity of the iron and steel industry, that is, to reduce the capacity of the iron and steel industry by 150 million tons in three to five years. When domestic demand is still weak and demand for foreign infrastructure is in the ascendant, the iron and steel enterprises' "going out" will help to solve the excess capacity of China's iron and steel industry by making use of the dual policy of "one belt and one road" initiative and supply side structural reform^[2].

2. Reasons for Overcapacity in China's Iron and Steel Industry and Analysis of Its "Going Out" Motivation

2.1 Analysis of the Reasons for Overcapacity of China's Iron and Steel Industry from the Perspective of Market, Structure and Environmental Protection

To investigate the causes of excess iron and steel production capacity in China, we should consider it in the context of China's economic development and its macroeconomic policy. From the market point of view, there are both demand factors and supply factors; from the quantitative point of view,

there are both total factors and structural factors; from the perspective of environmental protection, there are factors of environmental carrying capacity.

1. Overinvestment leads to overcapacity. China's iron and steel production capacity "big crocodile" from scratch, from the development to the emergence of "virtual fat" after a long time. In 1996, the output of crude steel was 100 million tons, which leaped to the first place in the world. From 1996 to 2006, the profit of the steel industry reached 1800 yuan/ton to 2000 yuan/ton at the highest level. The output has been increasing year after year, with the annual growth rate of over 30% from 2001 to 2005. Crude steel output reached 419 million tons in 2006. 2007 was originally an excellent opportunity to optimize the iron and steel industry structure and enhance the concentration of iron and steel industry. However, due to the global economic downturn caused by the subprime mortgage crisis in the United States in 2007, China made 4 trillion yuan of investment, and the iron and steel industry began a new round of "tide phenomenon". Over-investment has led to excessive capacity growth in the steel industry, resulting in serious overcapacity. In 2016, the crude steel output reached 808 million tons, and the steel production capacity increased instead of decreasing. From 1996 to 2006, the iron and steel industry grew by 319 million yuan. Since 2006, it has been recognized that the iron and steel industry is surplus. But after 10 years, its output increased by 389 million tons by the end of 2016, an increase of 92.84% ^[2] (Figure 1).

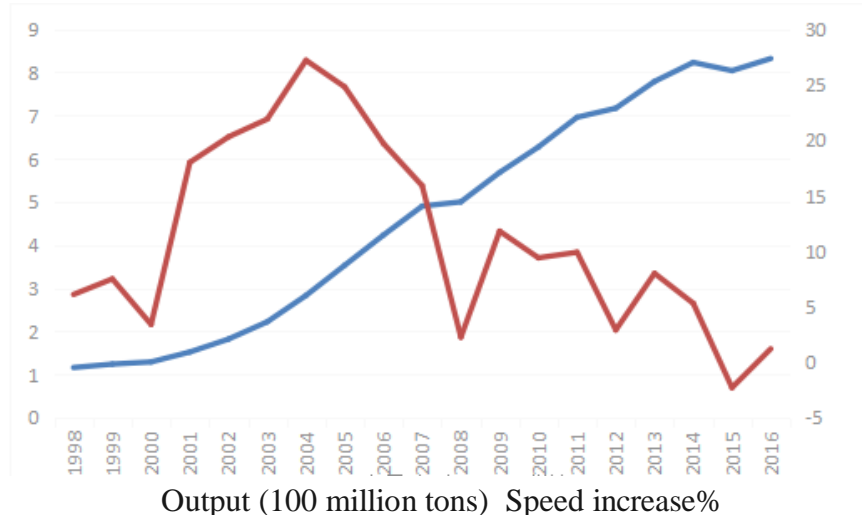


Fig1. Crude steel production and growth rate in China

2. Declining demand leads to overcapacity. After the 18th National Congress, the idea of a new normal economy was established, that is, within a reasonable range of economic operation, the government would not normally adopt the old method of relying on government investment to stimulate economic growth. In 2015, crude steel output was 804 million tons, the utilization rate of production capacity was about 70%, while the actual demand of crude steel was about 600 million tons, and the loss of steel enterprises was more than 50%.

Apparent consumption of crude steel (i.e. the value of crude steel output minus net export) is an important index for evaluating the demand and trend of domestic steel market. According to the data of the National Bureau of Statistics, China's crude steel apparent consumption reached a peak of 770 million tons in 2013, decreased by 4% in 2014 and 799.2 million tons in 2015, and decreased by 5.5% to 698.5 million tons in 2015. In 2016, it rebounded slightly, up 2% year-on-year. The apparent consumption of crude steel in 2016 is 709 million tons (Figure 2).

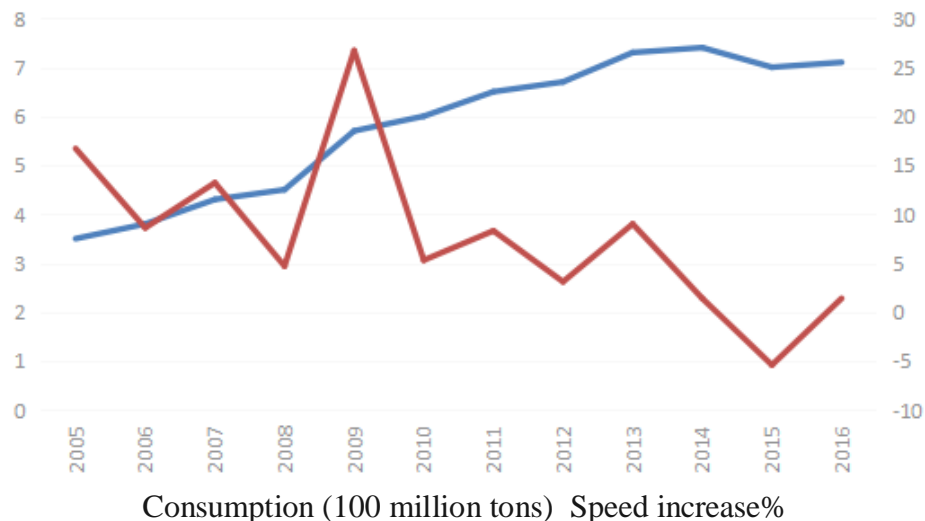


Figure 2. Apparent Consumption and Growth Rate of Crude Steel in China

Judging from the process of domestic industrialization, China has entered the late stage of industrialization. Compared with the history of developed countries, China's per capita steel demand has been far higher than the highest value of developed countries. Rapid economic growth used to be a panacea for digesting excess iron and steel production capacity. However, at present, the rapid economic development of our country has entered a new normal. Economic growth has shifted from high-speed to medium-high-speed, so this method of scale expansion, as it used to be, is no longer feasible. From the perspective of China's labor structure, the increase of domestic labor costs, the loss of cost advantage of exports and the gradual disappearance of population dividend will further affect the increase of exports.

3. Structural mismatch leads to overcapacity. Overcapacity in China's iron and steel industry is not only due to the imbalance between supply and demand, but also due to structural factors, there is structural overcapacity. This structural surplus includes regional and product situations. Regional overcapacity refers to the mismatch between production bases and major consumer markets; product-based overcapacity refers to the mismatch between supply and demand varieties. North China has the advantage of resources and is in the production base of iron and steel industry. The economic development of the south is faster than that of the north, which has become the main consumption of steel products.

4. Relative surplus under resource and environment constraints. Iron and steel industry is a resource and energy industry, which consumes a lot of iron ore, coal and water resources. In the process of industrialization, the consumption of resources and the impact on the environment are enormous, and the constraints of resources and environment are also significant. At present, the foggy weather in North China is increasing, and the environmental carrying capacity has reached its limit. Even without market factors, the constraints of resources and environment can not support the further development of the steel industry.

2.2 Motivation Analysis of "Going Out" of China's Iron and Steel Production Capacity

The motivations of international trade include cost theory (comparative cost theory and absolute cost theory), factor-sharing theory^[4], comparative advantage theory and national competitiveness theory. At present, China's iron and steel production capacity "going out" has its particularities, including the primary motivation for steel enterprises to "go out" in the face of domestic excess capacity and to seek market demand abroad; the positive motivation for the policy incentives of the Chinese government and the promotion of international industrial transfer; and the negative trend of foreign "anti-dumping and countervailing trade protectionism" and high iron ore prices. Motivation and so on.

1. Primary motivation. Overcapacity forces the steel industry to "go out". In 2016, the State Council put forward the goal of "the 13th Five-Year Plan" to eliminate the backward capacity of iron and steel.

On the basis of reducing the backward capacity of 90 million tons of iron and steel in recent years, the backward capacity of 100 million tons to 150 million tons will be eliminated in the next five years. Considering the new capacity, it is necessary to remove 300 to 400 million tons of backward capacity to alleviate the current problems. China's steel production accounts for about 50% of the world's total. Faced with the grim situation in the domestic market, steel enterprises are in urgent need of selling surplus steel products to a broader overseas market, transferring the steel manufacturing equipment to the "one belt and one road" countries that have more needs for the development of the iron and steel industry.

2. Positive motivation. The Chinese government's policy encourages and supports the transfer of international industries and promotes the "going out" of superior steel production capacity. Since 2012, the State Council and relevant ministries and commissions have repeatedly emphasized "transferring a batch" and explicitly proposed to resolve domestic excess capacity through international capacity cooperation. The effective implementation of the "one belt and one way" national strategy has promoted the iron and steel industry's layout planning along the "one belt along the way", and has provided favorable conditions for the iron and steel industry to "go out". At the end of 2015, China implemented the structural reform of supply side, focusing on enhancing the adaptability and flexibility of export products of foreign trade enterprises to foreign demand. The state implements the strategy of "going out", for example, the Ministry of Commerce takes the lead in establishing overseas economic and trade cooperation zones, signing free trade zone agreements and bilateral investment agreements with foreign countries, training international trade talents, and providing information services for "going out" enterprises.

3. Negative motivation. Overseas "double negative" investigations and high monopoly prices of iron ore force international cooperation in China's iron and steel production capacity. Exporting steel products alone can easily cause foreign trade frictions. The global crude steel output in 2016 is about 1.6 billion tons, of which up to 600 million tons belong to excess capacity. In 2016, China exported nearly 100 million tons of crude steel. The European Union, the United States, India and other countries use trade protectionism to boycott steel imports and conduct a "double-reaction" investigation into China.

3. The Possibility and Reality of "Going Out" Resolving Overcapacity in Iron and Steel Industry

3.1 The Possibility of "Going Out" to Resolve Overcapacity in Iron and Steel Industry

1. Emerging market countries have potential demand for steel production. After the financial crisis, exports to developed countries in Europe and the United States are still weak. In 2015, the world steel industry as a whole still maintained the trend of overcapacity and declining demand for steel. However, on the other hand, some emerging countries in ASEAN, Latin America and Africa are accelerating their development and becoming potential steel consumption markets. Grasping these future steel markets and developing them will not only benefit the sustainable development of China's iron and steel enterprises, but also enable China's enterprises to seize the initiative in future international competition.

There is a huge demand for infrastructure in Asian countries. The ADB report shows that the average annual demand for infrastructure construction in Asia as a whole has reached \$1.5 trillion. Latin America has a large population and abundant natural resources. Compared with Latin America, its infrastructure is still far behind. In recent years, many Latin American countries have intensified the construction of transportation, energy, telecommunications and other infrastructure, which has brought huge investment opportunities to China's steel industry.

Latin America is rich in mineral resources. With relatively mature technology, advanced equipment and rich experience, China has driven the adjustment of industrial structure in Latin America and become a satisfactory partner. Effectiveness has been achieved in promoting domestic high-quality production capacity to go global. It is reported that several large iron and steel enterprises with

advanced equipment have formed an alliance, transferring 10 million tons of steel production capacity to Brazil.

Africa is rich in iron ore, but low steel demand makes iron ore mainly used for export. In recent years, the accelerated development of some African countries has brought the region back into the eyes of investors. At present, there is enormous room for infrastructure construction in Africa. Chinese enterprises have a good cooperation history and investment foundation in Africa. In addition, the China-Africa Cooperation Forum also provides a platform for domestic iron and steel enterprises to cooperate with China and Africa in infrastructure.

2. China's iron and steel industry has the objective strength of "going out". Iron and steel production is increasing. At the beginning of the founding of New China, China's iron and steel output was only 158,000 tons. At the beginning of the reform and opening up, there were only 30 million tons. However, by 1996, China had become the first country in the world in iron and steel production. In the 21st century, China's iron and steel industry has developed rapidly. Crude steel output reached 489 million tons in 2007, quadrupling that in 1996, accounting for one third of the world's total steel output. In 2015, China's iron and steel output has reached about 804 million tons, 27 times the output at the beginning of reform and opening up. With the increase of iron and steel production, the production technology of iron and steel industry is also improving.

The key technology of iron and steel production is constantly breaking through. In recent years, China's iron and steel manufacturing industry has reached the world-class level in variety development, process, production technology and equipment technology. Super steel occupies the leading position in the world^[5]. Baosteel, Taisteel and Anshan Iron and Steel Co. are all involved in the production of super steel. High-quality steel products such as high-end automobile panel and high-grade pipeline steel are in the world's leading level^[6]. Special steel represented by bearing steel has reached the world first-class level. Railway locomotive steel and high-quality rail products have steadily improved in quality. Almost all steel products can be produced in China. Some special steel products R&D ability and production technology have reached the international advanced level. Process technology, large blast furnace technology and converter technology can be exported to the United States, Japan, South Korea and so on, from the importing country of steel technology and equipment to the exporting country.

The level of energy saving and emission reduction has been improved. Environmental protection indicators of iron and steel industry are mainly reflected in comprehensive energy consumption, new water consumption and emission indicators. The energy consumption per ton of steel, new water consumption and pollutant discharge in China's iron and steel industry have dropped dramatically. The standard coal consumption per ton of steel in China is 570 kg, which has reached the international level; the consumption of fresh water per ton of steel in national steel enterprises has been reduced from 4 tons in 2010 to 3.25 tons; the consumption of fresh water per ton of steel in Hansteel and Jingtang Iron and Steel Enterprises of Shougang Group has reached the world-class level, and the emission of desulfurization, denitrification and sulfur dioxide has strict inspection and control standards and supervision measures.

3.2 The strategies of the two major countries have brought realistic opportunities for the "going out" of iron and steel production capacity

In recent years, the iron and steel industry has encountered a "cold current". At home, the iron and steel industry has a serious overcapacity, so it is the first task to resolve the overcapacity of iron and steel. The United States, the European Union, India and other countries used the excuse of "double-negative" to investigate China's steel exports. The supply side structural reform and the "two directions" strategy provide an excellent and powerful support for China's iron and steel capacity transfer overseas^[7]. By optimizing the supply side, China's steel industry will move towards the middle and high end of the global value chain and provide new supply to foreign markets, thus releasing new demand. The strategy of "one belt and one road" has made great efforts abroad to

expand the demand for China's iron and steel production by exploiting and excavating the demand side.

1. the "one belt and one way" national strategy has provided a broad overseas market for the "going out" of steel production capacity. The "one belt and one road" initiative provides a rare opportunity for enterprises to "go out". In the post-financial crisis era, China's economic growth has made a significant contribution to the world economy and has a tremendous impact. In 2013, China's "one belt and one road" initiative was followed by many countries and regions along the way. Although most of the industrial areas along the belt and road are relatively weak, they have large population and full potential for development. In the next few years, large-scale infrastructure construction and energy development and utilization will provide policy benefits^[8] for Chinese enterprises to "go out". In more than 60 countries and regions along the line, the net importer of steel exceeds 70%. With the help of "one belt and one road", we can make capacity go out, use international capacity cooperation, transfer technology and management experience, cultivate local technology and management talents, promote local employment, promote local economic development, and at the same time, make China's excess capacity^[9].

2. To "go out" to resolve the relationship between excess capacity and supply-side structural reform. There are two industrial objectives of supply-side structural reform, one is industrial upgrading, the other is industrial transfer. On the one hand, "going out" is one of the main contents of the structural reform of supply side, and it also plays a vital role in the structural reform of supply side. The structural reform of supply side includes five tasks of "three to one, one to reduce and one to compensate", among which eliminating excess capacity is the most important task; eliminating capacity from four to one, and transferring one to another is one of the ways of eliminating capacity. "Going out" to eliminate excess capacity means transferring superior capacity abroad and international cooperation in iron and steel production capacity.

Supply-side structural reform can upgrade the level of "going out", provide medium and high-end supply for steel industry capacity "going out", and supplement new overseas demand. In November 2015, the Central Economic Working Conference put forward the idea of "focusing on strengthening the structural reform of the supply side" to improve the quality and efficiency of supply^[10]. Through supply-side reform, we should optimize the power structure of supply and create new supply that matches "going out". First, the implementation of "made in China 2025", with the help of "Internet +", through the upgrading of export structure to nurture the power of "going out", and realize the transformation of export products from the traditional advantages of price and resource competition to technology, quality, service, brand and other new advantages. Second, the government implements the strategy of "going out" and actively guides and serves enterprises to "go out". The government has introduced the management mode of "negative list" to create conditions for the convenience of enterprises' foreign investment. We will strengthen the construction of a "single window" and build a management service platform integrating investment, trade, customs clearance services and supervision. Third, the government provides investment and financing support policies for steel capacity transfer projects, formulates bilateral cooperation agreements, and provides precise intermediary services such as law, information and international trade talents for "going global" steel enterprises.

4. Location and Path Choice of "Going Out"

4.1 Location Choice of "Going Out"

How to "go out" generally includes two aspects: one is the location choice, that is, where the enterprise should go and where to invest; the other is how to go on, that is, the way to go out and how to invest. The two complement each other, and together determine the effectiveness of going out to invest in enterprises.

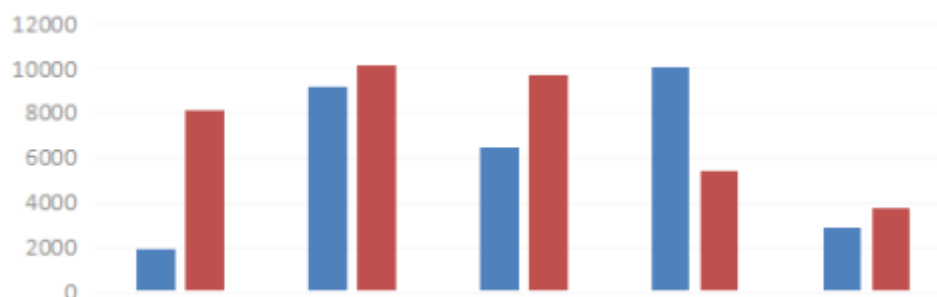
1. Go to developed countries and seek technology. On the one hand, there is a need to upgrade infrastructure in developed countries such as Europe, America and Japan. For example, in the past

two years, the net imports of steel from the United States, Canada and other countries are huge, and their domestic investment environment is excellent. Our enterprises have the condition of "going out". On the other hand, these developed countries have advanced steel production technology and environmental protection technology. Among them, European and American countries have mature technologies and standards for the treatment of soot, sulfur dioxide, nitrogen oxides and other emissions, while Japan has many steel production patents and has been the engine of technological innovation in steel production. China's enterprises have the meaning of "going out", that is, to learn from the experience standard to obtain a higher level of technology. These advanced technologies can not only reduce the cost of production, but also improve the quality and environmental standards of the whole industry.

2. Go to developing countries and seek resources and markets. Although the overall level of China's iron and steel industry is at a disadvantage compared with developed countries, it is in an advantageous position in many developing countries. In addition, many developing countries have certain iron ore reserves, while their domestic consumption capacity is low. These developing countries have the resources and markets that Chinese enterprises need to "go out".

The steel industry consumes huge amounts of raw materials and energy. A stable source of raw materials is of great significance to the development of the industry. As far as the scale of development of China's iron and steel industry is concerned, the domestic iron ore reserves are relatively insufficient and the quality of some ores is low. Therefore, China's demand for iron ore imports is huge. In 2010, the proportion of iron ore imports in China reached 64%. From 2015 to 84%. Investing in iron ore and obtaining long-term stable and high-quality iron ore resources is a problem that must be solved if China's iron and steel industry wants to continue to develop. It is also the reason and primary purpose for China's enterprises to "go out".

Situation of iron and steel industry along the line (unit: 10,000 tons)					
Region	Crude Steel Output	Apparent Consumption of Crude Steel	Import of Steel	Export of Steel	Import of Steel from China
ASEAN	1947	8126	6266	843	3213
South Asia	9205	10168	2161	762	965
West Asia and North Africa	6445	9711	4884	1658	1319
CIS	10047	5421	799	5131	92
Central and Eastern Europe	2882	3753	3066	1992	57



(From left to right: ASEAN, South Asia, West Asia and North Africa, CIS, Central and Eastern Europe) Crude steel output Apparent Consumption of Crude Steel

4.2 Choice of the Way of "Going Out"

There are three main ways for enterprises to go out: cross-border mergers and acquisitions, green land construction and overseas economic and trade cooperation zones. Cross-border mergers and acquisitions and greenbelt construction are two traditional ways of "going out", while overseas

economic and trade cooperation zones are new ways of "going out" in the new era. Cross-border mergers and acquisitions can quickly access the local enterprises' marketing channels and other resources, while green space construction needs a longer period, but also greater autonomy. Overseas economic and trade cooperation zones use the labor force and raw materials of the contracting countries to produce in the contracting countries' parks and sell directly in the contracting countries. Cross-border mergers and acquisitions are the cooperation between Chinese and foreign enterprises by means of equity participation or holding; greenbelt construction is the foreign direct investment of individual enterprises; overseas economic and trade cooperation zones are the "going out" of Chinese export enterprises and the establishment of foreign trade "enclaves" abroad, which is a brand-new way of foreign direct investment.

1. Cross-border M&A is a shortcut for enterprises to "go out". Transnational merger and acquisition is one of the most important ways for enterprises to invest abroad. It is a shortcut for Chinese enterprises to realize "going out". It can achieve transnational merger and acquisition by means of share-holding or holding. For "going global" enterprises, overseas M&A can integrate global resources, expand overseas markets and further expand their international influence^[2]. Achieving cross-border mergers and acquisitions can also avoid some barriers to foreign trade and reduce trade frictions. However, cross-border mergers and acquisitions are not a one-off activity, and attention should be paid to the cultural integration after investment. Owing to the different economic and cultural structures and institutional environments of different countries, there are often great differences. Cross-border M&A has the theory of "Seven-seven Laws". That is, 70% of the M&A activities will fail, and 70% of the failures are due to the lack of cultural integration after M&A^[11]. Due to the differences of history and culture in different countries, mergers and acquisitions enterprises are often unacceptable. It is necessary for enterprises to carry out localization strategy, integrate into local culture as soon as possible, formulate scientific strategic objectives and strategic steps, learn from advanced international experience, do internal work well and strengthen their strength.

2. Green land construction is a routine way for enterprises to "go out". Green land construction is another way of direct investment. Chinese enterprises set up new enterprises abroad to ease the pressure of excess iron and steel production capacity, reduce the tension of resources and environmental protection, and make full use of foreign resources to develop and grow. Compared with cross-border mergers and acquisitions, greenbelt construction costs more to enter the local market and has a longer profit cycle, but in the long run, it also has its own advantages. First, the policy advantages, compared with cross-border mergers and acquisitions, greenbelt construction can directly bring new output, tax revenue and employment to the host country, so it is more welcomed and supported by the host country; second, new enterprises have complete autonomy from site selection to construction to scale operation. For a market with good prospects, such a fully customized enterprise can have better long-term regulations. Draw and blueprint.

Of course, international project contracting is also one of the common ways for enterprises to "go out". However, it is necessary to identify the potential risks of industry standard differences, power allocation and language barriers in advance.

3. China's overseas economic and trade cooperation zones are an important platform for enterprises to "go out". In 2006, the Ministry of Commerce of China took the lead in signing a contract with Pakistan to establish the Haier Industrial Park, China's first overseas economic and trade cooperation zone, specifically organized by Haier Group in Pakistan. By the end of 2016, China has established more than 150 overseas economic and trade cooperation zones in more than 50 countries, covering Southeast Asia, West Asia, Central Asia, Central and Eastern Europe, Africa and Russia.

Overseas economic and trade cooperation zones are a way for Chinese enterprises to "go out" and make foreign direct investment in "enclaves" overseas. It is led by the Ministry of Commerce to sign contracts with foreign governments, set up economic and trade cooperation zones in the contracting countries, and is organized by powerful Chinese enterprises with international trade experience. The financial department provides financial support of 200 million to 300 million yuan for each

cooperative zone, and provides medium and long-term loans of no more than 2 billion yuan for the construction of the cooperative zone. Chinese and foreign enterprises can be stationed in the cooperative park. China's export enterprises are mainly engaged in the production and sales of processing and manufacturing, chemical industry, pharmaceuticals, electronics, agricultural products processing and other industries in the park. Overseas economic and trade cooperation zones can be either comprehensive parks, such as the Suez Economic and Trade Cooperation Zone in Egypt, the Sino-Hungarian Sino-German Economic and Trade Cooperation Zone, the Qingshan Park in the China-Indonesia Comprehensive Industrial Park, etc. or special parks, such as the Sino-Russian-Tomsk Timber Industry and Trade Cooperation Zone, the Sino-Russian Modern Agricultural Industry Cooperation Zone and the Julong Agricultural Industry Cooperation Zone in Indonesia^[12, 13, 14, 15]。

Overseas economic and trade cooperation zones are platforms for overseas economic and trade activities of export enterprises. In addition to the main technicians, managers and key equipment provided by the Chinese side, the general managers, labor force and raw materials of Chinese export enterprises in the cooperative zone are provided by the contracting countries, and the products produced are sold directly in the contracting countries. The cooperative zone adopts the operation mode of government-driven, enterprise-led and commercial operation. The effect of diffusion and agglomeration in the cooperative zone is obvious. The cooperative zone has admitted more than 2000 Chinese export enterprises, accounting for about 10% of China's foreign direct investment enterprises. The Zone encourages Chinese enterprises to invest in the Zone, accelerate the transfer of China's excess capacity, and explore an effective way for China to achieve industrial transfer. Chinese enterprises in the cooperative zone can save labor costs and increase product competitiveness by utilizing cheap labor and high-quality raw materials of the contracting countries. Economic and trade cooperation zones have an alternative effect on China's export trade, that is, from direct exports in China in the past to production and sales in the cooperation zones, which can reduce the volume of direct exports relatively, and avoid the trade protectionism of the signatories, which is conducive to reducing trade frictions.

5. Conclusion

Facing the arduous task and challenge of capacity removal in iron and steel industry, we need to understand the task of capacity removal comprehensively and scientifically. When facing the opportunity of "going out", we should make a detailed investigation on the regional conditions of the investment area, resources reserve of ore and other factors related to production, and have a thorough understanding of the local market, human environment, environmental protection evaluation of engineering construction and relevant policy support of the host country. Make full preparations for the early stage and the planning and design for the middle and late stages, and complete each input project steadily and steadily.

Nowadays, the global steel and raw material prices have generally declined, and China's steel industry is looking for a new way of transformation and upgrading of the steel industry. The strategy of "one belt and one road" has given our steel industry hope and dawning opportunities, and has encouraged the confidence of China's steel enterprises to "go out". With the further development of the "one belt and one way" strategy, China's iron and steel enterprises will build a number of new iron and steel industrial clusters with a high starting point of technological level, independent innovation, and a marked new label made in China by means of in-depth cooperation and effective exchanges with host countries. It is expected that China's iron and steel industry will get rid of the problem of excess capacity, and thus move from a regional power of the steel industry to a world power.

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